

Revision of the Australian Clivinini 3. The *procera* and *elegans* groups of the genus *Clivina* Latreille

(Coleoptera, Carabidae, Scaritinae)

Martin Baehr

Baehr, M. 2017. Revision of the Australian Clivinini 3. The *procera* and *elegans* groups of the genus *Clivina* Latreille (Coleoptera, Carabidae, Scaritinae). Spixiana 40(2): 197-304.

As the third part of a revision of the Australian species of the scaritine tribe Clivinini the *procera* and *elegans* groups of the genus *Clivina* Latreille are revised. To maintain stability of nomenclature, lectotypes and for certain species also paralectotypes are designated for the following nominal species: *Clivina abbreviata* (Putzeys), *C. brevisterna major* Sloane, *C. foveiceps* (Macleay), *C. froggatti* Sloane, *C. macleayi* Sloane, *C. marginata* (Putzeys), *C. monilicornis* Sloane, *C. nyctosyloides* Putzeys, *C. obliquicollis* Sloane, *C. oblonga* (Putzeys), *C. prominens* Putzeys, *C. regularis* Sloane, *C. robusta* Sloane.

Clivina prominens Putzeys, 1866 is synonymized with *C. procera* Putzeys, 1866.

Clivina brevisterna major Sloane, 1917 is resurrected as a separate taxon from synonymy with *C. brevisterna* Sloane, 1916 and is raised to specific status.

Clivina interstitialis Sloane, 1896 is renamed *C. propinqua*, nom. nov., because the name *interstitialis* is a junior homonym of *C. interstitialis* Kolbe, 1883.

Clivina foveiceps (Macleay, 1863) is renamed *C. macleayana*, nom. nov., because the name *foveiceps* is a junior homonym of *C. foveiceps* Putzeys, 1846.

Some new species belonging to groups mentioned in the 2nd part of the revision, which were sampled too late to be included in that part, are added to this 3rd part.

Following new taxa are described in this paper: *bankae*, *biseriata*, *carnabyi*, *cobourgiana*, *conicollis*, *cooindae*, *crassipennis*, *dubia*, *foveifrons*, *gemina*, *gemina nigripes*, *gerstmeieri planior*, *glabripennis*, *goldingi*, *gracilipes longior*, *heros*, *horaki*, *horneri*, *incurvicolis*, *infans*, *inopinata*, *interposita*, *laevigata*, *mahoni*, *micans*, *montisbelli*, *moretona*, *newcastleana*, *nitescens*, *normanbyensis*, *ovalior*, *pachysoma*, *platynota*, *profundestriolata*, *rectipennis*, *rugosifrons*, *ryaceki*, *semirubra*, *sinuicola*, *subrufipes*, *thoracica*, *uncinata*, *variseta*, *victoriae*, *vixsulcata*, *windjanae*.

A key to the species of the *procera* and *elegans* species groups of *Clivina* s.l. is provided. For the additional species relevant parts of the key in part 2 of the revision are repeated and extended to cover the new species. Male genitalia are figured. Female genitalia are only figured of certain groups and subgroups. A checklist is provided for the Australian Clivinini mentioned in this third paper, including notes on the recorded ranges.

Clivina bulirschi Baehr, 2015 is renamed *C. bulirschiana*, because Dostal also described a *Clivina* (*Pjysoclivina*) *bulirschi*, 2015 in a paper (Dostal 2015) which was printed a month earlier than *C. bulirschi* Baehr.

Martin Baehr, SNSB – Zoologische Staatssammlung München, Münchhausenstr. 21, 81247 München, Germany; e-mail: martin.baehr@zsm.mwn.de

Introduction

This third part of the revision of the Australian Clivinini covers two related species groups of commonly large or very large, or at least bulky, species. Style and format of descriptions etc. are similar to those in the first and second parts of the revision. Any general information about way of life, characters, collections, and relevant literature may be taken from these parts which also include the key to genera, subgenera, and species groups.

Material and methods

Altogether 2497 specimens of the species mentioned in the present part have been examined. Apart from material borrowed from several museum and private collections, these include the very rich collections made in recent times by S. Bilý and S. Jakl (Prague), A. Dostal (Vienna), and by myself in the northern parts of Northern Territory, Western Australia, and Queensland.

In spite of the amount of material, several species are still represented by single or very few specimens or were available from just a single locality. Additional systematic sampling using light traps and pitfall traps in many localities throughout northern and inland Australia would be needed to get a more authentic impression of the actual number and distribution of the species.

Methods of dissections and descriptions are similar to those used in parts 1 and 2 of the revision (Baehr 2008, 2015). However, length of pronotum has been measured from the most advanced part of the apex to the most advanced part of the base. To avoid overburdening descriptions with repetitions of similar character states, those states that are uniform within a group or subgroup have been mentioned in the diagnosis of the group but were omitted from the descriptions of the species. These mainly cover certain characters of mouth parts, structure of prothorax and elytra, legs, and female gonocoxites.

Distinction of sexes in the *procera* and *elegans* groups is easier than in most other groups, because in the males of all species the internal spur of the protibia is widened at its apex, or it is at least not as acute as in females. This is particularly useful, because due to the deep black colour of most species and to the generally very strong sclerotization, genitalia are not translucent when seen from below, as in many of the smaller, more delicate, and less sclerotized species worked in previous parts of the revision. Moreover, males of several species possess narrower, dorsally more convex protibiae with smaller external teeth than the females, which have more depressed, more strongly toothed protibiae. In several species also the male metatarsus is narrower and longer than that of the females.

In many species of the *procera* and *elegans* groups, differences in body size are considerable, and this is commonly combined with some allometric proportions

of prothorax and hind body. Also measurements of the protibia can rather vary according to the age of the specimen and the degree of abrasion of the external teeth.

Presence, or structure, of punctation and/or microreticulation of head, pronotum, elytra, and abdomen, or of one of these, are important characters for species definition and distinction. For unambiguous recognition of the commonly very faint or superficial microreticulation a binocular microscope with a bright lamp is needed which should offer at least 64×, better 100× magnification.

Data of examined material in full length with exact labelling, including sex, all ciphers, notes of determiners and curators, and printed labels, are given in most species, except some common and well known ones. Original spelling of date of collecting, especially of the month (arabic, roman, abbreviations), was generally used. An / with a blank before and after it denotes another label.

Records not specified as to a state are included under the heading 'AUS', as well as specimens bearing only 'Australia', or those without any labelling. States are recorded as under 'abbreviations'. State records or data like 'Australia', 'Nov. Holl.' etc. have not been repeated for non-type material.

Abbreviations of collections mentioned in the present part of the revision

AMS	Australian Museum, Sydney
ANIC	Australian National Insect Collection, Canberra (including the collection of B. P. Moore)
ANIC-MMS	W. Macleay Collection in Australian National Insect Collection, Canberra
CBM	Working Collection M. Baehr in Zoologische Staatssammlung, München
CBP	Collection P. Bulirsch, Praha
CDW	Collection A. Dostal, Wien (including the Karel Kult Collection)
CGT	Collection P. M. Giachino, Torino
CHA	Collection P. Hudson, Adelaide
CHP	Collection L. Hovorka, Praha
CJP	Collection S. Jakl, Praha
CKZ	Collection V. Kabourek, Zlin
CMP	Carnegie Museum of Natural History, Pittsburgh
CNCI	Agriculture Canada, Ottawa
CSM	Collection R. Sciaky, Milano
CTV	Collection L. Toledano, Verona
CWB	Collection D. Wrase, Berlin
DEI	Deutsches Entomologisches Institut, München
FMNH	Field Museum of Natural History, Chicago
IRSNB	Institut Royal des Sciences Naturelles, Bruxelles
MCNV	Museo Civico di Storia Naturale, Venezia
MCSN	Museo Civico di Storia Naturale, Genova
MCZ	Museum of Comparative Zoology, Cambridge/Mass.
MMS	Macleay Museum, Sydney

MNHP	Museum National d'Histoire Naturelle, Paris
NHM	The Natural History Museum, London
NHMB	Naturhistorisches Museum, Basel
NMNL	National Museum of Natural History Naturalis, Leiden
NMPC	National Museum of Natural History, Praha
NMV	Museum of Victoria, Melbourne
NTD	Museum and Art Gallery of the Northern Territory, Darwin
OUM	Oxford University Museum, Oxford
QDPIB	Queensland Department of Primary Industries, Brisbane
QDPIM	Queensland Department of Primary Industries, Mareeba
QMB	Queensland Museum, Brisbane
SAMA	South Australian Museum, Adelaide
SMNS	Staatliches Museum für Naturkunde, Stuttgart
SMTD	Staatliches Museum für Naturkunde, Dresden
UASM	Strickland Museum, Edmonton
USNM	United States National Museum, Washington, D.C.
WADAK	Western Australia Department of Agriculture, Kununurra
WADAP	Western Australia Department of Agriculture, Perth
WAM	Western Australian Museum, Perth
ZMHB	Museum für Naturkunde der Humboldt-Universität, Berlin
ZMUA	Zoölogisch Museum of the University of Amsterdam
ZSM	Zoologische Staatssammlung, München

Abbreviations

ACT	Australian Capital Territory
AUS	Australia
CYP	Cape York Peninsula
KID	Kimberley Division
NP	National Park
NSW	New South Wales
NT	Northern Territory
QLD	Queensland
SA	South Australia
VIC	Victoria
WA	Western Australia
c.	central
e.	eastern
ec.	eastern central
n.	northern
nc.	northern central
ne.	north-eastern
nw.	north-western
s.	southern
sc.	southern central
se.	south-eastern
sw.	south-western
w.	western
>	larger or longer than
<	smaller or shorter than

Taxonomy

Identification of groups

A key to the species groups of the Australian *Clivina* is in both previous parts of this revision. However, for easier use, an extract from this key is repeated below. Both species groups mentioned in the present part have the setae at the terminal abdominal sternum widely distant and have at most 3 striae ended free at the base of the elytra. They are distinguished as following:

25. Excision of anterior margin of clypeus more or less deep, quadrangular (Figs 78, 79); body size commonly large, > 10 mm, or if small, body short and compact. 26.
 - Excision of clypeus regularly concave; body size usually smaller, < 10 mm, body usually elongate and rather parallel-sided. 28.
26. Excision of anterior margin of clypeus shallow; eye semicircular, laterad markedly protruded; head dorsally with a transverse ridge on middle of frons and a large depression behind; hind body elongate, parallel; protibia short and wide, with 4 distinct, stout teeth; aedeagus with dense, elongate spines in the internal sac. *impressiceps* group
 - Excision of anterior margin of clypeus deep or not; but if hind body elongate and parallel, excision deep; in parallel-sided species eye usually laterad less protruded; head without a similar transverse ridge and depression; protibia narrow and elongate, with 3 rather delicate teeth; body shape various; aedeagus usually without dense, elongate spines in the internal sac. 27.
27. Hind body elongate, almost parallel-sided; metepisternum elongate, metathoracic wings long; excision of anterior margin of clypeus always deep, about quadrangular (Fig. 78); aedeagus never with arrow-head shaped, or club-shaped, or claw shaped apex (Figs 1-23). *procera* group
 - Hind body various but commonly shorter and not parallel-sided; metepisternum commonly short and metathoracic wings commonly shortened; excision of anterior margin of clypeus variously shaped but usually rather shallow (Fig. 79); aedeagus with arrow-head shaped, or club-shaped, or claw-shaped apex (Figs 24-53). *elegans* group

Characters

Particularly the species of the *procera* group are generally very similar in their external characters, even when minor differences may be present in body size, proportions of prothorax and elytra, size of eye, emargination of clypeus, and structure of surface (impressions on the head surface, striation of elytra, punctation, microreticulation). In certain species, however, even in some sympatric or syntopic ones, the differences in body shape and external structure are so minimal that their distinction on the basis of external characters is very difficult. Hence, in those species examination of the male aedeagus is the best if not the sole tool for species distinction. Although the aedeagus in most species is likewise quite similar shaped, it may exhibit obvious differences, e.g. in size, width, curvature, and shape of the apex, while the structure of the internal sac, e.g. denticulation of folds and number and/or position of these folds, is very similar.

Also the female gonocoxites are extremely similar and differ usually only slightly in relative length of gonocoxite 2 and in the number of setae on the gonocoxites and the lateral plate, if they differ at all. Moreover, number and arrangement of the setae may vary to some extent within species, so that the gonocoxites are very difficult to use and usually do not allow unambiguous identification of species. This implies that in some species of very similar shape and structure, in particular when they are sympatric, identification of females and their affiliation to the appropriate species is difficult or even impossible by use of morphological characters. In those species, taxonomic methods using molecular analysis may reveal a better distinction of the species, in particular of females.

Some character states are very uniform in all species worked in the present part. For not overburdening the descriptions with repetitions, a number of characters are not mentioned in the descriptions, except when they deviate from the common condition. These are:

Head: Paraorbital ridge usually elongate, convex, paraorbital sulcus inside of paraorbital ridge elongate, shallow, linear. Supraantennal plates laterally obliquely convex, coarsely margined. Labrum usually straight and 5- or 7-setose, but in some species the number of setae deviates. Mandible usually short, evenly curved. Only in few species elongate and in apical half narrow. Mentum with distinct, obtusely triangular tooth, bisetose near tooth and also at base, submentum quadrisetose. Glossa bisetose, paraglossae fused to glossa, barely surpassing the glossa. Lacinia with strong teeth, a row of long setae on the lower ventral surface, and a dense tuft of setae on the dorsal surface. Maxillary and labial palpi elongate, barely widened apicad, impilose. Antenna short, median and apical antennomeres about quadrate, densely pilose from 3rd antennomere.

Prothorax: Lateral margin and channel of pronotum usually very narrow; the posterior marginal seta

inserted slightly inside of the basal curvature. Basal angle evenly rounded. Prosternum usually not visible at the basal angle. Prosternal process coarsely margined, short, asetose at apex. Proepisternum usually striolate and microreticulate, in some species also punctate.

Elytra: Base smooth without distinct knobs except in middle. 3rd stria almost always 4-setose, usually with large and distinct punctures. Scutellary stria indistinct, extremely short, situated close to suture. Lateral margin not crenulate.

Legs: Profemur large, upper surface convex, lower surface somewhat depressed, but not margined. Prothibia elongate, 3-dentate, with comparatively short teeth which usually are shorter in males than females. Lower surface depressed and smooth, with a group of elongate setae near base. Mesotibia with more or less elongate, preapical spur on the dorsal surface. Meso- and metatibiae sparsely setose. Lower surface of 1st tarsomeres usually with a dense fringe of setae on both sides.

Male genitalia: Genital ring very uniform throughout, more or less oval-shaped. Aedeagus in basal half or two thirds with two sclerotized rods; orificium usually very elongate, slightly asymmetrically situated on the upper left surface, and in apical half open on the upper side. Internal sac with three denticulate and more or less strongly sclerotized folds.

Female genitalia: Gonocoxites 1 and 2 usually combined without a distinct border; laterally depressed and with a sharp edge along the medio-ventral margin. Arrangement of the bursa and other not sclerotized parts of the genitalia usually as in fig. 236 of part 2.

All species of the *procera* group are fully winged, in several species of the *elegans* group the metathoracic wings are abbreviated. Therefore the metepisternum is elongate in the *procera* group, but usually shortened at different degrees in the *elegans* group.

Key to the species of the *procera* and *elegans* groups of the genus *Clivina*

Note. The new species not belonging to the *procera* and *elegans* groups are inserted into the most recent existing keys at the end of the descriptive part. Position of folds or sclerites in the aedeagus are given in the inverted state of the internal sac.

1. Metepisternum elongate, metathoracic wings long **and** clypeal excision always deep, quadrangular (Fig. 78) **and** hind body elongate, almost parallel-sided **and** aedeagus never with arrow-head shaped, club-shaped, claw-shaped, or spatulate apex (Figs 1–23)..... 2.
- Not all these characters combined; aedeagus almost always (except *C. robusta* Sloane) with arrow-head shaped, or club-shaped, or claw-shaped, or spatulate apex (Figs 24–53), or aedeagus unknown. 25.

2. All legs black or almost so. 3.
 - Middle and hind legs rufous, distinctly paler than the anterior leg, or all legs unicolourous rufous to rufo-piceous. 12.
3. Body size very large, > 18 mm; lateral margin of pronotum considerably convex (Fig. 124); both parameres in front of the narrow apical part abruptly quadrangular (Fig. 14). n.WA: KID, adjacent nw.NT. *heros*, spec. nov.
 - Body size at the average smaller, usually < 18 mm (rarely, in *C. ryaceki*, spec. nov. up to 19 mm, but then lateral margin of pronotum almost straight); lateral margins of pronotum more or less oblique but rather straight (Fig. 123); both parameres in front of the narrow apical part more gently sloping (Fig. 13). n.NT, n.WA: KID. 4.
4. Proepisternum more or less densely and coarsely punctate. 5.
 - Proepisternum not or but feebly punctate. 6.
5. Body size < 14 mm; proepisternum densely punctate; apical part of aedeagus markedly asymmetric, apex narrow, at tip curved down or even crotched (Fig. 8). n.WA: s. + w.KID *gemina nigripes*, subspec. nov.
 - Body size > 15.5 mm; proepisternum less distinctly punctate; apical part of aedeagus symmetric, apex rather wide, straight and at tip obtuse (Fig. 11). nw.NT. *mahoni*, spec. nov.
6. Prothorax elongate, ratio l/w > 1.06, and strongly conical (Fig. 127). 7.
 - Prothorax shorter, ratio l/w < 1.06, and far less conical (Fig. 81); if ratio > 1.04, surfaces of pronotum and elytra markedly glossy. 8.
7. Prothorax shorter, ratio l/w < 1.09; elytra shorter, ratio l/w < 2.02; apex of aedeagus shorter and wider (Fig. 20); labrum 5-setose. n.QLD, n. NT. *monilicornis* Sloane, 1896
 - Prothorax longer, ratio l/w > 1.10; elytra longer, ratio l/w > 2.06; apex of aedeagus longer and narrower (Fig. 21); labrum usually 7-setose. n.QLD: CYP, n. NT. *conicollis*, spec. nov.
8. Anterior part of frons with distinct transverse sulci; body size 15.0–16.5 mm; aedeagus wide, apex deeply bisinuate at the left side and strongly turned left, at tip not incurved (Fig. 9). n.WA: s. + w.KID. *carnabyi*, spec. nov.
 - Anterior part of frons without transverse sulci; body size varied; aedeagus varied (Figs 2, 10, 15, 18). 9.
9. Surface of pronotum and elytra markedly glossy; prothorax rather quadrate, ratio base/apex < 1.24; prothorax wider in relation to head, ratio prothorax/head > 1.42; apical part of aedeagus markedly curved left, not sinuate, at tip not incurved (Fig. 18). w.QLD, ce.NT. *micans*, spec. nov.
 - Surface of pronotum and elytra far less glossy; prothorax less quadrate, ratio base/apex > 1.27, usually more; prothorax narrower in relation to head, ratio prothorax/head < 1.39; apical part of aedeagus less curved left, or sinuate, or at tip incurved and crotched (Figs 2, 10, 15). n.NT, nw.WA: sw.KID. 10.
10. Body size larger, length 16.5 mm; aedeagus remarkably sinuate, tip acute but not incurved (Fig. 15). n.NT. *goldingi*, spec. nov.
 - Body size smaller, length < 13.5 mm; aedeagus not sinuate, tip either acute and incurved, or obtuse and straight (Figs 2, 10). 11.
11. Legs deep black; apex of aedeagus elongate, at tip acute and incurved (Fig. 10). n.WA: sw.KID. *windjanae*, spec. nov.
 - Legs usually less deep black; apex of aedeagus shorter, at tip more or less obtuse and not or barely incurved (Fig. 2). n. + nw.NT. *obscuripes* Blackburn, 1890
12. Head with several distinct transverse sulci (Fig. 126); legs uniformly rufo-piceous; apex of aedeagus short, rather straight, at tip fairly acute but not incurved (Fig. 19). n.QLD, ne.NT. *rugosifrons*, spec. nov.
 - Head without perceptible transverse sulci; legs variously coloured; aedeagus variously shaped. 13.
13. Elytra extremely elongate, ratio l/w 2.22; labrum 7-setose; eye laterad markedly protruded (Fig. 84); head and pronotum finely but densely punctulate; aedeagus unknown. n.WA: w.KID. *montisbelli*, spec. nov.
 - Elytra shorter, ratio l/w < 2.12; labrum 5-setose; eye laterad less protruded (Figs 83, 85, 122); head and pronotum usually less densely punctulate; aedeagus variously shaped. 14.
14. Pronotum and elytra remarkably glossy, without microreticulation; apical part of aedeagus markedly curved down, on the left side with deep, semicircular excision, apex straight, at tip obtuse (Fig. 17). sw.QLD, ne.SA. *glabripennis*, spec. nov.

- Pronotum and/or elytra with distinct microreticulation, less glossy; aedeagus differently shaped (Figs 1, 3-7, 12, 16, 22, 23). Distribution different. 15.
- 15. Pronotum elongate and considerably narrowed apicad, ratio l/w 1.11 (Fig. 122); all legs rufous, anterior leg not darker than middle and hind legs; apex of aedeagus elongate, strongly sinuate, tip acute and markedly curved down (Fig. 6). nw.QLD. *thoracica*, spec. nov.
- Pronotum shorter and usually less narrowed apicad, ratio l/w usually <1.05 (Figs 80, 83, 125, 128), if up to 1.11, body size <12 mm and body depressed; either all legs uniformly rufous or anterior leg perceptibly darker than middle and hind legs; apex of aedeagus variously shaped, but when all legs uniformly coloured, apex of aedeagus shorter and obtuse at tip (Figs 1, 3-5, 7, 12, 13, 16, 22, 23). 16.
- 16. All legs uniformly rufous or rufo-piceous; ratio l/w of prothorax <1.01; elytra parallel-sided; aedeagus with rather short, not incurved apex (Fig. 5). nw.QLD, ne.NT. *sinuicola*, spec. nov.
- Middle and hind legs distinctly paler than the front leg; apex of aedeagus usually longer, either more sinuate and less obtuse, or narrow, parallel, with the tip suddenly bent down (Figs 1, 3, 4, 7, 12, 13, 16, 22, 23); if apex short and not sinuate, ratio l/w of prothorax >1.05 and elytra slightly oval-shaped (Fig. 87). 17.
- 17. Prothorax rather elongate, ratio l/w >1.05 **and** elytra slightly oviform (Fig. 87) **and** protibia rather short, ratio in male <2.85, in female <2.5 **and** apical part of aedeagus not curved down, barely curved left, rather short and obtuse, at tip not incurved **and** parameres asetose (Fig. 23). ne.NSW, se.QLD. *regularis* Sloane, 1896
- Not all character states combined; if from southern or south-eastern Australia, elytra parallel-sided, protibia longer, ratio l/w in male >4.0, in female >3.3; parameres unisetose. 18.
- 18. Proepisternum distinctly punctate; aedeagus as in Figs 4, 7. 19.
- Proepisternum not punctate or only in lower part indistinctly punctate; aedeagus as in Figs 1, 3, 12, 13, 16, 22. 20.
- 19. Head rather densely punctate; aedeagus with rather wide, almost regularly triangular apex, at tip not incurved or crotched (Fig. 4). n.NT, n.QLD. *cooinda*, spec. nov.
- Head sparsely punctate; apical part of aedeagus markedly asymmetric, apex narrow, at tip curved down or even crotched (Fig. 7). nw.NT, ne.WA: ne.KID. *gemina gemina*, spec. nov.
- 20. Comparatively small species, length 12.8 mm; prothorax fairly elongate and slightly conical, ratio l/w 1.05; eye lateral little produced, orbit c. 1/3 of length of eye (Fig. 128); apical part of aedeagus very asymmetric, but apex short, straight, at tip obtuse and not incurved (Fig. 22). AUS: locality not noted. *dubia*, spec. nov.
- Size various, prothorax various, but less conical; eye laterad well protruded, orbit short (Figs 80, 83, 125); aedeagus different (Figs 1, 3, 12, 13, 16). 21.
- 21. Body size very large, length 15.2-18.9 mm; elytra rather elongate, ratio l/w 2.06-2.12; lower surface of aedeagus very concave, apical part almost symmetrically triangular, acute, at tip not incurved (Fig. 13). n. + nw.NT, ne.WA: ne.KID. ...
..... *ryaceki*, spec. nov.
- Body size various but usually smaller, if >15.0 mm, aedeagus on the left side deeply bisinuate and species from eastern Australia; elytra various; lower surface of aedeagus less concave or bisinuate, apical part either deeply bisinuate or narrow and at tip markedly incurved or crotched (Figs 1, 3, 12, 16). 22.
- 22. Prothorax generally slightly longer, ratio l/w >1.02; lower surface of aedeagus regularly concave; left side deeply bisinuate, apex barely incurved, not crotched (Fig. 1). e.SA, VIC, NSW, e.QLD. *procera* Putzeys, 1866
- Prothorax generally slightly shorter, ratio l/w <1.02; lower surface of aedeagus either regularly concave but apex very narrow, or lower surface bisinuate; apex always crotched; left side bisinuate or not (Figs 3, 12, 16). n. + nc. + nw. NT. 23.
- 23. Pronotum slightly shorter and more quadrate, ratio l/w <1.0 (Fig. 125); apex of aedeagus on left side deeply bisinuate; parameres bisetose (Fig. 16). nc.NT. *newcastleana*, spec. nov.
- Pronotum usually slightly longer and less quadrate, ratio l/w usually >1.0 (Figs 80, 83); apex of aedeagus on left side not deeply bisinuate, either lower surface regularly concave (Fig. 3), or apical part conspicuously incurved (Fig. 12); parameres asetose. n. + nw.NT. 24.
- 24. Elytra slightly longer, ratio l/w 2.04-2.08; lower surface of aedeagus regularly concave, apex narrow (Fig. 3). n.NT. *subrufipes*, spec. nov.

- Elytra slightly shorter, ratio l/w 2.0–2.05; lower surface of aedeagus slightly bisinuate, apical part remarkably incurved (Fig. 12). nw. NT.
..... *victoriae*, spec. nov.
- 25. Lateral margin of elytra widely yellow (Fig. 95); aedeagus with distinctly arrow-shaped apex, without serrate fold in the internal sac (Fig. 30). n.QLD, n.NT, n.WA: KID.
..... *marginata* (Putzeys, 1868)
- Elytra unicolourous; aedeagus variously shaped. 28.
- 28. Metepisternum elongate, c. 2 × as long as wide at apex, metathoracic wings long; hind body elongate, parallel-sided or almost so. 29.
- Metepisternum shortened, <1.5 × as long as wide at apex, metathoracic wings commonly abbreviated; hind body not parallel-sided, more or less oval shaped and commonly shorter. 33.
- 29. Head with several irregularly transverse sulci, very densely punctate (Fig. 98, 199, 131); aedeagus with short and wide, arrow-shaped apex (Figs 34, 35). 30.
- Head without distinct transverse sulci, less densely punctate (Fig. 97, 132); aedeagus variously shaped (Figs 33, 36). 32.
- 30. Elytra longer, ratio l/w >2.06; pronotum weakly microreticulate; aedeagus see Fig. 34; or unknown. nc. + sc.NT, ec.WA. 31.
- Elytra shorter, ratio l/w <2.02; pronotum more strongly microreticulate; aedeagus see Fig. 35. nw.WA. *incurvicollis*, spec. nov.
- 31. Colour black; head with much denser, but finer punctation; prothorax laterally less convex (Fig. 131); aedeagus with obtusely triangular, almost club-shaped apex (Fig. 34). nc.NT.
..... *bankae*, spec. nov.
- Colour pale red; head with far less dense, but coarser punctation; prothorax laterally markedly convex (Fig. 99); aedeagus unknown. sc.NT, ec.WA. *rectipennis*, spec. nov.
- 32. Pronotum dorsally convex; both, pronotum and elytra, with fine but distinct microreticulation; elytra shorter, ratio l/w <2.0 (Fig. 97); aedeagus with triangular, arrow-shaped apex (Fig. 33). nw.WA: KID. *oblitricollis* Sloane, 1905
- Pronotum dorsally depressed; both, pronotum and elytra, with very superficial microreticulation, glossy (Fig. 132); elytra longer, ratio l/w >2.10; aedeagus with slightly asymmetric, spatulate apex (Fig. 36). nw.WA: Pilbara.
..... *platynota*, spec. nov.
- 33. 3rd, 5th, and 7th elytral intervals each with >10 punctures and setae (Figs 92, 135); elytra soldered together; aedeagus unknown. n.NT: Kakadu NP. *triseriata*, spec. nov.
- Only 3rd elytral interval with discal setae. ... 34.
- 34. 3rd interval with 5–7 discal punctures and setae; elytra free, but metathoracic wings almost completely reduced; aedeagus narrow, with elongate apical part and small, convexly arrow-shaped apex (Fig. 27). n.QLD. *variseta*, spec. nov.
- 3rd interval with 4 discal punctures and setae; elytra and aedeagus variously shaped. 35.
- 35. Mandibles slender and elongate, pincer-like (Fig. 94); aedeagus with narrow, gently knobbed apex (Fig. 29). 36.
- Mandibles short and wide; aedeagus variously shaped. 37.
- 36. Elytra shorter, ratio l/w <1.80; aedeagus see Fig. 29. nw.QLD, n.NT, ne.WA: ne.KID.
..... *gracilipes gracilipes* Sloane, 1896
- Elytra longer, ratio l/w >1.88; aedeagus unknown. n.QLD: c. + n.CYP.
..... *gracilipes longior*, subspec. nov.
- 37. Eye protruded but rather small, orbit large, oblique (Figs 114–116) **and** length <8.8 mm **and** labrum 5-setose; aedeagus with more or less elongate, claw-shaped apex (Figs 46–48). 38.
- Eye large, orbit small (Figs 93, 100, 101, 104–113, 129) **or** size much larger **or** labrum 7-setose; aedeagus different, never claw-shaped (Figs 24–26, 28, 31, 32, 37–45). 40.
- 38. Smaller species, length <6.5 mm; aedeagus with very narrow, elongate apical part and with small, claw-shaped apex; parameres conspicuously longitudinally striped (Fig. 46). n.NT.
..... *darwini* Sloane, 1916
- Larger species, length >7.5 mm; aedeagus with shorter claw-shaped apical part; parameres not longitudinally striped (Figs 47, 48). n.NT. ... 39.
- 39. Temporal ridge and basal margin of clypeus both markedly raised, frons in middle with a longitudinal groove (Fig. 115); prothorax slightly shorter, ratio l/w >0.98; apex of aedeagus straight, parameres less stout (Fig. 47).
..... *macleayi* Sloane, 1896
- Temporal ridge and basal margin of clypeus both far less raised, frons in middle without longitudinal groove (Fig. 116); prothorax slightly longer, ratio l/w >1.02; apex of aedeagus strongly turned left, parameres stout (Fig. 48).
..... *horneri*, spec. nov.

40. Eye more or less large, but not hemispherical and suddenly protruded, orbit short but always visible (Figs 88–90, 96, 102, 103, 130). 41.
- Eye large, hemispherical and suddenly protruded, orbit extremely short, barely visible (Figs 93, 100, 101, 104–113, 129). 47.
41. Eye rather small, orbit large and oblique, $>1/3$ as long as eye, head markedly triangular (Figs 96, 131); aedeagus either with sinuate, at tip obtusely angulate apex (Fig. 32), or with short and wide, spatulate apex (Fig. 31). e.VIC, e.NSW, se.QLD. 42.
- Eye larger, orbit small and less oblique, at most $1/4$ as long as eye, head not markedly triangular (Figs 88–90, 102, 103); aedeagus always with arrow-shaped or club-shaped apex (Figs 24–26, 39, 40). 43.
42. Generally larger species, length 12.5–17.2 mm, usually >14 mm; eye smaller, orbit larger, c. half as long as eye (Fig. 130); aedeagus with sinuate, at tip obtusely angulate apex (Fig. 32). e.VIC, e.NSW. *robusta* Sloane, 1905
- Generally smaller species, length 10.7–14.1 mm, usually <13 mm; eye larger, orbit smaller, c. $1/3$ as long as eye (Fig. 96); aedeagus with short and wide, spatulate apex (Fig. 31). ne.NSW, se.QLD. *oblonga* (Putzeys, 1873)
43. Elytra oblong-oval, considerably narrowed towards base (Figs 88–90), free but metathoracic wings reduced; aedeagus with narrow apical part and small, club-shaped apex; internal sac with a sclerotized and serrate fold (Figs 24–26). n.QLD. 44.
- Elytra slightly oval, but little narrowed towards base (Figs 102, 103), soldered together; aedeagus either with large and short, club-shaped apex or with asymmetrically spatulate apex; internal sac without a sclerotized and serrate fold (Figs 39, 40). n.NT. 46.
44. Aedeagus larger, length >3.0 mm, with wide, spade-shaped apex that is deeply separated from the preapical stalk, and with a strongly sclerotized and serrate fold in the internal sac (Fig. 24); elytra elongate, ratio $l/w >2.02$. n.QLD: tip of CYP north of Jardine River, and Torres Strait islands. *elegans* Putzeys, 1862
- Aedeagus smaller, length <2.8 mm, with narrower apex that is far less separated from the preapical stalk, and with a far less sclerotized and serrate fold in the internal sac (Figs 25, 26); length and shape of elytra various. n.QLD: n. + ce. CYP south of Jardine River. 45.
45. Elytra generally slightly shorter and more evenly oval-shaped, with narrower base, ratio $l/w 1.94$ – 2.02 (Fig. 89); ratio base/apex of pronotum <1.45 ; aedeagus slightly smaller, length <2.5 mm (Fig. 25). Area around Heathlands, far northern CYP. *interposita*, spec. nov.
- Elytra generally longer and less evenly oval-shaped, with wider base, ratio $l/w 2.03$ – 2.11 (Fig. 90); ratio base/apex of pronotum >1.50 ; aedeagus slightly larger, length >2.7 mm (Fig. 26). Iron Range, ce. CYP. *kershawi* Sloane, 1916
46. Elytra generally longer, more narrowed towards base, ratio $l/w 1.96$ – 2.07 ; 5th–7th striae weak or absent (Fig. 102); aedeagus with short, club-shaped apex (Fig. 39). n.NT around Darwin. *mastersi* Sloane, 1896
- Elytra generally shorter, less narrowed towards base, ratio $l/w 1.93$ – 1.98 ; 5th–7th striae distinct (Fig. 103); aedeagus with asymmetrically spatulate apex (Fig. 40). n.NT: Cobourg Pen. *cobourgiana*, spec. nov.
47. Labrum 5-setose **and** body size >12.5 mm **and** elytra longer, ratio $l/w >1.75$ **and** elytra not markedly oviform **and** striae but moderately deep and finely punctate (Fig. 93, 129). 48.
- Labrum usually 7-setose; if 5-setose, **either** body size small, <8 mm, **or** elytra shorter, ratio $l/w <1.73$ and markedly oviform and striae very deep and very coarsely punctate (Figs 100, 101, 104–113). 49.
48. Prothorax longer, less conical, ratio $l/w 1.0$ (Fig. 129); microreticulation of pronotum fine but distinct, transverse striolation very weak; elytra longer, ratio $l/w 1.88$; aedeagus with wide, spatulate but at tip convex apex (Fig. 28). ne.QLD. *inopinata*, spec. nov.
- Prothorax shorter, more conical, ratio $l/w <0.94$ (Fig. 93); microreticulation of pronotum barely perceptible, transverse striolation coarse; elytra shorter, ratio $l/w <1.80$; aedeagus unknown. c. + sw.QLD. *profundestriolata*, spec. nov.
49. Labrum 5-setose; body length 7.7 mm; prothorax rather elongate and but moderately conical, ratio $l/w 1.06$; elytra moderately oviform, ratio $l/w 1.83$; striae finely punctate (Fig. 109); aedeagus unknown. n.WA: sw.KID. *froggatti* Sloane, 1896
- Labrum usually 7-setose; prothorax shorter, ratio $l/w <1.01$; **either** much larger species, length >9.5 mm, **or** prothorax very conical and elytra short, ratio $l/w <1.73$, remarkably oval-

- shaped, striae very coarsely punctate (Figs 110–113). 50.
50. Generally smaller species, length 7.7–10.4 mm; prothorax remarkably conical; elytra short, ratio $l/w < 1.73$; markedly oval-shaped and dorsally convex (Figs 110–113). 51.
- Generally larger species, length 9.6–16.8 mm; prothorax less conical; elytra usually longer, ratio $l/w > 1.80$, if less, body length > 12 mm; elytra less oval-shaped, dorsally rather depressed (Figs 100, 101, 104–108). 54.
51. Discal punctures of elytra foveiform (Fig. 111); aedeagus with about circular, club-shaped apex (Fig. 44). n.NT. *demarzi* Baehr, 1987
- Discal punctures of elytra not foveiform (Figs 110, 112, 113); aedeagus with convexly triangular apex (Fig. 45), or unknown. 52.
52. Odd elytral intervals conspicuously raised; pronotum markedly depressed, with fine but distinct microreticulation, dull, also with distinct, irregular striae (Fig. 112); aedeagus with convexly triangular apex (Fig. 45). n.NT, n.WA: ne.KID. *crassipennis*, spec. nov.
- Odd elytral intervals not raised; pronotum more convex, with less distinct microreticulation and very superficial striae (Figs 110, 113); aedeagus unknown. 53.
53. Elytra shorter, ratio $l/w < 1.57$; striation regular (Fig. 110); pronotum dorsally less convex; antenna and legs black. n.QLD. *hackeri* Sloane, 1907
- Elytra longer, ratio $l/w 1.67$; striation irregular, 4th and 5th striae in basal half, 5th and 6th striae in apical half united (Fig. 113); pronotum dorsally very convex; antenna red, legs reddish-piceous. n.WA: sw.KID. *horaki*, spec. nov.
54. Pronotum short, ratio $l/w < 0.90$; elytra short, ratio $l/w < 1.78$, conspicuously narrowed at base (Fig. 108); aedeagus with arrow-shaped apex which is symmetrically attached (Fig. 43). nw.WA: Pilbara. *pachysoma*, spec. nov.
- Pronotum usually longer, ratio $l/w > 0.90$, commonly more; elytra longer, ratio $l/w > 1.80$, usually less narrowed at base (Figs 100, 101, 104–106); or elytra longer, elongately oval-shaped, ratio $l/w 1.85$ (Fig. 107); aedeagus either with club-shaped apex (Figs 37, 38), or with arrow-shaped apex which is asymmetrically attached (Figs 41, 42), or unknown. n.QLD, n.NT. 55.
55. Body size large, length > 14.2 mm; aedeagus with almost circular, club-shaped apex and elongate parameres (Fig. 38). n.NT. *major* Sloane, 1917
- Body size smaller, length < 13.0 mm; aedeagus either with club-shaped apex but shorter parameres (Fig. 37), or with arrow-shaped apex which is asymmetrically attached (Figs 41, 42), or unknown. 56.
56. Elytra elongately oval-shaped, markedly narrowed at base; striae in apical third very weak, 6th and 7th striae inconspicuous (Fig. 107); aedeagus unknown. n.QLD. *ovalipennis* Sloane, 1905
- Elytra less oval-shaped, less narrowed at base; striae complete, deeply impressed even at apex (Figs 100, 104–106). 58.
58. Prothorax and elytra without any traces of microreticulation, glossy (Figs 104, 106); aedeagus with asymmetric, arrow-shaped apex (Figs 41, 42). 59.
- Prothorax and elytra with fine microreticulation, duller (Figs 100, 105); aedeagus with club-shaped apex (Fig. 37), or unknown. 60.
59. Elytra little oviform, elongate, ratio $l/w 1.84$ – 1.92 (Fig. 106); whole surface very glossy; aedeagus with elongate, arrow-shaped apex (Fig. 42). n.NT, ?n.WA. *nitescens*, spec. nov.
- Elytra distinctly oviform, usually shorter, ratio $l/w 1.80$ – 1.85 (Fig. 105); dorsal surface less conspicuously glossy; aedeagus with shorter, arrow-shaped apex (Fig. 41). ne.QLD. *nyctosyloides* Putzeys, 1868
60. Microreticulation on pronotum and elytra fine but distinct, both surfaces rather dull; elytra slightly longer, ratio $l/w > 1.82$ (Fig. 100); aedeagus with club-shaped apex (Fig. 37). n.NT. *brevisterna* Sloane, 1916
- Microreticulation on pronotum and elytra very fine and indistinct, both surfaces rather glossy; elytra slightly shorter, ratio $l/w 1.81$ (Fig. 105); aedeagus unknown. ne.QLD. *ovalior*, spec. nov.

procera group

Diagnosis. Medium sized to very large species with deep, quadrangular clypeal excision; hind body parallel-sided or almost so; clypeus 5- or 7-setose, but in some species the number of setae varies between 3–8. Aedeagus with more or less acute apex, but apex

never arrow-shaped, or club-shaped, or claw-shaped, or spatulate. All species are fully winged. This is a very homogenous group with respect to external and also genital morphology.

Medium sized species are best distinguished from species of the *impressiceps* group by the elongate protibia that bears only three distinct though delicate teeth.

Distribution. 23 species and one subspecies, most of which are distributed in the northern part of Australia.

The *Clivina procera* complex

In the material available many specimens were identified either as *Clivina procera* Putzeys, 1866, or *C. obscuripes* (Blackburn, 1890). Usually southern and eastern specimens were determined as *C. procera*, northern ones as *C. obscuripes*. *C. procera* was described from a single specimen from Melbourne, and from Melbourne Putzeys (1866) in the same paper had also described *C. prominens* which was said to be slightly smaller. However, comparison of the types reveals that both certainly belong to the same species.

C. obscuripes was described from a single female from "Burrundie" in far Northern Territory and was claimed by the author, and subsequently by Sloane (1905), to be slightly more robust than *C. procera*, having slightly shorter elytra with slightly deeper striae, and a slightly more quadrate prothorax. As the name suggests, *C. obscuripes* has dark legs, while all southern and eastern specimens attributed to *C. procera* have at least the middle and hind legs yellow or pale red, at any rate considerably paler than the front leg.

All specimens belonging to both nominal species have in common the deep, rather quadrangular excision of the clypeus, almost impunctate and not transversely sulcate head, more or less quadrate prothorax, and elongate, almost parallel-sided, dorsally somewhat depressed elytra.

Having seen several hundreds of specimens from southern, eastern, and northern Australia attributed to either *C. procera* or *C. obscuripes*, I recognize that the taxonomy is not as easy as it was previously believed, because apparently several populations exist which differ in certain character states of external and genital morphology, and usually possess definite and more or less well separated areas. The main characters that can be used for the distinction of those populations are: body size, colour of legs, surface structure of head and pronotum, shape of pronotum, degree of punctuation of proepisternum, and shape of the apical part of the aedeagus. All other

differences mentioned in Blackburn's and Sloane's descriptions and comments vary randomly in the whole complex.

As usual in such complex of very similarly shaped and structured populations, decisions about the taxonomic value, or level, of the various different populations are difficult. The reasons are a certain amount of variation within populations, the disputable value of the character states mentioned above, and, in the case of leg colour, the difficult decision about the colour in not fully pigmented or sclerotized specimens. Probably additional taxonomic methods, in particular molecular ones, would be useful and perhaps could help to elucidate the difficult taxonomic situation in this complex.

According to the mentioned character states, I believe that 12 populations can be distinguished in this complex, which differ in one or another of the mentioned character states:

1. Those specimens from southern and eastern Australia which are attributed to *C. procera*, usually are comparatively large, the middle and hind legs are definitely paler than the anterior leg, and the apex of the aedeagus is more or less regularly triangular, moderately acute, and at the very tip not or little bent down. This population ranges from eastern SA through VIC, NSW, and southern and eastern QLD up to CYP. For this population the name *C. procera* is still used, because the type specimens of *C. procera* and *C. prominens* clearly belong to this population.

2. In the far northern part of NT (environments of Darwin down to about Katherine) a population of moderately large specimens exists which possess fairly dark legs and barely paler middle and hind legs. The apical part of the aedeagus usually is slightly sinuate, but the tip is rather short and quite obtuse, and is more or less, but not suddenly or markedly, curved down. By comparison with the type of *C. obscuripes* that name is attributed to this population.

3. A population of fairly large specimens occurs in north-eastern NT and adjacent north-western QLD around the coast of the Gulf of Carpentaria. The apex of the aedeagus, in the few male specimens recorded, usually is little or not sinuate and more or less obtuse. The legs are rather uniformly reddish-piceous to piceous. It is the connecting link between *C. procera* and *C. obscuripes*.

4. A population occurring mainly in Kakadu NP and at some localities west of the park, is comparatively small, has definitively paler middle and hind legs, and the aedeagus is moderately sinuate, acute, and very shortly bent down at the tip.

5 and 6. Specimens from north-western NT and the Kimberleys commonly are comparatively large

and the apical part of the aedeagus is sinuate, very acute, and distinctly bent down at the tip. Because specimens from north-western NT and adjacent north-eastern WA (the north-eastern part of KID) have decidedly paler middle and hind legs, whereas the population from the southern and western part of KID (from about Fitzroy Crossing to Derby, and inland to Windjana Gorge) have very dark, even completely black legs, they are regarded as two subspecies of a common species.

7. A population distributed from far Northern Territory to extreme north-eastern Western Australia (the north-eastern part of KID) is large, decidedly larger than any other group except one population that is even larger (see below under 10.), has pale middle and hind legs, elongate, acute apex of the aedeagus, and the pronotum has slightly oblique lateral margins which are almost straight or only little convex. In its whole range it occurs together with other populations.

8. A population that occurs in northern central NT includes comparatively large specimens with shorter and more quadrate pronotum than usual. The aedeagus is of rather similar shape as that of the specimens from northern WA, but the middle and hind legs are definitely paler than the anterior leg. Most specimens have been recently collected in the area from about Katherine to Elliott.

9. A single male specimen from north-western QLD likewise has a very sinuate and acute, at tip markedly bent down aedeagus, but the legs are rather uniformly reddish-piceous and the prothorax is unusually elongate and depressed. Therefore the specimen is quite different from those of the population around the Gulf of Carpentaria, as well in external, as in genital morphology.

10. A very large species, actually the largest found in Australia and perhaps the largest *Clivina* in general, occurs in KID in north Western Australia. It is characterized by completely black legs, short, laterally markedly convex prothorax, and elongate, remarkably downcurved apex of the aedeagus. Moreover, the subapical margin of both parameres is conspicuously quadrangular. It is sympatric with one or even two other populations, according to the area.

11. A population of rather large specimens bears several more or less distinct transverse sulci on the frons. The head is sparsely but distinctly punctate, the pronotum is depressed, middle and hind legs are pale, and the aedeagus is short and at tip not incurved. It occurs in north QLD up to the northern part of CYP.

12. In a population of fairly large specimens from south-western QLD and adjacent north-eastern SA the dorsal surface is not or barely microreticulate and remarkably glossy, the pronotum is wide and

depressed, legs are pale, and the aedeagus is elongate, markedly asymmetric, and at tip not incurved.

For the present paper, mainly for heuristic reasons and to provide a frame for future taxonomic surveys, I have decided to give preliminary names to the mentioned populations. However, which taxonomic level should be attributed to these populations? Taking shape and structure of the aedeagus as the most important character with respect to reproductive separation, two groups of populations are distinguished: namely those with a short, more or less obtuse and not much bent down apex of the aedeagus, and those with an elongate, acute, and distinctly bent down apex. Because in some areas populations of both groups are sympatric, those populations at any rate must be considered species, whereas populations with rather similar aedeagi and that geographically are not widely separated, might be considered subspecies. However, as long as no other character sets are available, preferably those of molecular genetics, for heuristic reasons I think it the best to attribute to all populations the rank of species, except two populations in the north-eastern, respectively south-western Kimberleys which only differ in the leg colour, and which, therefore, are provisionally regarded subspecies.

The result is the following preliminary classification:

Clivina procera Putzeys

Figs 1, 54, 78, 80

Clivina procera Putzeys, 1866a: 34. – Putzeys 1866b: 180; 1868: 7; Blackburn 1890: 1248; Sloane 1896a: 181, 227, 228, 231, 238, 244; 1896b: 275; 1905a: 730, 732; Csiki 1927: 493; Moore et al. 1987: 75; Lorenz 2005: 144.

Clivina prominens Putzeys, 1866: 35 (**syn. nov.**). – Putzeys 1866b: 182; 1868: 8; Blackburn 1890: 1249; Sloane 1896a: 229; 1905a: 730; Csiki 1927: 493; Moore et al. 1987: 75; Lorenz 2005: 144.

Examined types. Holotype of *procera*: ♂, *Scol. procerus*. ♂ / Ex Musaeo Chaudoir (MNHP). – Lectotype of *prominens* (**by present designation**): ♀, Ex Musaeo Chaudoir, no label but sub "*prominens* Putz. Australie Melbourne Bakewell" (MNHP).

Type localities. Of *procera*: "Melbourne", Victoria. – Of *prominens*: "Melbourne", Victoria.

Note. As the type specimen of *C. prominens* does not exhibit any differences in body shape, apart from being slightly smaller than the type specimen of *C. procera*, the name *prominens* is synonymized with *procera*. This procedure is corroborated by the similar type localities and the considerable variation in body size of this species.

Other material (316 ex.). SA: Waikerie 24.viii.58 B.P.Moore / *Clivina procera* Putz. Det. B.P.Moore'62 (ANIC); Innamincka: Coopers Ck 24 Jan. 1976 M.S. & B.J.Moulds / Walford-Huggins Collection / *Clivina procera* Putz. det. B.P.Moore'77 (CMP); Type / Putzeys Typ! / Gawler Odewahn / Compared with T Y P E K. Kult 1946 / *promiens* Putz. typ! / COLLECTIO KAREL KULT (CDW); 27.02S, 140.02E unnamed Lake, 15.x.72 Roffey & Mitchell (ANIC); 34.03S 140.43E GPS Calperum HS. 15km NNW Renmark, 7-8 Nov.1995, M.Dominguez & K.R.Pullen / Calperum Station/Bookmann Biosphere Reserve Invertebrate survey (ANIC); 34.02S 140.36E GPS 21km NW Renmark, 8 Nov.1995 Cardale, Lee, Pullen & Dominguez / Calperum Station/Bookmann Biosphere Reserve Invertebrate survey (ANIC); 33.47S 140.42E GPS 24km NbyW Renmark 13 Dec 1995 Mallee grassland K.R.Pullen / Calperum Station/Bookmann Biosphere Reserve Invertebrate survey (ANIC); Adelaide / Adelaide Coll.Castelnau / *Scolyptus procerus* Putz. teste Putzeys 1868 (MCSG); Myponga A. H. Elston / *C. procera* Putz. Id. by A. M. Lea / A.H. Elston Collection (AMS K 149365); Naracoorte 20.i.1967 G. Monteith (UQIC #90678-9 (QMB); Mt. Gambier Lea (SAMA 25-033615); Blanche^m (SAMA 25-033609); Mannum (SAMA 25-033741); W. of Renmark Sept.'57 Darlington (MCZ); R.Murray S. Australia A. H. Elston / 862 *Clivina procera* Putz. Id. by T.G. Sloane / A.H. Elston Collection (AMS K 149366); R.Murray A. H. Elston / *Clivina procera* Putz. / A. H. Elston Collection (AMS); S.Australia Blackburn / 3105 (unreadable) / *procerus* Putz. / *Clivina procera* Putz. S. Australia (SAMA); S.Aust (MMS); South Australia (MMS); S. Australia / *Clivina procera* Putz. S.Aust. (MMS); *Scolyptus* / S. Australia (SAMA 25-033618). – VIC: Benalla 29.viii.60 B.P.Moore (ANIC); Benalla viii.60 B.P.Moore (ANIC); Hattah Lakes 25.xi.68 B.P.Moore (ANIC); 35°31'03S 141°18'56E Big Desert Big Billy 7-18 Nov 1997 M.Naev & M.Powell (ANIC); 34.35S 132.46E (wrong longitude, must be 142°!) Robinvale 25 Oct.-3 Nov. 1988 T.Weir, J.Lawrence & M.Hansen (ANIC); 2km W Ulupna Island NNW Strathmerton 30 Oct 1990 P. A. Meyer (ANIC); Bonnetry (?) Bend 26.viii.69 B.P.Moore (ANIC); Watchem 10.1.1989 Spurrell. (NMV COL 5540); Bermah For. 36°S, 145°E, 3.11.02, A.Ballinger / *Clivina procera* Putz. det.M.Baehr'03 (CBM); Lake Hattah 28.xi.67 G.W.Anderson (ANIC); Kulkynne, Dec.34.7 R.Thompson / *Clivina procera* Putz Id. by F. E. Wilson (ANIC); (unreadable) / *Clivina procera* Putz. (Brisbane) (ANIC-MMS); Natia J.E.Dixon (NMV COL-13550); Ouyen mallee 20.1912 / Pres by J.E.Dixon 19.11.16 (NMV COL-14050-1); Lake Hattah J. E. Dixon (NMV COL-13545); Lake Hattah Nov. 1924 C. Oke / *Clivina procera* Putz. Id. by T. G. Sloane (NMV COL-5534/8); Lake Hattah Nov. 1924 C. Oke / *Clivina procera* Putz. Id. by C. Oke / UQIC Reg. #90742 (QMB); Echuca, 28.12.1989 E.M. (NMV COL-13619); Caulfield (NMV COL-5514); Caulfield / *Clivina procera* Putz. det. by Sloane 7/04 (NMV COL-10515); Inglewood Dec. 1925 C. Oke. / *Clivina procera* Putz. Id. by T. G. Sloane (NMV COL-5536); Linga Oct. 1932 F.E.Wilson / F. E. Wilson Collection (NMV COL-5537); Nagambie 12.34 J.C. 9 (?) (NMV COL-20836); *Clivina procera* Putz. Sea Lake /

Clivina procera Putzeys (NMV COL-18909); N^r Melb^{ne} (NMV COL-13512/17); Murray R. / C. French's Collection (NMV COL-5545); Kulkynne Dec. 1917 R.Thompson / NM 7 *Clivina procera* Putz. (AMS K 149367); Vict. / *Clivina procera* Putz. Id. by T. G. Sloane / COLLECTIO KAREL KULT (CDW); Victoria (NMV COL-10510/13); *Clivina procera* P. / Victoria (MMS). – NSW: Yandilla F. A. Gore. Don. 11262 / *Clivina planifrons* Putz. N. S. Wales (QMB); Dubbo 4 Dec. 1973 / Coll. A&M Walford-Huggins / *Clivina procera* Putz. det.M.Baehr'95 (CMP); Australia, H.J.Carter 1912-483. / Windsor Hood 7.04 / *C. procera* Putz. (NHM); Windsor Hood 7.04 / H. J. Carter Coll. (NMV COL-10516); Bogan R. J. Armstrong / *C. procera* Putz. det. K. Kult 1948 / COLLECTIO KAREL KULT (CDW); Bogan R. J. Armstrong / *Clivina procera* Putz. Id. by J.W.T.Armstrong (ANIC); Bogan R., S. of Nyngan Oct'57 Darlington (MCZ); 10 km E of Nyngn, 26.x.1978 K. J. Lambkin & D. R. Smith (QMB); 30.52S 147.46E Sandy Camp Station, Macquarie Marshes, W. of Coonamble, 27 May 1952. J.Balderson (ANIC); Deniquin, 26.12.66 V. R. Squires (ANIC), Lake Cowal 10.iii.1970, 15-2-1971 W. Vestjens (ANIC); c.25km W. of Wentworth, Moorna Station 13-18.ix.74, P.Meyer (ANIC); Collector, N.S.W. 30.55S 149.26E 11.ix.1968, A.Clarke (ANIC); Mul / *C. procera* Putz Id. by Sloane 7.04 (NMV COL-5542); Murray R. / F. E. Wilson Collection (NMV COL-5535); Canowindra Jan 56 F.E.Wilson / F.E. Wilson Collection (NMV COL-10518); Richmond R. Austr. Mus. 5-02 / H. J. Carter Coll. (NMV COL-5426); Richmond R. SYNTYPE *Clivina foveiceps*, Macl. (ANIC-MMS); Condobolin 29.10., 30.10., 31.10., 1.11.1958 / *Clivina procera* Putz. Det. B.P.Moore 1999 (AMS K 147964-67); 301 JM 8.1.20 Coonamble / *Clivina* sp. (AMS); Gwabegar 16.11.1979 / *Clivina procera* Putz. Det. B.P.Moore 1999 (AMS); *S. procerus* Putz Wentworth (SAMA); Allroy N.S.W. / 7744 *Clivina procera* Putz. N. S. Wales (SAMA); *C. procerus* Putz. Wentworth / *Scolyptus procerus* Putz. / 7742 *Clivina procera* Putz. N. S. Wales (SAMA); Heatbon State Forest, 22 km SE Cessnock St.64 2 XI 1980 / Australie New South Wales C. & A. Jeekel (ZMUA, now NMNL); Round Hill district Jan 1990 A.Sundholm J.Bugela (AMS K 225388); N.S.Wales / *Scolyptus procerus* Putz. Darling River (MMS); Lake Cowal 11 : 11 : 1972 D. A. Doolan / D. A. Doolan Collection / *Clivina procera* Putz. Det. B.P.Moore 1999 (AMS K 147962); Mulwala T.G.S. (unreadable) / *Clivina procera* Putz. Id. by T. G. Sloane (QMB); Australien N.S.Wales E.Plason / Sammlung H.Hesse (SMNS); (unreadable), N.S.W. T.G.S. 8.10.25 (ANIC); N.S.Wales / *Clivina procera* / Coll. Franklin Müller / *Clivina procera* N.S.Wales / *C. procera* Putz. det. K. Kult 1948 (DEI); *Clivina procera* Putz N.S.W. (SAMA); H. J. Carter Coll. / *Clivina procera* Putz. N. S. Wales (NMV COL-14018); N.S.Wales (MMS); New South Wales UQIC Reg. # 907546 (QMB); N.S. Wales / *Scolyptus planiceps* Putz. Australien O. Langenhan / Sammlung O. Langenhan. Kauf 1931. 18 (SMTD); N.S.Wales / SYNTYPE (of *C. foveiceps* Macl.) (ANIC-MMS). – QLD: "11 Mile Scrub", 19 km N, of Moreton, C. York Pen. 15-16.vii.1973 G. B. Monteith (CBM, QMB); Homestead Silver Plains East Coast Cape York Pen. 20.IV.1960 J. L. Wassell (ANIC, CBM); Silver Plains Cape

York, Q. May–June '58 Darlingtons (MCZ); Cooktown, 30.12.48 E. Adams E.Sutton. / E. Sutton Collection. (QMB); Cooktown 19.4.53 C. Oke (NMV COL-13604); W. of Ravenshoe Atherton Tab., Q. c.3000', Feb. 58 Darlingtons (MCZ); N. of Mareeba Feb.'58 N.Q.Darlingtons (MCZ); 18.09S 144.20E Mount Surprise, Qld. 2.4 April 1995 J.Balderson P.K.Christensen (ANIC); Tolga N. Qld. 3-iv-1983 J.D. Brown, light trap (QDPIM); Tolga N. Qld. 5.iv.1981 N. Gough, J.D. Brown at light (QDPIM); Cairns 3/53 GB. / M. 157 / J. G. Brooks Bequest 1976 (ANIC); Cairns (ANIC); v. Cairns, Q. Darlingtons (MCZ); Woodstock 3.9.53 E.Sutton A.Johnson / E. Sutton Collection. (QMB); Woodstock 11.11.56 A.Johnson E.Sutton / E. Sutton Collection. (QMB); Woodstock N.Q. 3/54 AJ / *procera* Putz. 339a / J.G. Brooks Bequest 1976 (ANIC); Kowanyama, N. Qld. 9.i.1977 D.L.Hancock (QMB); Townsville G.F.Cook / *Clivina obscuripes* (unreadable) (SAMA 25-033772); Qld. Greenvale, 70km SW at light. 28 Mar– 7 Apr. 1995 A. J. Watts (SAM); N. Queensland 29.1.–3.2.2000 The Lynd Junction Sv.Bilý leg. (CBM); Wallaroo legit G. Hangay, 17.I.68 / *Clivina procera* Putz. det.M.Baehr'96 (CBM); Wallaroo 17.I.68 leg. G.Hangay / *Clivina procera* Putz. det.M.Baehr'89 (QMB); Mackenzie River 29.I.1968 leg.G.Hangay / *Clivina procera* Putz. det.M.Baehr'89 (CBM); Foleyvale Abor.Res. 20.–23.I.1968 lg.G.Hangay / *Clivina procera* Putz. det.M.Baehr'89 (CBM); SEQ: 25°26'SX150°01'E Taroom District Boggomoss No.3 9 Sep-11 Nov1996, OF P.Lawless 094 / QM Reg.No. T35621, 35624-8 / Boggomoss databased as *Clivina* sp.1 Temporary label only (QMB); SEQ: 25°27'SX150°03'E Taroom District Boggomoss No.21 18 Jun1996, H. Janetzki / QM Reg.No. T35629 / Boggomoss databased as *Clivina* sp.1 Temporary label only (QMB); 6 km N Taroom25°36'E,149°46'S 1 Mar 1991 mv lamp G. Daniels / UQIC Reg. 90253 (QMB); 25°26'SX150°01'E Boggomoss Ck. BM03. Nov1996, 200m P.Lawless 10590 (QMB); 25°27'SX150°03'E Boggomoss No.21 via Taroom. 11–12Nov1996, F.Cook 072 / QM Reg.No. T35621, 35622 / Boggomoss databased as *Clivina* sp.1 Temporary label only (QMB); 26°23'Sx146°12'E Charleville, 8km SW 4–5Mar2003; 300m G.Monteith, C.J.Burwell Mulga 51123 (QMB); 26°26'Sx146°10'E Charleville, 5km NE 3–5Mar2003; 310m G.Monteith, C.Burwell Box flat 51124 (QMB); 5km NE Edungalba 18 Jan 1991 AStofarski (SAMA); Townsville G. E. Bryant F.P.Dodd. 1911 / J. G. Bryant Coll. (NHM); Townsville Brown / H. J. Carter Coll. P.20.4.22. (NMV COL-5411); Townsville to Mackay. Q Mar'58 Darlingtons (MCZ); Injune CQ 2.3.38 E. Sutton / E. Sutton Collection (QMB); Rockhampton A. M. Lea (Sama 25-033518); Rockh / J. French's Coll. / *Clivina obscuripes* Blckb. Queensland (NMV COL-5140); Rockhampton Mar.'58, Q. Darlingtons (MCZ); Rockhampton 9 2.1-44 E.Sutton C.Valles / E.Sutton Collection Don-Dec.1964. (QMB); Dawson R. (ANIC); Townsville, 15.12.02 F. P. Dodd (ANIC); Nelly Bay Magnetic Is Mar97 S.Feam (QMB); Mackay / C. French's Coll. / 916 / *Clivina procera* Putz. Id. by T. G. Sloane (NMV COL-5539); 7 / Dalby Q. Mrs. F. H. Hobler 7 *Clivina procera* Putz. Id. by T. G. Sloane (SAMA); Dalby Q. Mrs. F. H. Hobler (SAMA 25-033616/714-16); 26°41'Sx150°38'E

“Allinga” Chinchilla Grace Lithgow (QMB); Emerald E.Allen 1916 (QMB); In flood debris / Rockhampton (SAMA 25-033612/19); Rockhampton / Rockhampton Coll.Castelnau / *Scolyptus procerus* Putz. teste Putzeys 1868 (MCSG); Coll. C. FelscheGeschenk, 1907 / Rockhampton (SMTD); P. Denison / Port Denison Coll. Castelnau / *Scolyptus procerus* Putz. teste Putzeys 1868 (MCSG); Caves nr. R/ton RLHiggins (ANIC); Clermont VII 29 Dr. K. K. Spence / C. *Procera* Putz. ♂ Id by Dr. K. K. Spence (AMS K 149368); Brisbane HJC 14/10 / H. J. Carter Coll. / *Clivina procera* Putz. (NMV COL-5544); Gayndah K37093 / *Clivina procera* Putz Id. by T. G. Sloane (AMS); Maryborough E. W. Fischer (SAMA 25-033620); Milmeran 11/53 J.M. / M. 159 / J. G. Brooks Bequest 1976 (ANIC); 5-4-55 / J.Sutherland Brisbane / UQIC Reg. 90346 (QMB); Ex light trap St. George, 8. ii.1974 L.Lloyd (QDPiB); Strathmore Stn. via Georgetown 22.iv.1984 R.I. Storey at light (QDPIM); Kowanyama 9.i.1977 D. L. Hancock (QMB); Townsville, light trap 23.iv.68 P. Ferrar (ANIC); Townsville 15.12.02 F. P. Dodd / 2550 / Griffith Collection Id by A. M. Lea (SAMA 25-033536); Queensland Br. Müller F. / C. *procera* Putz. det. K. Kult 1948 / Collectio Karel Kult (CDW); N.Qld / *obscuripes* Blackb. (???); Cape York VI. 1993M. & P. Uhla legit (CBM). – WA: W.Austr / *Clivina procera* P. (MMS); Swan Riv. + / 493 / Swan River Coll. Castelnau / *Scolyptus procerus* Putz. / *Scolyptus procerus* Putz. teste Putzeys 1868 (MCSG). – AUS: *Sc. prominens* (unreadable) Putz. / COLLECTIO KAREL KULT (CDW); Aust. 73.7 / *procera* Ptz. det. K. Kult (NHM); 29910 / Nov.Holl. Austr* / Fry Coll. 1905-100 (NHM); Australien / Coll. Felsche, det. *procera* (SMTD); Montevideo 1889, Müller / 196, *Scolyptus procerus* Putz. (unreadable) 80. (SMNS); Soc. Ent. Belg. Coll. Putzeys / *Clivina procera* Putzeys, 1866 (syn: *Scolyptus procerus* Putzeys, 1866) (IRSNB); Soc. Ent. Belg. Coll. Putzeys / *Sc. procerus* Putz. / *Clivina procera* Putzeys, 1866 (syn: *Scolyptus procerus* Putzeys, 1866) (IRSNB); Australie / Ex Coll. Chaudoir (MNHP); Coll. French Australia (ANIC); Trangie Stn 8-9/9/77 / *Clivina* sp. det. T.A.Weir 1978 (ANIC); 296 / Carabidae *Clivina elegans* Putz. (ANIC); (defect), Mul. 90 (ANIC); *Clivina procera* Putz. Id by Sloane 7/04 (NMV COL-10512); Murch (unreadable) C. French's Coll. / *Clivina procera* Putz. Vict & Queensland (NMV COL-5543); *Clivina procera* Putz. Id. by C. Oke / E.T.Smith Collection (NMV COL-11913-4); 2872 (NMV COL-10508); Murray River / *Clivina procera* P. (MMS); Darling R. (MMS); Riv. Paroo. / Riv. Paroo Coll. Castelnau / *Scolyptus procerus* teste Putzeys 1868 (MCSG); Ex J. J. Walker bequest 1939 (OUM); (label faded) / M.416 (QDPIM); Riv. Darling Coll.Castelnau / *Scolyptus procerus* ♂ / *Scolyptus procerus* Putz. teste Putzeys 1868 (MCSG); Australia / Coll.Castelnau / *Scolyptus procerus* Putz. t. Putz. / *Scolyptus procerus* Putz. teste Putzeys 1873 (MCSG); Riv. Darling Coll. Castelnau / *Clivina procera* Putz. teste Putzeys 1868 (MCSG); (unreadable) 14.11.91 (SAMA 25-044617); Wyandotte 16-4-46 / S.R.E. Brock Collection (ANIC); Relton / Relton Bequest / *Clivina quadriceps* Sloane (QMB); *Clivina obscuripes* (NMV COL-5399).

Diagnosis. Moderately large to large, black species with deep, quadrangular clypeal excision, not sulcate, barely punctate head, rufous middle and hind legs, and in apical third asymmetric aedeagus with the apex directed right and more or less curved down.

Description

Measurements. Length: 12.2–16.7 mm; width: 3.3–4.7 mm. Ratios. Length/width of pronotum: 1.02–1.05; base/apex of pronotum: 1.26–1.33; width pronotum/head: 1.33–1.40; length/width of elytra: 2.01–2.06; length/width of protibia: ♂: 4.0–4.15, ♀: 3.3–3.35; length/width of metatibia: ♂: 5.6–5.8, ♀: 5.5–5.8.

Colour (Fig. 80). Unicolourous black. Anterior leg piceous, median and posterior legs rufous.

Head (Figs 78, 80). Eye large, laterally much projected, orbit short, slightly oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum usually 5-setose. Clypeus not divided from frons; upper surface remarkably smooth, without transverse sulci or striae; frons in anterior part with sparse, rather coarse punctures, otherwise very finely punctate. Surface without distinct microreticulation, glossy.

Pronotum (Fig. 80). Comparatively short, considerably narrowed apicad, dorsally rather depressed. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fourth. Basal groove elongate, linear, straight, impunctate. Disk with some very fine, transverse striae in middle, extremely finely punctate, with only traces of extremely superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 80). Moderately elongate, almost parallel-sided, barely widened apicad, convex but in middle depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae in basal half well impressed, becoming shallower towards apex, impunctate or almost so. Intervals slightly convex, impunctate, with some transverse striae, with fine, isodiametric microreticulation, moderately glossy. Epipleura narrow, basally with a sulcus formed by a row of punctures.

Metathoracic wings. Fully developed.

Lower surface. Propisternum impunctate, with few irregular, elongate dorso-ventral striae and many short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.5× as long as wide, in anterior half with sparse, rugose punctures. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in males more than in females. Longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 1). Aedeagus wide, fairly elongate, narrowed apicad; lower surface gently concave, towards apex more concave. Apical part very asymmetric, deeply bisinuate at the left side; apex moderately short, slightly turned left, asymmetric, tip not incurved, fairly obtuse. Both parameres very elongate, the left one considerably stouter than the narrower right one; both with elongate, very narrow, bisetose, apical part; setae very short, situated right at tip.

Female gonocoxites (Fig. 54). Gonocoxites narrow and elongate, little curved, with rather acute apex; with one elongate but comparably slender seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, two or three setae at middle of the medio-dorsal surface, but without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically without or with one shorter seta.

Variation. Body size very varied, but the majority of the specimens, particularly the southern ones, are large. Also shape of pronotum varies to some degree, being more or less narrowed apicad.

Distribution. Eastern Australia from eastern SA to north-eastern QLD. The few old records from southern Western Australia certainly are wrong.

Collecting circumstances. Specimens were collected by: “Mercury vapour light”, “at light”, “light trap”, “Pitfall”, “in flood debris”, and in “dung trap”, but almost all old specimens do not bear any information about sampling methods.

Clivina obscuripes (Blackburn)

Figs 2, 81

Scolyptus obscuripes Blackburn, 1890: 1247.

Clivina obscuripes, Sloane 1905a: 730, 733; Csiki 1927: 508; Moore et al. 1987: 74; Lorenz 2005: 143.

Examined types. Holotype: ♀ (probable), T. 2894 N.T. / Type / Blackburn coll. 1910-236. / *Scolyptus obscuripes*, Blackb. / *Clivina obscuripes* Blackb. 47 det. K. Kult (BMNH).

Type locality. “Burrindie”, Northern Territory.

Other material (94 ex.). NT: 10 ♂♂, 3 ♀♀, 12.57S 132.33E Jim Jim Creek, 19km WSW of Mt. Cahill, N.T. 19.v.73 N.T. T. Weir & T. Angeles / 11236, -46, -54, -60, -64, -66, -72-73, -75-78, -92 (NTD, CBM); 3 ♂♂, 12 ♀♀, 3/06, KAKADU NP, MUIRELLA 10.05.2006 40M S12°51'15" E132°45'16" LIGHT LG. BERGER-DOSTAL (CBM, CDW); 1 ♂, 1 ♀, Kakadu Nat. Park, CSIRO Biodiversity Survey, Site 40, 13.6062121 S, 132.959611 E, S. Oberprie-ler, Feb-Mar 2014 (CBM); 5 ♂♂, 4 ♀♀, 13.03S 132.19E South Alligator River, 46km WSW of Mt. Cahill 20.v.73 Matthews & Upton (ANIC, CBM, SAMA); 4 ♂♂, 5 ♀♀, 13.45S 138.41E Daly River Mission 8-24.vi.1974 J. F. Hutchinson (ANIC); 3 ♀♀, Daly River Mission 4.vii.1974 J. F. Hutchinson (ANIC); 4 ♂♂, 3 ♀♀, S. Alligator River area, 35 km W Jabiru, blacklight, 9.iv.1980, GFHevel & JAFortin (CBM, USNM); 1 ♀, 12.26S, 132.58E Cahills Crossing, East Alligator River, 29.v.73, at light, E. G. Matthews (ANIC); 1 ♂, 12.57S 132.33E Jim Jim Creek, 19km WSW of Mt. Cahill, N.T. 19.v.73 N.T. T. Weir & T. Angeles / 11260 (NTD); 1 ♂, 1 ♀, Kakadu Nat. Park Coinda30.III.1996 P.M.Giachino leg. (CGT); 1 ♂, 17m alt, Kakadu NP, Ubirr env, 12°25'S 132°57'E 25-26. iv.2009, St. Jakl lgt. (CJP); 1 ♂, 2 ♀♀, LITCHFIELD NP Adelaide River, 29.V.2000 leg. M. Langer (CBP); 1 ♀, Windows of the Wetland Point Stuart, 25.V.2000 leg. M. Langer / Wilderland Lodge Lichtfang am Rand von Monsunregenwald (CBP); 1 ♂, Arnhem Land Urupunga June 1975 Wendy Walsh / *Clivina obscuripes* Blbn det. P.P.Moore'82 / *Clivina obscuripes* Blackburn comp. w. type B.P.Moore'86 (ANIC); 1 ♂, 12.06S 133.04E Cooper Creek, 19km E by S of Mt. Borradaile, 5.vi.1973, T.Weir & A.Allwood (ANIC); 1 ♂, 1 ♀, Mary R. Arnhem Hwy. 29 Nov. 1978 R.I. Storey At Light *Clivina obscuripes* B'bn det. B.P.Moore'79 (ANIC, QDPIM); 1 ♂, Katherine 2/3/93 Leg. Leech (CSM); 1 ♀, Katherine 28/3/93 Leg. L. Toledano (CGT); 1 ♂, Mainoru Stn. 26.XI.81 Walford-Huggins / Walford-Huggins Collection Carnegie Museum / *Clivina obscuripes* Blbn det.B.P.Moore'82 (CMP); 2 ♀♀, 12.48S 132.44E 8 km NE by N of Mt. Cahill Nov. 26, 1974 Coll - R. I. Storey at light / UQIC #90340-1 (QMB); 1 ♀, Kakadu N. Park S. Alligator River 19.xii.1990 (MCNV); 1 ♀, Muirella Park, Kakadu 8.v.1987 Fay and Halfpapp at light (QDPIM); 1 ♀, Darwin 20.vi.1994 (CHP); 1 ♀, Port Darwin (SAMA 25-033589); 1 ♂, Caught in flooded area King R. by W.Melliman 24-12-15 (?) / Not likely different from *Clivina obscuripes* Black. Id. by T. G. Sloane / COL-5407 (NMV); 4 ♂♂, 5 ♀♀, King R. 24.12.15 Coll. W. Melliman / *Clivina obscuripes* Blkb Det by T.G.Sloane Rec - 3 - 17 / COL-5400-6 (NMV); 1 ♀, Darwin Coll. by (?) R. Spencer 1912 / 826 *Clivina obscuripes* BISI thinks this is not distinct from *C. procera* Puz. / COL-5408 (NMV); 1 ♀, (largely unreadable) 14-10-16 / *Clivina obscuripes* Blkb det. by T G Sloane Rec - 3 - 17 / COL-5409 (NMV); 1 ♂, Tortilla Flat 11.iii.1987 J. Waldock / 11301 (NTD). - AUS: 1 ♀, No locality label S.R.E.Brock Collection (ANIC).

Diagnosis. Comparatively small to moderately large, black species with deep, quadrangular clypeal excision, not sulcate, barely punctate head, dark legs, and short, in apical third slightly asymmetric aedeagus with straight, barely curved, at tip obtuse apex.

Description

Measurements. Length: 10.0-13.5 mm; width: 2.8-3.85 mm. Ratios. Length/width of pronotum: 1.02-1.03; base/apex of pronotum: 1.27-1.33; width pronotum/head: 1.30-1.33; length/width of elytra: 2.0-2.06; length/width of protibia: ♂: 3.5-3.65, ♀: 3.0-3.25; length/width of metatibia: ♂: 6.0-6.1, ♀: 5.5-5.7.

Colour (Fig. 81). Unicolourous black. Anterior leg dark piceous to black, median and posterior legs piceous to almost black, little or not paler than the anterior leg.

Head (Fig. 81). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum usually 5-setose. Clypeus not or barely divided from frons; upper surface smooth, without transverse sulci or striae; frons in anterior part with or without sparse, rather coarse punctures, otherwise very finely punctate. Surface without distinct microreticulation, glossy.

Pronotum (Fig. 81). Comparatively short, considerably narrowed apicad, dorsally rather depressed. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fourth. Basal groove elongate, linear, straight, impunctate. Disk with some very fine, transverse striae in middle, extremely finely punctate, with only traces of extremely superficial, isodiametric microreticulation, fairly glossy.

Elytra (Fig. 81). Moderately elongate, almost parallel-sided, barely widened apicad, convex but in middle depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae in basal half well impressed, becoming shallower towards apex, usually at least in basal half finely punctate. Intervals slightly convex, impunctate, usually without transverse striae, with fine, isodiametric microreticulation, moderately glossy. Epipleura narrow, basally with a sulcus formed by a row of punctures.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum usually little or not punctate, with few irregular, elongate dorso-ventral striae and many short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.5 × as long as wide, in anterior half with sparse, rugose punctures. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in males more than in females. longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6-8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate,

with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 2). Aedeagus wide, fairly elongate, narrowed apicad; lower surface regularly concave. Apical part very asymmetric, more or less deeply bisinuate at the left side; apex short, slightly turned left, asymmetric, tip not incurved, rather obtuse. Lower surface in middle with a low ridge. Both parameres very elongate, the left one considerably stouter than the right one; both with elongate, very narrow, uni- or, more commonly, bisetose apical part; setae short, situated right at tip.

Female gonocoxites. Very similar to those of *C. procerata* Putzeys.

Variation. Body size rather varied. Also shape of pronotum varies to some degree, being more or less narrowed apicad.

Distribution. Northern part of NT, particularly in Kakadu NP.

Collecting circumstances. Little recorded. Recently collected specimens were mainly obtained at light.

Clivina subrufipes, spec. nov.

Fig. 3

Examined types. Holotype: ♂, 12.23S 132.56E 7km NNW of Cahills Crossing, East Alligator River, N.T. 27.v.73, E. G. Matthews (ANIC). – Paratypes: 2 ♂♂, same data (ANIC); 4 ♂♂, 1 ♀, 12.48S 132.42E Nourlangie Ck. N.T. 8km N. of Mt. Cahill, 21.v.73, at light, E. G. Matthews (SAMA); 1 ♂, 12.48S 132.42E Nourlangie Ck. 8km N. of Mt. Cahill, 26.xi.1974 N.T. T. Weir & T. Angeles / 11307 (NTD); 1 ♂, 1 ♀, 12.48S 132.44E Nourlangie Ck. 8km NE by N of Mt. Cahill, N.T. 21.v.73, T. Weir & T. Angeles / 11295, 11304 (NTD); 1 ♂, 12.49S 132.44E Nourlangie Ck. 6km NE. of Mt. Cahill, N.T. 2.v.73, T. Weir & T. Angeles / 12283 (NTD); 1 ♂, 6 ♀♀, 12.46S 132.39E 12km NNW of Mt. Cahill, N.T. 20.v.73, E. G. Matthews (ANIC, CBM, SAMA 25-024862-3); 1 ♂, 1 ♀, 12.46S 132.39E 12km NNW of Mt. Cahill, N.T. 20.v.73, Matthews & Upton (ANIC, SAMA); 3 ♂♂, 12.46S 132.39E 12km NNW of Mt. Cahill, N.T. 20.v.73 T. Weir & T. Angeles / 11257-59, -94 (NTD); 2 ♂♂, 2 ♀♀, 12.23S 132.57E 5km NNW of Cahills Crossing, N.T. East Alligator River, N.T. 28.v.73, E. G. Matthews (ANIC); 1 ♂, 12.23S 132.56E 7km NW by N of Cahills Crossing (East Alligator R.) N.T. 27.v.73, T. Weir & N. Forrester / 12232 (NTD); 1 ♀, 12.23S 132.57E 5km NNW of Cahills Crossing (East Alligator R.) N.T. 87.v.73, T. Weir & N. Forrester / 12244 (NTD); 1 ♂, 12.06S 133.04E Cooper Creek, 19km E. by S. of Mt. Borradaile, N.T. 31.v.1973, T. Weir & N. Forrester / 12471 (NTD); 1 ♂, 1 ♀, 12.06S 133.04E Cooper Creek, N.T. 19km E by SW. of Mt. Borradaile, 31.vi.73, at light, E.G. Matthews (ANIC); 1 ♀, 12.06S 133.04E Cooper Creek, N.T. 19km E by SW.

of Mt. Borradaile, 5.vi.73, M.S. Upton (ANIC); 1 ♂, 12.26S, 132.58E Cahills Crossing, East Alligator River, 29.v.73, at light, E. G. Matthews (ANIC); 1 ♀, 12.17S 133.20E Cooper Creek, 11km S. by W. of Nimbuwah Rock, N.T. 3.vi.73, T. Weir & T. Angeles / 11234 (NTD); 3 ♂♂, 12.51S 132.47E 8km E by N of Mt. Cahill, N.T. 22.v.1973 T. Weir & T. Angeles / 11296-98 (NTD); 1 ♂, 12.22S 133.01E 6km SW. by S. of Oenpelli, N.T. 30.v.73, E. G. Matthews (ANIC); 1 ♂, 12.17S 133.13E 18km E by N of Oenpelli, NT 1.vi.73, Matthews & Upton (ANIC); 2 ♂♂, 12.31S 133.19E Nabarlek Dam, N.T. 15km S. by W. of Nimbuwah Rock, 2.vi.73, at light, E. G. Matthews (ANIC); 6 ♂♂, 2 ♀♀, 12.54S 132.32E Jim Jim Airstrip, N.T. 1.v.1973 T. Weir & T. Angeles / 11279-82, -85-88 (CBM, NTD); 1 ♂, 1 ♀, 12.20S 132.54E 9km N by E of Mudginbarry HS, 26.v.73, Matthews & Upton (ANIC); 1 ♂, 12.31S 132.54E 9km N by E of Mudginbarry HS, N.T. 31.v.73, E.G. Matthews (ANIC); 2 ♂♂, East Alligator R. 10 ml.S.W. Oenpelli Mission N.T. 22.vi.1971 A. Allwood & T. Angeles / 11230-31, -62-63 (CBM, NTD); 1 ♀, 12.25S 132.58E 1km N. of Cahills Crossing, N.T. East Alligator River, 7.vi.73, Upton & Feehan (ANIC); 2 ♀♀, 12.25S 132.58E 1km N. of Cahills Crossing (East Alligator R.) 29.v.1973 T. Weir & N. Forrester / 11245, -51 (NTD); 1 ♂, 12.36S 132.52E Magela Creek, N.T. 1km NNW. of Mudginbarry H.S. 25.v.1973, Matthews & Upton (ANIC); 7 ♂♂, 7 ♀♀, AUSTRALIA N.T. Kakadu N.P. 22-25/3/93 Cooinda at light/al lume Leg. L. Toledano (CBM, CLT); 2 ♂♂, 2 ♀♀, AUSTRALIA N.T. Kakadu N.P. Cooinda 25-26/12/96 at light/al lume Leg. L. Toledano, R. Olivieri (CBM, CLT); 5 ♂♂, 2 ♀♀, AUSTRALIA, N.T. Kakadu N.P. 22-25/3/93 Leg. Leech (CBM, CSM); 3 ♂♂, Australia N. T. Kakadu Nat. Park 30.III.1993 (CGT); 2 ♂♂, AUSTRALIA N.T. KAKADU N.P. 18/20. XII (MCNV); 2 ♀♀, AUSTRALIA N.T. Kakadu N. Park Cooinda 20.xii.1990 (MCNV); 1 ♂, 1 ♀, Australia NT Kakadu, 10/14.I.2004 Lgt. R. Novák (CKZ); 1 ♂, 1 ♀, AUSTRALIA near Kakadu 1994 18/I E.&C. Balletto leg. (CCS); 1 ♂, 1 ♀, AUSTRALIA NT 17m alt, Kakadu NP, Ubirr env, 12°25'S 132°57'E 25-26.iv.2009, St. Jakl lgt. (CBM, CJP); 1 ♀, AUSTRALIA Northern T. Windows of the Wetlands Point Stuart, 25.V.2000 leg. M. Langer / Wilderness Lodge Lichtfang am Rand von Monsunregenwald (CBP); 1 ♀, ARNHAM LAND NT URUPUNGA JUNE 1975 W. WALSH / WALFORD-HUGGINS COLLEXCTION / *Clivina obscuripes* (Blackb.) Series det by A. WALFORD-HUGGINS (CMP); 1 ♀, Wildman R. Cashew Porject, N.T. 12.VII.1989 Malipatil & Houston (QDPIM); 1 ♀, AUSTRALIEN (N.T.) LITSHFIELD (N.P.) 04.V.1992 leg. O.HILLERT (CWB); 2 ♂♂, 2 ♀♀, AUSTRALIA, Northern T. LICHTFIELD NP Adelaide River 29.V.2000 leg. M. Langer (CBM, CBP); 1 ♂, AUSTRALIA N.T. Batchelor 26-27/3/93 at light/al lume Leg. L. Toledano (CTV); 1 ♂, AUSTRALIA N.T. Batchelor 26-27/3/93 Leg. Leech (SM); 1 ♀, Australia N.T. Batchelor Lake Bennet 30.III.1993 (CGT); 1 ♀, AUSTRALIA Douglas Hot Springs, 12.12.08 13°45'S, 131°26'E, 35m L. Hovorka leg. (CBP); 1 ♂, 1 ♀, Burnside, N.T. May 1931 HANDSCHIN (NHMB); 4 ♂♂, 3 ♀♀, S. Alligator River area, 35 km W Jabiru, blacklight, 9.iv.1980, GFHevel & JAFortin (USNM); 1 ♂, 12.17S 133.13E Birraduk Creek,

N.T. 18km E by N of Oenpelli. 4.vi.73, Upton & Feehan (ANIC); 1 ♂, 1 ♀, Tortilla Flat 11.iii.1982 J.Waldock / 11299-300 (NTD); 1 ♂, 12.48S 132.44E 8 km NE by N of Mt. Cahill, N.T. Nov. 26, 1974 Coll – R.I Storey at light / UQIC #90342 (QMB); 1 ♂, Pt. Darwin (ANIC); 2 ♀♀, AUSTRALIA N.T. Point Stuart Wilderness Lodge 26.V.2002 leg. M. Langer / S12°35,146 E131°45.661 h 25m 60km Arnhem Hwy. (CBP).

Etymology. The name refers to the rufous middle and hind legs.

Diagnosis. Comparatively small to moderately large, black species with deep, quadrangular clypeal excision, not sulcate, barely punctate head, more or less pale middle and hind legs, and rather elongate, in apical third asymmetric aedeagus with straight and very narrow, curved, at tip incurved or even hook-shaped apex.

Description

Measurements. Length: 10.6–13.5 mm; width: 2.95–3.7 mm. Ratios. Length/width of pronotum: 0.99–1.02; base/apex of pronotum: 1.22–1.26; width pronotum/head: 1.25–1.33; length/width of elytra: 2.04–2.08; length/width of protibia: ♂: 3.7–3.8, ♀: 3.0–3.15; length/width of metatibia: ♂: 5.6–6.1, ♀: 5.6–6.0.

Colour. Unicolourous black. Anterior leg dark piceous to black, median and posterior legs rufous, considerably paler than the anterior leg.

Head. Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum usually 5-setose, rarely 4-, 6-, or 7-setose. Clypeus not or barely divided from frons; upper surface smooth, without transverse sulci or striae; frons with scattered, rather fine punctures. Surface without distinct microreticulation, glossy.

Pronotum. Comparatively short, considerably narrowed apicad, dorsally rather depressed. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with some very fine, transverse striae in middle, not or sparsely and extremely finely punctate, with very superficial, isodiametric microreticulation, fairly glossy.

Elytra. Moderately elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less deep. Striae well impressed, becoming slightly shallower towards apex, usually at least in basal half more or less coarsely punctate. Intervals slightly convex, impunctate, usually without transverse striae, with fine, isodiametric

microreticulation, moderately glossy. Epipleura narrow, basally with a more or less distinct sulcus formed by a row of punctures.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum little or not punctate, with few irregular, elongate dorso-ventral striae and many short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.5× as long as wide, in anterior half with sparse, rugose punctures. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in males more than in females. Longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 3). Aedeagus rather wide, fairly elongate, strongly and asymmetrically narrowed apicad; lower surface evenly concave. Lower surface in apical half in middle slightly concave. Apical part very narrow, asymmetric, sinuate at the left side; apex very narrow, elongate, slightly turned left, tip distinctly crotched. Both parameres stout, the left one considerably stouter than the right one; both with moderately elongate, narrow, aetose, apical part.

Female gonocoxites. Very similar to those of *C. procera* Putzeys.

Variation. Body size rather varied. Also shape of pronotum varies to some degree, being more or less narrowed apicad.

Distribution. Northern part of NT, particularly in Kakadu NP.

Collecting circumstances. Little recorded. Recently, specimens were mainly collected at light.

Clivina cooinda, spec. nov.

Figs 4, 82

Examined types. Holotype: ♂, Douglas R. Crossing on Oolloo Stn. Rd. NT. 26.iii.1972 A. Allwood & T. Angeles (NTD). – Paratypes: 1 ♀, Tindal, N.T. 14.31S 132.22E 1–20 Dec. 1967 light trap W.J.M. Vestjens (ANIC); 7 ♂♂, 5 ♀♀, AUSTRALIA N.T. Kakadu N.P. 22–25/3/93 Cooinda at light/al lume Leg. L. Toledano (CBM, CLT); 4 ♂♂, 6 ♀♀, AUSTRALIA N.T. Kakadu N.P. Cooinda 25–26/12/96 at light/al lume Leg. L. Toledano, R. Olivieri (CBM, CLT); 3 ♂♂, AUSTRALIA, N.T. Kakadu N.P. 22–25/3/93 Leg. Leech (CBM, CSM); 1 ♀, AUSTRALIA N.T. Kakadu

N. Park Cooina 20.xii.1990 (MCNV); 2 ♀♀, AUSTRALIA, NT, Kakadu N.P., Gunlom, 13°26.02'S 132°24.85'E, 60m alt, 6-8.IV.2009, light traps, leg. Vit Ryáček (CBM, CBP); 3 ♂♂, AUSTRALIA, Northern T. LICHTFIELD NP Adelaide River 29.V.2000 leg. M. Langer (CBM, CBP); 1 ♂, AUSTR.NT, Douglas Hot Springs, 1212.08 13°45'S 131°26'E 35m L.Hovorka leg. (CBP); 1 ♀, Australia N.T. Katherine 21/12/98 leg. Daccordi (CGT); 1 ♀, Katherine / *procera* Putz. / *Clivina procera* Putz. (MCZ); 1 ♂, Pt. Darwin (ANIC); 3 ♂♂, 13 ♀♀, N. of Mareeba Feb.'58 N.Q. Darlington / *procera* Ptz. det.'59 Darlington (CBM, MCZ); 3 ♂♂, 1 ♀, Townsville Australia 5Feb1945 BMalkin / *procera* det.'48 Darlington (MCZ).

Etymology. The name refers to the locality Cooina in Kakadu NP, where most specimens were collected.

Diagnosis. Comparatively small to moderately large, black species with deep, quadrangular clypeal excision, not sulcate, densely punctate head, rufous middle and hind legs, and stout, in apical third triangular aedeagus with almost straight, triangular, at tip acute apex.

Description

Measurements. Length: 9.3–12.7 mm; width: 2.65–3.7 mm. Ratios. Length/width of pronotum: 1.01–1.04; base/apex of pronotum: 1.26–1.30; width pronotum/head: 1.27–1.32; length/width of elytra: 1.99–2.07; length/width of protibia: ♂: 3.65–3.8, ♀: 3.25–3.35; length/width of metatibia: ♂: 6.2–6.25, ♀: 6.0–6.1.

Colour (Fig. 82). Unicolourous black. Anterior leg dark piceous to black, median and posterior legs more or less bright rufous, considerably paler than the anterior leg.

Head (Fig. 82). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum usually 5-setose. Clypeus not or barely divided from frons; upper surface smooth, without transverse sulci or striae; frons very densely punctate, particularly in anterior part. Surface without distinct microreticulation, moderately glossy.

Pronotum (Fig. 82). Moderately elongate, considerably narrowed apicad, dorsally slightly depressed. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with some very fine, transverse striae in middle, not or extremely finely and sparsely punctate, with fine but distinct, isodiametric microreticulation, moderately glossy.

Elytra (Fig. 82). Moderately elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, usually at least in basal half finely punctate. Intervals convex, impunctate, without or with few fine, transverse striae, with distinct, isodiametric microreticulation, moderately glossy. Epipleura narrow, basally with a shallow sulcus formed by a row of punctures.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum in basal half more or less distinctly, coarsely punctate, with few irregular, elongate dorso-ventral striae and many and short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.5× as long as wide, in anterior half with sparse, rugose punctures. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in males more than in females. Longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 4). Aedeagus very wide, rather short, slightly asymmetrically narrowed apicad; lower surface in basal half deeply concave, then convex, towards apex again concave. Apex triangular, slightly asymmetric, rather short, slightly curved left, tip not incurved, acute. Both parameres rather elongate, the left one considerably stouter than the right one; both with elongate, very narrow, unisetose, apical part; setae elongate, situated right at apex; but the left paramere commonly with an additional shorter seta on the lower surface of the apical part.

Female gonocoxites. Very similar to those of *C. procera* Putzeys.

Variation. Body size rather variable. Also shape of pronotum varies to some degree, being more or less narrowed apicad.

Distribution. Northern part of NT, particularly in Kakadu NP, north-eastern QLD.

Collecting circumstances. Little recorded. All recently collected specimens were sampled at light.

Clivina sinuicola, spec. nov.

Fig. 5

Examined types. Holotype: ♂, Mornington Island Mission 4 May 1960 P. Aitken N. Tindale (SAMA 25-033654). – Paratypes: 1 ♂, Qld, at light Mornington Is. Mission 12 May, 1963 P. Aitken N.B. Tindale (SAMA); 2 ♀♀, Qld. Mornington Is. Mission At light. 28 April 1960. P. Aitken, N.B. Tindale (SAMA); 1 ♀, Horn Islet, Sir Edward Pellew Group, N.T. 25–31.i.1968 B. Cantrell / UQIC #90312 (QMB); 2 ♂♂, 4 ♀♀, 7/06 N-AUSTR, NT, 80KM W ROPER BAR, 14.05.2006, 78M S14°54'18.8" E133°57'18.1" LIGHT LG. BERGER-DOSTAL (CBM, CDW); 1 ♂, 8/06 N-AUSTR, NT, 40KM V PORT ROPER, 15.05.2006, S14°54'04.8" E135°03'24.7" 134M, LT. BERGER-DOSTAL (CDW); 2 ♀♀, Roper River, N.T. 6.iv.1976 T. Weir / , 11241, -65 (NTD); 1 ♂, 2 ♀♀, 12/06 N-AUSTR. Qld. ca 50m. ca 25km E of Normanton, 19.05.2006, S17°24'54.2" E141°16'36.7" AT LIGHT BERGER-DOSTAL (CBM, CDW); 1 ♂ AUS15, QLD13, Flinders R., 37 km wsw. Normanton, 12m, 17°52'35.4"S, 140°47'06.2"E, 18.4.2015, M. Baehr (CBM); 3 ♂♂, 2 ♀♀, AUSTRALIA Queensland. Flinders R., s. Normanton., u. v. - light 24–25.iv.1979 P. A. Meyer coll. (CBM, UASM); 2 ♀♀, AUST: n.QLD 18km sth. Normanton 19.Mar.2004 J. Hasenpusch T. light (QDPM); 1 ♂, 16.08S 136.06E 22 km WSW of Borroloola, N. T. 16.iv.1976, at light J.E. Feehan (ANIC); 2 ♀♀, 15 ml. S.W. of Normanton, Qld. 25.v.1972 G.B. & S.R. Monteith / UQIC '90525/532 (QMB); 1 ♀, Walker CR., 25 ml. S.E. of Karumba, Qld. 28.v.1972 G.B. & S.R. Monteith / UQIC '90387 (QMB); 2 ♀♀, Gulf C.F. 23/4/93, 16.5.94 (ANIC).

Diagnosis. Comparatively small to large, black species with deep, quadrangular clypeal excision, not sulcate, sparsely punctate head, more or less dark rufous middle and hind legs, and in apical third very asymmetric aedeagus with rather short, slightly curved, at tip obtuse apex.

Etymology. The name refers to the occurrence around the Gulf of Carpentaria.

Description

Measurements. Length: 10.1–15.9 mm; width: 2.8–4.5 mm. Ratios. Length/width of pronotum: 0.99–1.01; base/apex of pronotum: 1.22–1.33; width pronotum/head: 1.28–1.35; length/width of elytra: 1.98–2.07; length/width of protibia: ♂: 3.4–3.8, ♀: 3.4–3.5; length/width of metatibia: ♂: 6.25–6.6, ♀: 5.4–5.8.

Colour. Unicolourous black. Anterior leg rufopiceous to piceous, median and posterior legs rufous, little paler than the anterior leg.

Head. Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum usually 5-setose. Clypeus not or barely divided from frons; upper surface smooth, without transverse sulci or striae; frons with sparse punctures. Surface without distinct microreticulation, rather glossy.

Pronotum. Comparatively short, considerably narrowed apicad, dorsally slightly depressed. Lateral margin more or less oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with some very fine, transverse striae in middle, not or barely punctate, with more or less distinct, very superficial, isodiametric microreticulation, fairly glossy.

Elytra. Moderately elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming shallower towards apex, at least in basal half finely punctate. Intervals slightly convex, impunctate, without or with few transverse striae, with fine but distinct, isodiametric microreticulation, moderately glossy. Epipleura narrow, basally with a sulcus formed by a row of punctures.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum in basal half usually slightly punctate, with few irregular, elongate dorso-ventral striae and many short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.5 × as long as wide, in anterior half with sparse, rugose punctures. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in males more than in females. longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 5). Aedeagus wide, fairly elongate, narrowed apicad; lower surface deeply concave, near apex slightly bisinuate. Apical part very asymmetric, bisinuate at the left side; apex moderately elongate, rather wide, curved left, tip not incurved, obtuse. Both parameres stout but elongate, the left one considerably stouter than the right one; both with elongate, very narrow, unisetose, or rarely bisetose, apical part; setae very short, situated right at tip.

Female gonocoxites. Very similar to those of *C. procera* Putzeys.

Variation. Body size very varied. Also shape of pronotum varies to some degree, being more or less narrowed apicad; and punctuation of proepisterna is also somewhat varied.

Distribution. Area around the Gulf of Carpentaria, from the south-eastern margin of Arnhem Land to about Normanton in north-western QLD; also on Mornington Island.

Collecting circumstances. Little recorded. Most specimens apparently sampled at light.

Clivina thoracica, spec. nov.

Fig. 6, 122

Examined types. Holotype: ♂, Australia, QLD Normanton 1.1998 leg. Lamond (CBM).

Etymology. The name refers to the unusually elongate prothorax of the single specimen.

Diagnosis. Rather large, black species with deep, quadrangular clypeal excision, not sulcate, sparsely punctate head, dark rufous middle and hind legs, and in apical third very asymmetric aedeagus with elongate, markedly sinuate, at tip crotched apex.

Description

Measurements. Length: 14.5 mm; width: 4.0 mm. Ratios. Length/width of pronotum: 1.11; base/apex of pronotum: 1.27; width pronotum/head: 1.32; length/width of elytra: 2.07; length/width of protibia: ♂: 4.35; length/width of metatibia: ♂: 6.7.

Colour (Fig. 122). Unicolourous black. Anterior leg piceous, median and posterior legs dark rufous, little paler than the anterior leg.

Head (Fig. 122). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 5-setose. Clypeus not divided from frons; upper surface without transverse sulci or striae; frons with sparse punctures. Surface without distinct microreticulation, rather glossy.

Pronotum (Fig. 122). Elongate, considerably narrowed apicad, dorsally depressed. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow, median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with some very fine, transverse striae in middle, impunctate, very fine, superficial, isodiametric microreticulation, fairly glossy.

Elytra. Elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming shallower towards apex, at least in basal half finely punctate. Intervals slightly convex, impunctate, with few transverse striae, with fine, superficial, isodia-

metric microreticulation, rather glossy. Epipleura narrow, without perceptible sulcus.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum densely and coarsely punctate, with few irregular, elongate dorso-ventral striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.25 × as long as wide, in anterior half with sparse, rugose punctures, in posterior half with a deep, longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and very elongate, teeth small, obtuse. Longitudinal sulcus on upper surface shallow; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 6). Aedeagus wide, fairly elongate, narrowed apicad; lower surface in basal half concave, in apical third markedly convex, towards apex again deeply concave. Apical part very asymmetric, deeply sinuate at the left side; apex elongate, very narrow, bisinuate and at tip turned left, asymmetric, tip markedly curved down and crotched, acute. Both parameres stout but elongate, the left one considerably stouter than the right one; both with rather elongate, very narrow, unisetose apical part; setae very short, situated right at tip; but right paramere in some specimens with an additional seta at the lower surface near apex.

Female gonocoxites. Unknown.

Variation. Unknown.

Distribution. North-western QLD. Known only from type locality.

Collecting circumstances. Not recorded.

Clivina gemina, spec. nov.

This species apparently occurs in two populations which are only distinguished by the colour of their middle and hind legs, but are geographically well separated.

Clivina gemina gemina, spec. nov.

Figs 7, 83

Examined types. Holotype: ♂, Wyndham WA 20.iv. 1976 K.&E. Carnaby (ANIC). – Paratypes: 12 ♂♂, 13 ♀♀, Kakadu N.P., Gunlom, 13°26.02'S 132°24.85'E, 60m alt,

6–8.IV.2009, light traps, leg. Vít Ryjáček (CBM, CBP, CRP); 1 ♂, 3 ♀♀, same data (ANIC); 1 ♀, Australia, NT, Gregory NP Victoria R. Inn, 24.IV.2004 16.36.95S, 131.07.73E 62m, leg. M. Langer (CBM); 3 ♂♂, 3 ♀♀, AUSTRALIA N.T. m50 Victoria River Road House 20–21/24–25.III.1996 P. M. Giachino leg. (CGT); 1 ♀, AUSTRALIA N.T. Victoria Crossing 28–29/3/93 at light/al lume Leg. L. Toledano (CTV); 1 ♀, AUSTRALIA N.T. Top Springs 29.XII.1998 180 km W of Dunmurr M. Daccordi leg. (CGT); 1 ♀, Australia/NT Keep River N.P.: Gurandalg Camp, ca 50 km E Kununurra 17.+23.IV.2004 lgt. M. Langer / S 15.52.494 E 129.03.076 Höhe 99 m Lichtfang (CBM); 1 ♀, 15.44S 129.09E GPS 5.5 km NE by E Jarnarm Keep River Nat. Pk. 27 May 2001 T. Weir, P. Bouchard / at light open forest (ANIC); 1 ♂, 15.45S 129.05E Jarnarm Camp Keep River N.P. 5 jun. 2001 A. Calder at black light (ANIC); 3 ♂♂, 11 ♀♀, 100 mi. E. of Kununurra, W.A., light trap, 27.3.66 J. A. Mahon (ANIC, CBM); 10 ♂♂, 12 ♀♀, AUSTRALIA: WA: Kimberley 12m alt. Home Valley Station 14°42'S 127°51'E; 15–18.IV.2009 nr. Pentecost river, S. Jakl lgt. (CBM, CBP, CJP); 11 ♂♂, 4 ♀♀, AUSTRALIA: WA: Kimberley, Wyndham env., 20–21. iv.2009, 15°31'S 128°10'E, salty bay of the sea, 3m alt. St. Jakl lgt. (CBM, CBP, CJP); 1 ♀, AUSTRALIA: WA: 15–16. iv.2009; Hidden Valley NP Kununurra 15°46S 128°44E 64m alt. St. Jakl lgt. (CJP); 2 ♂♂, AUSTRALIA: WA: Kimberley, Home Valley St., 15°42'29"S 127°51'11"E, 12m alt, 16–18.IV.2009, light traps, leg. Vít Ryjáček (CRP); 2 ♂♂, Wyndham-KRS 18.5.58.R.Lukins (WADAP); 1 ♂, Kimberley Res. Stn. 7.1.53 R.Lukins (WADAP); 1 ♀, WA Wyndham 20 Apr 1975 Ex. Carnaby Coll. (ANIC); 3 ♀♀, S15.64975 E128.71519 light trap in plowed field FWI, Kununurra, W. Aust. 25.iii.2003 C.Y. Norwood (Dept Agr WA 122165-6, 122181); 1 ♂, 3 ♀♀, Australia/WA East Kimberley: Parry Creek Road, Parry Creek Farm 22.IV.2004 lgt. M. Langer / S 15.35.882 E 128.16.7171 Höhe 33 m Lichtfang (CBM, CBP); 1 ♀, Australia, WA., The Kimberley Parry Creek Farm, Parry Lagoons Nat. Res. 20 km S Wyndham / leg. M. Langer 15°35'47.3" E 128°16'45.2" H = 11 m (NF) (CWB); 1 ♀, Australia, WA, Parry Creek Farm, 20 km s. Wyndham 15°35'47.2"S. 128°16'45.7"E 15.V.2009, 11m, M. Langer (CBM); 1 ♀, WA Wyndham 20 Apr 1975 Ex. Carnaby Coll. (ANIC).

Etymology. The name refers to the similarity to *C. pro-cera*.

Diagnosis. Medium sized to rather large, black species with deep, quadrangular clypeal excision, not sulcate, sparsely punctate head, rufous middle and hind legs, densely and coarsely punctate proepisternum, and in apical third very asymmetric aedeagus with elongate, sinuate, at tip incurved or crotched apex.

Description

Measurements. Length: 11.3–13.5 mm; width: 2.8–3.9 mm. Ratios. Length/width of pronotum: 1.02–1.05; base/apex of pronotum: 1.23–1.27; width pronotum/head: 1.26–1.34; length/width of elytra:

2.5–2.10; length/width of protibia: ♂: 3.5–3.8, ♀: 2.75–2.85; length/width of metatibia: ♂: 6.3–6.8, ♀: 5.8–6.1.

Colour (Fig. 83). Unicolourous black. Anterior leg more or less dark piceous, median and posterior legs rufous, considerably paler than the anterior leg.

Head (Fig. 83). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum usually 5-setose. Clypeus not or barely divided from frons; upper surface smooth, without transverse sulci or striae; frons finely and sparsely punctate. Surface without distinct microreticulation, glossy.

Pronotum (Fig. 83). Moderately elongate, considerably narrowed apicad, dorsally moderately convex. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk without or with some very fine, transverse striae in middle, barely punctate, with very fine and superficial, isodiametric microreticulation, fairly glossy.

Elytra (Fig. 83). Moderately elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, usually at least in basal half finely punctate. Intervals slightly convex, impunctate, usually without transverse striae, with fine, isodiametric microreticulation, moderately glossy. Epipleura narrow, basally with a sulcus formed by a row of punctures.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum densely punctate, with few irregular, elongate dorso-ventral striae and many and short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.5× as long as wide, in anterior half with sparse, rugose punctures. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in males more than in females. Longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 7). Aedeagus wide, fairly elongate, narrowed apicad; lower surface in basal half deeply concave then convex, towards apex again concave. Apical part very asymmetric, deeply bisinuate at the left side; apex elongate, narrow,

slightly turned left, slightly asymmetric, tip incurved or slightly crotched, acute. Both parameres very elongate, the left one considerably stouter than the narrower right one; both with elongate, very narrow, aetose or unisetose, apical part; setae, of present, very short, situated right at tip.

Female gonocoxites. Very similar to those of *C. procera* Putzeys.

Variation. Body size somewhat varied. Otherwise little variation noted.

Distribution. Northern part of NT to north-eastern Kimberleys in WA.

Collecting circumstances. Almost all specimens were collected at light near rivers and billabongs.

Clivina gemina nigripes, subspec. nov.

Fig. 8

Examined types. Holotype: ♂, Fitzroy River W.A. at light 16 March 1980 K. & E. Carnaby (ANIC). – Paratypes: 4♂♂, 7♀♀, same data (ANIC, CBM); 2♂♂, 3♀♀, WESTERN AUSTRALIA Fitzroy River 16-4-1976 (AMS, ANIC); 2♂♂, WESTERN AUSTRALIA Fitzroy River 16-4-1980 (ANIC); 3♀♀, W. Australia Fitzroy River 16.IV.1976 K.&E.Carnaby (ANIC); 2♂♂, 2♀♀, WA Fitzroy River 16 Apr 1976 Ex Carnaby Coll (ANIC); 2♂♂, WA Fitzroy River 16 Apr 1980 K&E Carnaby Ex. Carnaby Coll. (ANIC); 2♀♀, WA Fitzroy River 16 Apr 1973 K&E Carnaby Ex. Carnaby Coll. (ANIC); 3♀♀, WA Fitzroy River at light 16 Apr 1967 Ex. Carnaby Coll. (ANIC); 1♀, WA Fitzroy River 16 Apr 1980 K&E Carnaby Ex. Carnaby Coll. (ANIC); 1♀, WA Fitzroy River at light 16 Apr 1967 Ex. Carnaby Coll. (ANIC); 1♀, WA Fitzroy River 16 Apr 1980 K&E Carnaby Ex. Carnaby Coll. (ANIC); 2♀♀, Fitzroy R. NWA 16 April 1976 K&E Carnaby (ANIC); 2♂♂, 2♀♀, Fitzroy Crossing WA 18.iv.76, at light K.&E.Carnaby (ANIC); 4♀♀, WA Fitzroy Crossing 16 Apr 1974 Ex. Carnaby Coll. (ANIC); 1♂, 1♀, WA Fitzroy Crossing 23 Mar 1984 Ex. Carnaby Coll. (ANIC); 1♂, 1♂, Australien, WA Fitzroy Crossing 19.11.1984 M. Baehr (CBM); 1♂, 2♀♀, Derby, N.W.A. W-Ð-Ðodd M (SAMA 25-033408/411/520); 1♀, NSW Armidale 9 Dec 1971 K&E Carnaby Ex. Carnaby Coll. (ANIC).

Etymology. The name refers to the black legs.

Diagnosis. Similar to the nominate subspecies, but all legs deep black.

Description

Measurements. Length: 11.7–13.9 mm; width: 3.25–3.9 mm. Ratios. Length/width of pronotum: 1.01–1.03; base/apex of pronotum: 1.29–1.35; width pronotum/head: 1.34–1.38; length/width of elytra: 2.03–2.09; length/width of protibia: ♂: 3.35–3.6,

♀: 2.7–2.8; length/width of metatibia: ♂: 6.5–6.7, ♀: 6.1–6.2.

Colour. Unicolourous black. All legs deep black. Head. As in the nominate subspecies.

Pronotum. Much as in the nominate subspecies, but usually slightly more narrowed apicad.

Elytra. As in the nominate subspecies.

Metathoracic wings. Fully developed.

Lower surface. As in the nominate subspecies. Legs. Much as in the nominate subspecies.

Male genitalia (Fig. 8). Much as in the nominate subspecies.

Female gonocoxites. As in the nominate subspecies.

Variation. Body size somewhat varied. Also shape of pronotum varies to some degree, being more or less narrowed apicad.

Distribution. Southern part of the Kimberley Division. The single specimen from “Armidale” certainly is wrongly labelled.

Collecting circumstances. Little recorded, almost all specimens collected near Fitzroy River. Few more recently collected specimens sampled at light.

Clivina carnabyi, spec. nov.

Fig. 9

Examined types. Holotype: ♂, Fitzroy Crossing, W.A. 125:35E, 18:10S 17 Mar. 1984, at light K. & E. Carnaby (ANIC). – Paratypes: 1♀, same data (CBM); 2♀♀, Wil-lare Bridge on Fitzroy River, W.A. 28 Feb. 1985 at light K. & E. Carnaby (ANIC); 1♀, W.AUST., KIMBERLEY LENNARD RIVER XING GIBB RIVER ROAD 17.23S, 124.44E 1 APRIL 1988 T. F. HOUSTON 679-4 / AT LIGHT(MV) AT NIGHT (WAM 39158); 1♀, 16.28S 124.51E WA Walcott Inlet. CALM-SITE 19/2. 17–19 Jun. 1988 J. Majer, closed forest (ANIC); 1♂, 1♀, Fitzroy River W.A. at light 16 March 1980 K. & E. Carnaby (ANIC, CBM); 1♂, WA Fitzroy Crossing 23 Mar 1984 Ex. Carnaby Coll. (ANIC);

Etymology. The name is a patronym in honour of the collectors of most specimens, K. and E. Carnaby.

Diagnosis. Large, black species with deep, quad-rangular clypeal excision, transversely sulcate, sparsely punctate head, deep black legs, not or feebly punctate proepisternum, and in apical third asymmetric aedeagus with elongate, sinuate, at tip not incurved apex.

Description

Measurements. Length: 15.2–16.6 mm; width: 4.1–4.55 mm. Ratios. Length/width of pronotum: 1.02–1.04; base/apex of pronotum: 1.32–1.36; width

pronotum/head: 1.39–1.44; length/width of elytra: 2.09–2.15; length/width of protibia: ♂: 3.3–3.5, ♀: 3.0–3.1; length/width of metatibia: ♂: 6.35–6.5, ♀: 5.9–6.0.

Colour. Unicolourous black. All legs deep black.

Head. Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum usually 5-setose. Clypeus shallowly divided from frons; upper surface with some more or less deep and complete transverse sulci; sparsely punctate. Surface without distinct microreticulation, glossy.

Pronotum. Moderately elongate, considerably narrowed apicad, dorsally gently convex. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with some very fine, transverse striae in middle, extremely finely punctate or impunctate, with fine, superficial, isodiametric microreticulation, fairly glossy.

Elytra. Elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, at least in basal half finely punctate. Intervals slightly convex, impunctate, usually without transverse striae, with fine, very superficial, isodiametric microreticulation, glossy. Epipleura narrow, basally with a shallow sulcus formed by a row of punctures.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum usually barely punctate, with few irregular, elongate dorso-ventral striae and many and short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, slightly >2.5× as long as wide, in anterior half with sparse, rugose punctures. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in males more than in females. longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 9). Aedeagus very wide, fairly elongate, narrowed apicad; lower surface in basal part concave, in apical third gently convex, towards apex again concave. Apical part very asymmetric, slightly bisinuate at the left side; apex fairly elongate, markedly turned left, asymmetric, tip not

incurved, acute. Both parameres rather stout, the left one considerably stouter than the right one; both with moderately elongate, very narrow, aetose apical part.

Female gonocoxites. Very similar to those of *C. windjanae*, spec. nov.

Variation. Rather little variation noted, except for length of elytra.

Distribution. Western and southern part of the Kimberley Division.

Collecting circumstances. Most specimens were collected at light near rivers.

Clivina windjanae, spec. nov.

Figs 10, 55

Examined types. Holotype: ♂, Windjana Gorge W.A. 17 Mar. 1980 at light K. & E. Carnaby (ANIC). – Paratypes: 2 ♂♂, 4 ♀♀, same data (ANIC, CBM); 3 ♂♂, 3 ♀♀, Lennard River W.A. at light 18 March 1980 K. & E. Carnaby (ANIC, CBM); 1 ♂, Fitzroy River W.A. at light 16 March 1980 K. & E. Carnaby (ANIC).

Etymology. The name refers to the type locality, Windjana Gorge in the Kimberley Division.

Diagnosis. Medium sized, black species with deep, quadrangular clypeal excision, not sulcate, sparsely punctate head, deep black legs, not or feebly punctate proepisternum, and in apical third asymmetric aedeagus with elongate, sinuate, at tip incurved or crotched apex.

Description

Measurements. Length: 12.0–13.4 mm; width: 3.4–3.8 mm. Ratios. Length/width of pronotum: 0.97–1.03; base/apex of pronotum: 1.32–1.36; width pronotum/head: 1.30–1.38; length/width of elytra: 2.03–2.07; length/width of protibia: ♂: 3.4–3.5, ♀: 2.8–3.0; length/width of metatibia: ♂: 6.2–6.25, ♀: 6.1–6.2.

Colour. Unicolourous black. All legs deep black.

Head. Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 5-setose. Clypeus not divided from frons; upper surface without transverse sulci; sparsely punctate. Surface without distinct microreticulation, glossy.

Pronotum. Moderately elongate, considerably narrowed apicad, dorsally gently convex. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with some very fine, transverse

strioles in middle, extremely finely punctate or impunctate, without microreticulation or with finest traces of extremely, superficial, isodiametric microreticulation, glossy.

Elytra. Fairly elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, almost impunctate. Intervals slightly convex, impunctate, without or with very weak transverse strioles, with fine, extremely superficial traces of isodiametric microreticulation, glossy. Epipleura narrow, basally with a shallow sulcus formed by a row of punctures.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum usually barely punctate, with few irregular, elongate dorso-ventral strioles and many and short, transverse strioles, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.5× as long as wide, in anterior half with sparse, rugose punctures. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in males more than in females. Longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 10). Aedeagus wide, fairly elongate, narrowed apicad; lower surface regularly concave. Apical part asymmetric, slightly bisinuate at the left side; apex rather elongate, slightly turned left, asymmetric, tip incurved or slightly crotched, rather acute. Both parameres short and stout, the left one considerably stouter than the right one; both with very short, asetose or unisetose apical part; setae, if present, extremely short, situated right at tip.

Female gonocoxites (Fig. 55). Gonocoxites narrow and elongate, little curved, with rather acute apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, three setae at middle of the medio-dorsal surface, but without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically with three or four shorter seta.

Variation. Little varied. Only shape of pronotum and length of elytra vary slightly.

Distribution. Western and southern part of the Kimberley Division.

Collecting circumstances. All specimens were collected at light near rivers.

Clivina mahoni, spec. nov.

Fig. 11

Examined types. Holotype: ♂, 100 mi. E. of Kununurra, W.A., light trap, 27.3.66 J. A. Mahon (ANIC). – Paratype: 1 ♀, same data (CBM).

Etymology. The name is a patronym in honour of the collector, J. A. Mahon.

Diagnosis. Large, black species with deep, quadrangular clypeal excision, not sulcate, sparsely punctate head, deep black legs, not or feebly punctate proepisternum, and in apical almost symmetric aedeagus with straight, parallel-sided, at tip slightly incurved apex.

Description

Measurements. Length: 15.5–16.4 mm; width: 4.35–4.5 mm. Ratios. Length/width of pronotum: 1.03–1.08; base/apex of pronotum: 1.33–1.36; width pronotum/head: 1.36–1.39; length/width of elytra: 2.09–2.11; length/width of protibia: ♂: 4.5, ♀: 3.4; length/width of metatibia: ♂: 5.7, ♀: 5.6.

Colour. Unicolourous black. All legs deep black.

Head. Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 5-setose. Clypeus not divided from frons; upper surface smooth, without transverse sulci or strioles; frons sparsely punctate. Surface without distinct microreticulation, glossy.

Pronotum. Rather elongate, considerably narrowed apicad, dorsally gently convex. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with some very fine, transverse strioles in middle, impunctate, with very fine, though rather distinct, isodiametric microreticulation, fairly glossy.

Elytra. Elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, at least in basal half finely punctate. Intervals slightly convex, impunctate, without or with very weak transverse strioles, with fine, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus indistinct.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum slightly punctate in ventral half, with few irregular, elongate dorso-ventral striae and many and short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, slightly $>2.5\times$ as long as wide, in anterior half with sparse, rugose punctures. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 11). Aedeagus very wide, fairly elongate, narrowed apicad; lower surface concave, in apical third slightly convex, towards apex again concave. Apical part almost symmetric, on both sides bisinuate; apex narrow, elongate, straight, parallel-sided, tip slightly incurved, obtuse. Both parameres remarkably stout, the left one considerably stouter than the right one; both with elongate, very narrow, aetose apical part.

Female gonocoxites. Very similar to those of *C. windjanae*, spec. nov.

Variation. Little variation noted.

Distribution. North-western NT. Known only from the type locality.

Collecting circumstances. Both specimens were collected in light trap.

Clivina montisbelli, spec. nov.

Fig. 84

Examined types. Holotype: ♀, W.AUST. KIMBERLEY FERN CK NR MT BELL KING LEOPOLD RANGE 10 APRIL 1988 T. F. HOUSTON 688-4 / AT MV LIGHT AT NIGHT (6.–7.40 PM) (WAM39176).

Etymology. The name refers to the type locality, Mt. Bell in the Kimberley Division.

Diagnosis. Medium sized, rufous species with deep, quadrangular clypeal excision, not sulcate, densely punctate head, rufous middle and hind legs, slightly punctate proepisternum, and very elongate and remarkably parallel-sided elytra.

Description

Measurements. Length: 12.1 mm; width: 3.15 mm. Ratios. Length/width of pronotum: 1.06; base/

apex of pronotum: 1.20; width pronotum/head: 1.22; length/width of elytra: 2.22; length/width of protibia: ♀: 2.8; length/width of metatibia: ♀: 7.3.

Colour (Fig. 84). Unicolourous rufous, probably because of immaturity. Anterior leg piceous, median and posterior legs rufous, considerably paler than the anterior leg.

Head (Fig. 84). Large in comparison with the prothorax. Eye very large, almost semicircular, laterad far projected, orbit very short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 7-setose. Clypeus shallowly divided from frons; upper surface smooth, without transverse sulci or striae; frons in middle with a distinct, oval impression. Surface with dense, rather fine punctures, without microreticulation, glossy.

Pronotum (Fig. 84). Comparatively elongate, almost parallel-sided, dorsally rather depressed. Lateral margin almost straight, barely concave in apical third. Apex feebly concave. Marginal channel narrow. Median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated slightly behind apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with several fine, transverse striae in middle, extremely finely but rather densely punctate, without microreticulation, very glossy.

Elytra (Fig. 84). Very elongate, parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, almost impunctate. Intervals slightly convex, sparsely and extremely finely punctate, without transverse striae, with finest, almost invisible traces of isodiametric microreticulation, very glossy. Epipleura narrow, basally with a sulcus formed by a row of punctures.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum moderately densely punctate, with few irregular, elongate dorso-ventral striae and many and short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Abdominal sterna in middle with extremely fine, laterally coarser punctures. Metepisternum very elongate, almost $3\times$ as long as wide, in anterior half with some dorso-ventral sulci.

Legs. Protibia rather wide. Longitudinal sulcus on upper surface very distinct; lower surface with a row of 6 stout setae along basal part of inner margin. Mesotibia elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia very elongate, rather sparsely setose. Metatarsus remarkably elongate, tarsomere 1 almost as long as the following three tarsomeres.

Male genitalia. Unknown.

Female gonocoxites. Very similar to those of *C. windjanae*, spec. nov.

Variation. Unknown.

Distribution. Central-western Kimberley Division. Known only from type locality.

Collecting circumstances. The holotype was collected at light.

Clivina victoriae, spec. nov.

Fig. 12

Examined types. Holotype: ♂, Victoria River Downs 3 km SW of Stn NT 6 Aug. 1979 L.P.Kelsey at light (ANIC). – Paratypes: 2 ♂♂, same data (ANIC, CBM); 1 ♂, 6.4 km W-SW of Victoria Riv. Downs, N.T. 13 June, 1973 L.F. Kelsey (ANIC); 1 ♀, 8 km ENE of Victoria Riv. Downs, N.T. 12 July, 1973 L.F. Kelsey (ANIC).

Etymology. The name refers to the type locality, Victoria River Downs.

Diagnosis. Medium sized, black species with deep, quadrangular clypeal excision, not sulcate, little punctate head, rufous middle and hind legs, impunctate proepisternum, elongate and parallel-sided elytra, and remarkably incurved apex of the aedeagus.

Description

Measurements. Length: 12.3–13.3 mm; width: 3.4–3.7 mm. Ratios. Length/width of pronotum: 0.99–1.01; base/apex of pronotum: 1.21–1.25; width pronotum/head: 1.28–1.32; length/width of elytra: 2.0–2.05; length/width of protibia: ♂: 2.85–3.25, ♀: 2.75; length/width of metatibia: ♂: 5.7–5.9, ♀: 5.55.

Colour. Unicolourous black. Middle and hind legs rufous, paler than the anterior legs.

Head. Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 5-setose. Clypeus not divided from frons; upper surface smooth, without transverse sulci or striae; frons sparsely punctate. Surface without distinct microreticulation, glossy.

Pronotum. Moderately elongate, little narrowed apicad, dorsally gently convex. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated in front of apical fifth. Basal groove elongate, linear, straight, impunctate. Disk without transverse striae, impunctate, with extremely fine and superficial

traces of about isodiametric microreticulation that is only perceptible at very high magnification; surface rather glossy.

Elytra. Elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinctly impressed. Striae well impressed, becoming slightly shallower towards apex, at least in basal half finely punctate. Intervals slightly convex, impunctate, without or with very weak transverse striae, with extremely superficial, isodiametric microreticulation that is only perceptible at very high magnification; surface glossy. Epipleura narrow, basal sulcus indistinct.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with few irregular, elongate dorso-ventral striae and many short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, slightly >2× as long as wide, in anterior half with sparse, rugose punctures. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 as long as the following three tarsomeres.

Male genitalia (Fig. 12). Aedeagus wide, fairly elongate, narrowed apicad; lower surface in basal half concave, in apical third slightly convex, towards apex again remarkably concave. Apical part asymmetric, slightly bisinuate at the left side; apex elongate, almost straight, remarkably curved down, tip slightly incurved, rather acute. Both parameres stout, the left one considerably stouter than the right one; both with fairly elongate, very narrow, aetose apical part.

Female gonocoxites. Very similar to those of *C. windjanae*, spec. nov.

Variation. Very little variation noted.

Distribution. North-western NT. Only recorded from a very limited area.

Collecting circumstances. All specimens collected at light near a large river.

Clivina ryaceki, spec. nov.

Fig. 13, 123

Examined types. Holotype: ♂, 15.46S 129.0E NT GPS Jarnarm Keep River N.P. 5 Jun. 2001 A. Calder at black light (ANIC). – Paratypes: 4 ♂♂, 7 ♀♀, same data (ANIC, CBM); 2 ♂♂, 3 ♀♀, 15.46S 129.06E NT GPS Jarnarm Keep River Nat.Pk. 8 Jun. 2001 A. Calder Malaise trap (ANIC); 5 ♂♂, 7 ♀♀, 15.46S 129.0E NT GPS Jarnarm Keep River N.P. 5 Jun. 2001 A. Calder at black light (ANIC, CBM); 4 ♀♀, 15.46S 129.10E NT GPS spring at 8 km E by N Jarnarm Keep River Nat.Pk 26 – 28 May 2001 T.Weir, P.Bouchard (ANIC); 2 ♂♂, 1 ♀, 15.44S 129.09E NT GPS 5.5 km NE by E Jarnarm, Keep River Nat. Pk, 27 May 2001 T.Weir, P.Bouchard (ANIC); 3 ♀♀, Keep Creek, N.T. Victoria Hwy 29 Mar. 1984, at light. K. & E. Carnaby (ANIC); 1 ♂, Keep River, N.T. 20.3.84 Coll Carnaby / A. Hiller Coll (QMB); 2 ♀♀, NT Keep River NP Gorge carpark 15.50S, 129.06E 26 April 1996 G.R.Brown mv lamp (NTD); 13 ♂♂, 12 ♀♀, AUSTRALIA, NT, Kakadu N.P., Gunlom, 13°26.02'S 132°24.85'E, 60m alt, 6–8.IV.2009, light traps, leg. Vit Ryáček (CBM, CRP); 2 ♀♀, Port Darwin N. Territory (SAMA 25-033607-8); 1 ♂, 12.36S 132.52E Magela Creek, N.T. 11m NNW of Mudginbarry HS. 25.v.73, Matthews & Upton (ANIC); 1 ♂, Australia/N.T. Keep River N.P.: Gurandalg Camp, ca 50 km E Kununurra 17. +23.IV.2004 lgt. M.Langer / S 15.52.494 E 129.03.076 Höhe 99 m Lichtfang (CBP); 1 ♂, 2 ♀♀, WYNDHAM. NWA 28.IV.76 K.CARNABY / WALFORD-HUGGINS COLLECTION / *Clivina procer*a Putzeys [Series det. by A. Walford-Huggins] (CMP); 1 ♂, 1 ♀, WA Wyndham 20 Apr. 1975 Ex Carnaby Colln (ANIC); 1 ♀, Wyndham WA 20.IV.1976 K. & E. Carnaby (ANIC); 14 ♂♂, 11 ♀♀, AUSTRALIA: WA; Kimberley, 12m, Home Valley Station, 14°42'S 127°51'E, 15–18. iv.2009, nr Pentecost Riv., St. Jakl lgt. (CBM, CBP, CJP); 1 ♀, AUSTRALIA, WA, Kimberley, Home Valley St., 15°42'29"S 127°51'11"E, 12m alt, 16–18.IV.2009, light traps, lgt. Vit Ryjáček (CRP); 4 ♂♂, 4 ♀♀, AUSTRALIA: WA; Kimberley, Wyndham env., 20–21.iv.2009, 15°31'S 128°10'E, salty bay of the sea, 3m alt. St. Jakl lgt. (CBM, CBP, CJP); 1 ♂, 1 ♀, AUSTRALIA WA; 15–16.iv.2009, Hidden Valley NP, Kununurra 15°46S 128°44E 64 m alt. St. Jakl lgt. (CJP); 2 ♀♀, AU Western Australia NE-Kimberley: Wyndham 15°31.2'S 128°10.7'E 8m IV – 2009 lgt. Vit Ryjáček (CBP); 1 ♂, 2 ♀♀, 14.52S 125.50E 4km SbyW Mining Camp, Mitchell Plat. WA. 13 May 1983 DCF. Rentz J.Balderson Stop 17 / Crusher at light (ANIC); 1 ♂, 14.52S 125.50E 4km SbyW Mining Camp, Mitchell Plateau WA 13May 1983 I.D.Naumann J.C.Cardale at light (ANIC); 1 ♂, Nov. Holl. Occi^d / 69650 (NHM).

Etymology. The name is a patronym in honour of the collector of many specimens, Vit Ryáček.

Diagnosis. Large, black species with deep, quadrangular clypeal excision, not sulcate, little punctate head, rufopiceous middle and hind legs, oblique but not convex lateral pronotal margin, impunctate proepisternum, elongate and parallel-sided elytra,

and remarkably curved aedeagus with elongate, straight, triangular apex.

Description

Measurements. Length: 15.2–18.9 mm; width: 4.2–5.3 mm. Ratios. Length/width of pronotum: 1.0–1.03; base/apex of pronotum: 1.25–1.30; width pronotum/head: 1.34–1.38; length/width of elytra: 2.06–2.12; length/width of protibia: ♂: 4.15–4.2, ♀: 3.3–3.5; length/width of metatibia: ♂: 5.8–6.1, ♀: 5.7–5.9.

Colour (Fig. 123). Unicolourous black. Middle and hind legs rufo-piceous, perceptibly paler than the anterior leg.

Head (Fig. 123). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 5-setose. Clypeus not divided from frons; upper surface smooth, without transverse sulci or striae; frons sparsely punctate. Surface without distinct microreticulation, glossy.

Pronotum (Fig. 123). Moderately elongate, slightly narrowed apicad, dorsally gently convex. Lateral margin oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with some very fine, transverse striae in middle, impunctate, with or without finest and extremely superficial traces of isodiametric microreticulation, glossy.

Elytra. Elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, impunctate. Intervals slightly convex, impunctate, without or with very weak transverse striae, with fine, very superficial, isodiametric microreticulation, rather glossy. Epipleura narrow, basal sulcus indistinct.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate in ventral half, with few irregular, elongate dorso-ventral striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, slightly <2.5× as long as wide, almost impunctate. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface barely perceptible; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate,

rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 13). Aedeagus wide, fairly elongate, regularly narrowed apicad; lower surface very concave throughout. Apical part barely asymmetric, almost regularly triangular; apex moderately elongate, straight, tip not incurved, triangular and acute. Both parameres very elongate, the left one considerably stouter than the narrower right one; the end of the stout part in both parameres oblique; both with elongate, very narrow, unisetose apical part; setae very short, situated right at tip.

Female gonocoxites. Very similar to those of *C. procera* Putzeys.

Variation. Some variation noted in body size.

Distribution. Northern and north-western NT, north-eastern part of the Kimberley Division.

Collecting circumstances. Most specimens collected at light, some near rivers or billabongs.

Clivina heros, spec. nov.

Figs 14, 56, 124

Examined types. Holotype: ♂, W.AUST., KIMBERLEY CA 9 KM E OF NAPIER DOWNS HS (17.20 S, 124.49 E 5 & 9 APRIL 1988 T. F. HOUSTON 684-3 / AT LIGHT(MV) AT NIGHT (WAM 39167). – Paratypes: 1 ♂, 3 ♀♀, same data (WAM 39164-66, 68); 1 ♂, Daly R. Mission 10.v.1974 J.Hutchinson (ANIC); 1 ♀ (defect), *Scolyptus procerus*? Putz. Port Darwin (MMS); 1 ♀, Australia/NT Keep River NP.: Gurandalg Camp, ca 50 km E Kununurra 17. +23.IV.2004 lgt. M.Langer / S 15.52.494 E 129.03.076 Höhe 99 m Lichtfang (CBM); 1 ♂, 3 ♀♀, Keep Creek, N.T. Victoria Hwy 29 Mar. 1984, at light. K. & E. Carnaby (ANIC); 2 ♀♀, NT. Keep River on Victoria Hwy 29 Mar 1984 at light. K.&E.Carnaby (ANIC); 3 ♀♀, Keep Creek, N.T. Victoria Hwy 29 Mar. 1984, at light. K. & E. Carnaby (ANIC); 1 ♀, AUSTRALIEN Northern Territory Keep River Nat.Park 7. 3. 1991 leg. H.Schulenburg (NTD); 1 ♂, Keep River, M.T. 29-3-84 Coll: Carnaby (QMB); 1 ♂, Kununurra W.A. 12.2.62 K. S. Cole (WADAP 5300); 3 ♂♂, 2 ♀♀, Wyndham-KRS 10.2., 14.2., 22.2. 53 .R.Lukins (WADAP 5292-96); 1 ♂, Wyndham-Goose (?unreadable) 15.3. 53 .R.Lukins (WADAP 52997); 1 ♂, WA, Wyndham 20 Apr 1975 Ex: Carnaby Coll. (ANIC); 1 ♂, 1 ♀, Kimberley Res. Station W.A. Ex Light Trap. 8.3.60, 11.2.61 K. T. Richards (WADAP 5298-9); 2 ♂♂, Western Australia Ord River Valley Kimberley Res. Stn. 18-ii-1983. ESC Smith (WADAK 117919-20); 2 ♀♀, 50-703 Ord River (WAM 38939-40); 1 ♀, Kimberley Research Stn. Via Wyndham N.W. Aust 22.3.1965 E.C.B.Langfield (ANIC); 1 ♂, AUSTRALIA, WA, Kimberley Home Valley St. 15°42.29'S, 127°51.11'E, 12m alt, 16.–18.IV.2009, light traps. leg. Vit Ryáček (CRP); 1 ♂, Fitzroy River, WA 14 May 1989 ex. coll. A. Hay (ANIC); 1 ♀, Australien, WA Fitzroy Crossing 19.11.1984 M. Baehr (CBM); 2 ♀♀,

Fitzroy River, W.A. 11 May 1989 ex coll. A.Hay (ANIC); 2 ♂♂, 2 ♀♀, Fitzroy River W.A. at light 16 March 1980 K. & E. Carnaby (ANIC); 2 ♀♀, WA Fitzroy Crossing 16 Apr 1974 Ex Carnaby Colln (ANIC); 1 ♂, FITZROY RIVER NWA: 26-4-1976 K+E.Carnaby (ANIC); 1 ♂, 1 ♀, Fitzroy Crossing, W.A 125:35E, 18:10S 17 Mar. 1984, at light K. & E. Carnaby (ANIC); 1 ♀, W.AUSTRALIA Fitzroy River 16.IV.1976 K. & E. Carnaby (ANIC); 2 ♂♂, WESTERN AUSTRALIA Fitzroy River 16-4-1976 K. & E. Carnaby (ANIC); 1 ♀, WESTERN AUSTRALIA Fitzroy River 16-4-1980 K. & E. Carnaby (ANIC); 1 ♂, W.Australia Fitzroy River 16.IV.1976 K.&E.Carnaby (CNCI); 1 ♀, Fitzroy R. NWA 16 April 1976 K.&E.Carnaby (ANIC); 1 ♂, Willare Bridge on Fitzroy River, W:A. 28 Feb. 1985, at light K. & E. Carnaby (ANIC); 1 ♂, Fitzroy River NWA: 26.IV.1976 K.&E.Carnaby / WALFORD-HUGGINS COLLECTION / *Clivina obscuripes* Blbn. det. B. P. Moore '77 (CMP); 1 ♀, Willare W.A. / 3-5'96 Knowles / Golding/Powell Collection donated 12.Feb.2002 (WAM 39192); 1 ♂, AUSTRALIA FITSROY R WA 07-02-1989 Ex Coll. F.Wachtel (CDW); 2 ♂♂, 9 ♀♀, Winjana Gorge W.A. 17 Mar.1980 at light K. & E. Carnaby / more specimens in spirit tube (ANIC); 1 ♂, 3 ♀♀, W. Aust. At light. Winjana Gorge. Napier Range. 90 mi E. Derby .7th May 1973. T. and C. Houston. (SAMA); 4 ♀♀, Lennard River W.A. at light 18 Mar. 1980 K. & E. Carnaby (ANIC); 1 ♂, 2 ♀♀, W.AUST., KIMBERLEY LENNARD RIVER XING GIBB RIVER ROAD 17.23S, 124.44E 1 APRIL 1988 T. F. HOUSTON 679-4 / AT LIGHT(MV) AT NIGHT (WAM 39156,-59); 1 ♀, WA: 14°29'Sx126°46'E Kimberley,Carson R.std. 21-22 Apr 1998 D.J.Cook, woodland (QMB); 3 ♂♂, 3 ♀♀, Derby, N.W.A. W. D. Dodd (SAMA 25-033593, -602, -603, -605, -606); Derby, N.W.A. W. D. Dodd / *Clivina obscuripes* Blkb. ? 75 Large form S. Id. by T. G. Sloane (SAMA); 1 ♂, 16-5-1989 DERBY W.A. / *Clivina* nr. *procera* Putz.det. B. P. Moore 1992 (DPIM); 1 ♀, 6-5-83 / DERBY G.LAROND / Golding/Powell Collection donated 12 Feb 2002 (WAM 39188); 1 ♂, N.W.Aust / *Clivina procera* Putz. ? var.? (ANIC); 1 ♀, N.W.Australia / *Clivina procera* ? Putz. N.W.Aust. (MMS); 1 (?sex, defect) N.W.Aust (MMS); 1 ♀ (CBP); 1 ♀, (Wadak 117921).

Additional material (1 ex). **WA:** 1 (?sex, defect) N.W. Aust (MMS).

Etymology. The name refers to the very large body size.

Diagnosis. Very large, black species with deep, quadrangular clypeal excision, not sulcate, little punctate head, deep black legs, oblique-convex lateral pronotal margin, impunctate proepisternum, elongate and parallel-sided elytra, and remarkably curved aedeagus with elongate, straight, triangular apex.

Description

Measurements. Length: 18.2–23.9 mm; width: 4.9–6.3 mm. Ratios. Length/width of pronotum: 0.98–1.05; base/apex of pronotum: 1.30–1.34; width pronotum/head: 1.36–1.44; length/width of elytra:

2.13–2.18; length/width of protibia: ♂: 3.9–4.05, ♀: 2.95–3.15; length/width of metatibia: ♂: 6.2–6.5, ♀: 6.4–6.6.

Colour (Fig. 124). Unicolourous black. All legs deep black.

Head (Fig. 124). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 5-setose. Clypeus not divided from frons; upper surface smooth, without transverse sulci or striae; frons sparsely punctate. Surface without distinct microreticulation, glossy.

Pronotum (Fig. 124). Moderately elongate, considerably narrowed apicad, dorsally gently convex. Lateral margin oblique-convex. Apex distinctly concave. Marginal channel narrow and median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, impunctate, without microreticulation, glossy.

Elytra. Elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, impunctate. Intervals slightly convex, impunctate, without or with very weak transverse striae, with very fine, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus shallow, punctate.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with few irregular, elongate dorso-ventral striae, with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.25 × as long as wide, in anterior half with sparse, rugose punctures, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface deep; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere almost as long as the following three tarsomeres.

Male genitalia (Fig. 14). Aedeagus wide, fairly elongate, slightly asymmetrically narrowed apicad; lower surface concave, extremely so in apical half. Apical part moderately asymmetric, triangular; apex narrow and rather elongate, straight but slightly curved left, tip not incurved, acute. Both parameres very elongate, the left one considerably stouter than

the narrower right one; the end of the stout part in both parameres quadrangular; both with moderately elongate, very narrow, unisetose or asetose apical part; setae very short, situated right at tip.

Female gonocoxites (Fig. 56). Gonocoxites comparatively short and wide, little curved, with acute apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, three elongate setae on the ventral surface of gonocoxite 1, three setae at middle of the medio-dorsal surface, and with a tiny nematiform seta near apex. Lateral plate basally with one elongate seta, apically with two or three shorter seta.

Variation. Considerable variation noted in body size.

Distribution. North-western NT, Kimberley Division in northern WA.

Collecting circumstances. Many specimens collected at light, some near rivers or billabongs.

Clivina goldingi, spec. nov.

Fig. 15

Examined types. Holotype: ♂, 4 May 1997 / Knotts Crossing Katherine, N.T. / Golding/Powell Collection donated 12 Feb 2002 (WAM 39193).

Etymology. The name is patronym and refers to the collector M. Golding.

Diagnosis. Large, black species with deep, quadrangular clypeal excision, not sulcate, little punctate head, deep black legs, straight and little oblique lateral pronotal margin, impunctate proepisternum, elongate and parallel-sided elytra, and elongate, slightly sinuate, acute apex of the aedeagus.

Description

Measurements. Length: 16.5 mm; width: c. 4.7 mm. Ratios. Length/width of pronotum: 1.04; base/apex of pronotum: 1.35; width pronotum/head: 1.39; length/width of elytra: c. 2.08; length/width of protibia: ♂: 3.3; length/width of metatibia: ♂: 5.8.

Colour. Unicolourous black. All legs deep black.

Head. Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 5-setose. Clypeus not divided from frons; upper surface smooth, without transverse sulci or striae; frons sparsely punctate. Surface without distinct microreticulation, glossy.

Pronotum. Moderately elongate, very little narrowed apicad, dorsally gently convex. Lateral margin straight and little oblique, faintly concave in apical third. Apex barely concave. Marginal channel nar-

row; median line shallow, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove very shallow, barely indicated, elongate, linear, straight, impunctate. Disk with some very fine, transverse striae in middle, impunctate, with very fine, isodiametric microreticulation, fairly glossy.

Elytra. Elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, at least in basal half finely punctate. Intervals slightly convex, impunctate, without transverse striae, with fine, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus indistinct.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with few irregular, elongate dorso-ventral striae, with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.25 × as long as wide, in anterior half with sparse, rugose punctures, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia comparatively short and wide. Longitudinal sulcus on upper surface faintly impressed; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 15). Aedeagus very wide, fairly elongate, narrowed apicad and slightly sinuate; lower surface in basal two thirds gently concave, then straight and slightly directed down. Apical part elongate, conspicuously bisinuate at both sides, remarkably sinuate; apex elongate, narrowed towards tip, which is rather acute. Both parameres very stout, the left one considerably stouter than the right one; both with rather short, narrow, uni- or bisetose apical part; setae short, situated right at the apex; the left paramere with a tiny second seta.

Female gonocoxites. Unknown.

Variation. Unknown.

Distribution. Northern NT. Known only from type locality.

Collecting circumstances. Not recorded.

Clivina newcastleana, spec. nov.

Figs 16, 57, 125

Examined types. Holotype: ♂, Elsey Ck. 10ml. E of Mataranka on Roper Bar Rd. NT 22.iii.72, A. Allwood & W. Forrester / 11271 (NTD). – Paratypes: 2 ♂♂, 7 ♀♀, same data (NTD); 1 ♀, Elsey Ck. 10ml. E of Mataranka on Roper Bar Rd. NT 19.iv.72, T. Weir A. Allwood / 11240 (NTD); 1 ♀, Elsey Ck. NT. Roper Bar Rd. 22.iii.1972 Allwood & Angeles / *Clivina* sp. / 11227 (NTD); 7 ♂♂, 15 ♀♀, AUSTRALIA NT: 190m alt. 70km SW of Mataranka, 15°19'S 132°50'E 22–23.xii.2008, St. Jakl lgt. (CBM, CBP, CJP); 2 ♀♀, AUSTRALIA NT: 190m alt. 70km SW of Mataranka, 15°19'S 132°50'E 14–16.i.2009; St. Jakl lgt. (CJP); 3 ♂, 9 ♀♀, AUSTRALIA NT: 190m alt. 70km SW of Mataranka, 15°19'S 132°50'E 22–23.xii.2008; L. Hovorka lgt. (CBM, CBP, CHP); 1 ♀, AUSTR. NT, 70km SW of Mataranka, 14–15.1.09, 15°19'S 132°50'E 190m, Sv. Bilý leg. (CBM); 2 ♂♂, 2 ♀♀, AUSTRALIA NT: 3km N of Mataranka, 14°43'S 132°01'E 18–19.xii.2008, St. Jakl lgt. (CBM, CBP, CJP); 7 ♂♂, 10 ♀♀, AUSTRALIA: NT; 168m alt. 25 km S of Katherine, nr. Cutta Cutta Caves, 14°31'S 132°25'E, 23–31.xii.2008, St. Jakl lgt. (CBM, CBP, CJP); 2 ♀♀, Cutta Cutta N.T. June 1987 S. Churchill (AMS K255334); 1 ♂, AUSTRALIA: NT; 100m alt., 25 km S of Katherine, rd. to Kununurra, 14°44'S 132°01'E, 17–31.xii.2008, St. Jakl lgt. (CBM); 26 ♂♂, 36 ♀♀, AUS13, NT25, c.12 km wnw. Elliot, 204m 17°37'06"S, 133°28'41"E 17.4.2013, M.Baehr (CBM); 11 ♂♂, 19 ♀♀, Australia: N.T. (am Stuart Hwy) ca. 25 km N Elliott (Bauplatz) 20.IV.2011 LF; H = 274 m S 17°23'59.9" E 133°27'12.2" leg. Michael Langer (CBM, CWB); 3 ♀♀, AUS13, NT45, c.32 km e. Mataranka, Roper Bar Rd., 14°59'16"S, 133°21'06"E 115m, 3.5.2013, M.Baehr (CBM); 1 ♂, 2 ♀♀, AUS13, NT47, c.78 km e. Mataranka, Roper Bar Rd., 14°54'59"S, 133°42'48"E, 74m, 5.5.2013, M.Baehr (CBM); 3 ♂♂, 9 ♀♀, AUS13, NT12, NT23, 5 km s. Larrimah, Birdum Crk., 184m, 15°32'02"S, 133°22'33"E, 8.4., 16.4.2013, M.Baehr (CBM); 10 ♂♂, 9 ♀♀, AUS13, NT44, 5 km s. Larrimah, Birdum Crk., 500m e. NT12, 185m, 15°32'02"S, 133°23'35"E, 2.5.2013, M.Baehr (CBM); 2 ♂♂, 1 ♀, AUSTRALIA NT 316m alt, 14°53'S (wrong latitude, must be 18°53'S!), 132°01'E, Banka Banka env., road to Tennant Creek, 12–14.i.2009, St. Jakl lgt. (CBM, CBP, CJP); 1 ♂, AUSTRALIA N. Territ. Katherine env. 10–14.I.2004 Lgt. P. Macháček (CBM); 1 ♀, Col G. Lecourt 01/00 Katherine NT Australia / *Clivina* 1VK P. Bulirsch det. 2006 (CBP); 2 ♂♂, 4 ♀♀, AUSTRALIA N.T. Katherine 28/3/93 Leg. L. Toledano (CBM, CTV); 1 ♀, AUSTRALIA N.T. Katherine 28/3/93 (CGT); 2 ♀♀, Austral. North T. Katherine, XII.57 leg. H. Demarz (ZSM); 1 ♀, Australia N.T. Katherine Gorge 30.III.93 (CGT); 1 ♂, Katherine, N.T. at light, 7.ii.68 J.A.L. Watson (ANIC); 1 ♀, N.T. Katherine Gorge NP M.V. Light 1 Apr 1981M. Malitpatil & J. Hawkins (NTD); 1 ♂, 1 ♀, Katherine (ANIC); 1 ♀, AUS13, NT21, T/O Stuart Hwy./Edith River Rd., 145m, 14°11'10"S, 132°02'04"E, 15.4.2013, M.Baehr (CBM); 3 ♀♀, NT: 80km S of Larrimah 24 Jan. 1977 M.S. & B.J. Moulds (AMS K225265, K225291, K225305); 1 ♂, 1 ♀, NT Elliot 10 March 1997 G. R. Brown at light (NTD); 1 ♂, Katherine,

N.T. 17 Apr. 1962 I.F.H. Common (ANIC); 1 ♂, 1 ♀, Katherine Gorge M. V. Light 1 Apr 1981 M. Malipatil & J. Hawkins (NTD); 1 ♂, N.T. Kulamindini Bore nr. Elliot 17.34S 133.34E M.V. Light 13 Apr. 1981 M. Malipatil & J. Hawkins (NTD); 1 ♀, Newcastle Waters N. Australia 3 June 1929 T. G. Campbell (ANIC), 1 ♀, N.T. Lake Woods, 15 km SW Elliot, at light 3 Oct. 1977. G.F. Gross, J.A. Forrest (SAMA); 1 ♀, Newcastle Waters, N. Australia June 1929 T. G. Campbell / *Clivina quadratifrons* Sln. Id. by W.K. Hughes (ANIC).

Etymology. The name refers to the Newcastle Waters area where many specimens were collected.

Diagnosis. Rather large, black species with deep, quadrangular clypeal excision, not sulcate, sparsely punctate head, rufous middle and hind legs, straight and little oblique lateral pronotal margin, impunctate or sparsely punctate proepisternum, elongate and parallel-sided elytra, and elongate, sinuate, acute and incurved or slightly crotched apex of the aedeagus.

Description

Measurements. Length: 11.2–14.4 mm; width: 3.15–4.1 mm. Ratios. Length/width of pronotum: 0.96–1.0; base/apex of pronotum: 1.25–1.28; width pronotum/head: 1.33–1.39; length/width of elytra: 2.0–2.05; length/width of protibia: ♂: 3.8–4.0, ♀: 2.9–3.2; length/width of metatibia: ♂: 6.2–6.4, ♀: 5.8–6.2.

Colour (Fig. 125). Unicolourous black. Middle and hind legs rufous, considerably paler than the anterior leg.

Head (Fig. 125). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 5-setose. Clypeus not divided from frons; upper surface smooth, without transverse sulci or striae, rather sparsely punctate. Surface without distinct microreticulation, glossy.

Pronotum (Fig. 125). Comparably short, little narrowed apicad, dorsally gently convex. Lateral margin straight and slightly oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow; median line shallow but well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, impunctate, with very fine, superficial, isodiametric microreticulation, glossy.

Elytra. Elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, at least in basal half finely punctate. Intervals slightly convex, impunctate

or almost so, without or with very weak transverse striae, with fine, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus indistinct.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate or sparsely punctate in ventral half, with few irregular, elongate dorso-ventral striae and short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.25 × as long as wide, in anterior half with sparse, rugose punctures, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface faintly impressed; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 16). Aedeagus wide, fairly elongate, narrowed apicad; lower surface in basal half concave, in apical third slightly convex, towards apex again deeply concave. Apical part very asymmetric, deeply bisinuate at the left side; apex elongate, narrow, slightly curved left, slightly asymmetric, tip incurved and crotched, acute. Both parameres stout but elongate, the left one considerably stouter than the right one; both with very elongate, narrow, bisetose, apical part; setae very short, situated right at tip.

Female gonocoxites (Fig. 57). Gonocoxites very narrow and elongate, little curved, with acute apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, three setae at middle of the medio-dorsal surface, and a tiny nematiform seta near apex. Lateral plate basally with one elongate seta, apically apparently without setae.

Variation. Considerable variation noted only in body size.

Distribution. Central NT from about Katherine to north of Tennant Creek.

Collecting circumstances. Many specimens collected at light, some near rivers or billabongs.

Clivina glabripennis, spec. nov.

Figs 17, 85

Examined types. Holotype: ♂, AUSTRALIA: QLD: 271 km West Windorah, 31.viii.1997, J. & A. Skevington, A. Zwick, S. Winterton, C. Lambkin / UQIC Reg. #90502 (QMT234150). – Paratypes: 2 ♀♀, same data / UQIC Reg. #90500-1 (CBM, QMB); 4 ♀♀, AUSTRALIA SW Queensland 12 km W of Windorah; 110 m 28–31.i.2011; sand dunes 25°21'S, 142°32'E; St. Jakl lgt. (CBM, CBP, CJP); 1 ♀, INNAMINCKA: COOPERS CK S.A.: 24 Jan. 1976 M.S. & B.J. Moulds / WALFORD-HUGGINS COLLECTION / *Clivina procera* Putz. det. B.P. Moore '77 (CMP).

Etymology. The name refers to the glossy, not microreticulate surface.

Diagnosis. Large, black species with deep, quadrangular clypeal excision, not sulcate, sparsely punctate head, rufous middle and hind legs, straight and fairly oblique lateral pronotal margin, impunctate proepisternum, elongate and parallel-sided elytra, and elongate, sinuate, acute, not incurved apex of the aedeagus.

Description

Measurements. Length: 13.7–17.0 mm; width: 3.8–4.8 mm. Ratios. Length/width of pronotum: 0.98–1.01; base/apex of pronotum: 1.29–1.31; width pronotum/head: 1.37–1.41; length/width of elytra: 2.02–2.06; length/width of protibia: ♂: 3.35, ♀: 2.85–3.1; length/width of metatibia: ♂: 6.7, ♀: 6.1–6.3.

Colour (Fig. 85). Unicolourous deep, glossy black. Middle and hind legs rufous, anterior leg rufo-piceous.

Head (Fig. 85). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 5-setose. Clypeus not divided from frons; upper surface smooth, without transverse sulci or striae, rather sparsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 85). Comparably short, fairly narrowed apicad, dorsally gently convex. Lateral margin straight and oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove shallow, elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, impunctate, without microreticulation, very glossy.

Elytra (Fig. 85). Elongate, parallel-sided, not widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, at least in basal half finely punctate. Intervals slightly convex,

impunctate, without or with very weak transverse striae, without microreticulation, remarkably glossy. Epipleura narrow, basal sulcus indistinct.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with few irregular, elongate dorso-ventral striae and short, transverse striae, also with distinct isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.25 × as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface deeply impressed; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 17). Aedeagus very wide, rather elongate, asymmetrically narrowed apicad; lower surface concave, extremely so in apical half. Apical half of lower surface with two longitudinal ridges, surface between deeply concave. Apical part very asymmetric, deeply concave at the left side; apex moderately elongate, rather narrow, straight but slightly curved left, tip not incurved ventrad, obtuse. Both parameres elongate, the left one considerably stouter than the narrower right one; both with moderately elongate, very narrow, bisetose apical part; setae short, situated right at tip.

Female gonocoxites. Very similar to those of *C. newcastleana*, spec. nov.

Variation. Considerable variation noted in body size.

Distribution. South-western QLD, adjacent north-eastern SA.

Collecting circumstances. Little recorded. The specimens from near Windorah were sampled in “sand dunes”, most probably at light.

Clivina micans, spec. nov.

Figs 18, 86

Examined types. Holotype: ♂, Q./N.T. border. nr. Camooweal. W. Qld. 25 Mar. 84 Coll: A. Hiller (QMT234902). – Paratypes: 1 ♂, same data (CBM); 1 ♂, 1 ♀, Alexandria, N. Australia. W. Saalcker. 18,20-3-06 1907-261. / *ovalipennis* Sl. Det. K. Kult / COLLECTIO KAREL KULT COLL.A.DOSTAL,1989 (CDW).

Etymology. The name refers to the very glossy surface.

Diagnosis. Rather large to large, black species with deep, quadrangular clypeal excision, not sulcate, sparsely punctate head, black legs, straight and fairly oblique lateral pronotal margin, impunctate and very glabrous proepisternum, elongate but not absolutely parallel-sided elytra, coarsely punctate elytral striae, and elongate, straight, slightly turned left apex of the aedeagus with obtuse tip.

Description

Measurements. Length: 12.9–15.6 mm; width: 3.7–4.35 mm. Ratios. Length/width of pronotum: 1.04–1.06; base/apex of pronotum: 1.16–1.24; width pronotum/head: 1.42–1.50; length/width of elytra: 2.0–2.03; length/width of protibia: ♂: 3.25–3.4, ♀: 2.5; length/width of metatibia: ♂: 6.0–6.1, ♀: 5.1.

Colour (Fig. 86). Unicolourous black. Legs deep black.

Head (Fig. 86). Eye fairly large, laterally moderately projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum 5-setose. Clypeus not divided from frons; upper surface smooth, without transverse sulci but frons laterally with some short, faint striae, rather sparsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 86). Moderately elongate, narrowed apicad, dorsally gently convex. Lateral margin straight and oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove shallow, elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, impunctate, in the males without, in the single female with very faint, superficial, isodiametric microreticulation, very glossy.

Elytra (Fig. 86). Elongate, but not absolutely parallel-sided, or slightly widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae deep, becoming slightly shallower towards apex, coarsely punctate. Intervals slightly convex, impunctate, without or with very weak transverse striae, in males without, in the single female with very faint, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus distinct, punctate.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, and almost without striae, remarkably glabrous, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, slightly $>2\times$ as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface distinct; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 18). Aedeagus wide, moderately elongate, very asymmetrically narrowed apicad; lower surface concave, in apical third almost straight. Apical half of lower surface gently concave. Apical part very asymmetric, bisinuate at the left side; apex elongate, rather narrow, slightly curved left, tip obtusely angulate. Both parameres rather short, the left one stouter than the narrower right one; both with very short, narrow, aetose apical part.

Female gonocoxites. Very similar to those of *C. newcastleana*, spec. nov.

Variation. Considerable variation noted in body size. Also apparently some sexual variation in presence/absence of microreticulation on pronotum and elytra.

Distribution. North-western QLD near QLD/NT border, adjacent central eastern NT.

Collecting circumstances. Not recorded.

Clivina rugosifrons, spec. nov.

Figs 19, 58, 126

Examined types. Holotype: ♂, Moreton Tel. Stn., Cape York Pen. N. Qld. 30.vi.1975 G. B. Monteith (QMT234903). – Paratypes: 3 ♂♂, 5 ♀♀, same data (QMB, CBM); 1 ♀, Batten Point 15.54S 136.32E 30 km NE by E of Borrooloola, N.T. 18.iv.1976 J.E. Feehan (ANIC); 1 ♀, 2754 NQU / *C. procera* Putz. var? Gulf of Carpentaria (SAMA); 1 ♀, Cairns dist. E. Allen (SAMA 25-033611); 1 ♀, AUSTRALIA: n. Qld. Pinnarondi Stn. 60 km W. of Mt. Garnet 7.ii.1989 D. Heiner at light (QDPIM); 1 ♀, NORTH QLD SPRING VALLEY / 20.Feb.1972A & M. Walford-Huggins 5902 / WALFORD-HUGGINS COLLECTION / *Clivina procera* Putz. [Series det. by A.Walford-Huggins] (CMP); 1 ♀, Gulf. C.F. 16/6/94 N.W. (unreadable) ♀ (ANIC); 1 ♀, Gulf C.F. 16/3/94 (ANIC); 1 ♀, Conjuboy2/42 / M. 158 / J. G. Brooks Bequest, 1976 (ANIC); 1 ♂, QLD: 21.138°Sx148.155°E Redcliffe Tbl. Site 3. 13–14Apr2012, S.Monteith mushroom trap, open forest, 400m 35235 (QMB); 1 ♀, NQU / *obscuripes* Blackb. (SAMA); 3 ♀♀, Stewart R. Q.W. D. Dodd / 19264 *Clivina obscuripes* Btkb. 75 S. Id by T. G. Sloane (SAMA); 1 ♂, 5 ♀♀, W. of Ravenshoe Atherton Tab., Q. c.3000', Feb.'58 Darlingtons (CBM, MCZ).

Etymology. The name refers to the rugose, transversely sulcate frons.

Diagnosis. Large, black species with fairly deep, wide, quadrangular clypeal excision, transversely sulcate, sparsely punctate head, rufous to rufopiceous middle and hind legs, straight and fairly oblique lateral pronotal margin, impunctate or sparsely punctate proepisternum, elongate, parallel-sided elytra, and elongate, sinuate, barely incurved apex of the aedeagus.

Description

Measurements. Length: 14.1–15.9 mm; width: 3.9–4.8 mm. Ratios. Length/width of pronotum: 1.01–1.06; base/apex of pronotum: 1.26–1.33; width pronotum/head: 1.32–1.38; length/width of elytra: 2.02–2.08; length/width of protibia: ♂: 3.15–3.25, ♀: 2.9–3.05; length/width of metatibia: ♂: 6.1–6.2, ♀: 5.7–6.1.

Colour (Fig. 126). Unicolourous black. Middle and hind legs rufopiceous, little paler than the anterior leg.

Head (Fig. 126). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with deep, almost quadrangular excision. Labrum usually 5-setose, rarely 4- or 7-setose. Clypeus divided from frons by a sulcus, usually clypeus and anterior part of frons with additional transverse sulci. Surface rather sparsely punctate, without microreticulation, glossy.

Pronotum (Fig. 126). Moderately elongate, slightly narrowed apicad, dorsally gently convex. Lateral margin straight and oblique, faintly concave in apical third. Apex slightly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove shallow, elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, impunctate, with very superficial traces of isodiametric microreticulation, glossy.

Elytra (Fig. 127). Elongate, parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae well impressed, becoming slightly shallower towards apex, at least in basal half finely punctate. Intervals slightly convex, impunctate, without or with very weak transverse striae, with very faint, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus indistinct.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum sparsely punctate or impunctate, with few irregular, elongate dorsoventral striae, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.25 × as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface distinct; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 19). Aedeagus wide, fairly elongate, narrowed apicad; lower surface in basal half concave, in apical half bisinuate. Apical part asymmetric, bisinuate at the left side; apex short, slightly turned left, slightly asymmetric, tip not incurved, more or less obtuse. Both parameres very elongate, the left one considerably stouter than the narrower right one; both with elongate, very narrow, aetose apical part.

Female gonocoxites (Fig. 58). Gonocoxites rather narrow and elongate, little curved, with obtusely rounded apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, two setae at middle of the medio-dorsal surface, and with a tiny nematiform seta near apex. Lateral plate basally with one elongate seta, apically with two or three shorter seta.

Variation. Some variation noted in body size, relative length of prothorax and elytra, and distinctness of the frontal sulci.

Distribution. North QLD, adjacent north-eastern NT.

Collecting circumstances. Little recorded. Some specimens were collected at light, one in “mushroom trap in open forest”, several near river.

Clivina monilicornis Sloane

Fig. 20

Clivina monilicornis Sloane, 1896a: 229. – Sloane 1896a: 227, 231, 239; Csiki 1927: 508; Moore et al. 1987: 73; Lorenz 2005: 143.

Examined types. Lectotype (by present designation): ♀ (probable, genitalia destroyed), Pt. Denison / SYNTYPE (red) / *Clivina monilicornis* Sl. Port Denison (ANIC-MMS). – Paralectotypes: 2 ♀♀ (probable, abdomen of one specimen destroyed), Pt. Denison / SYNTYPE (red) (ANIC-MMS); 1 (sex?, only abdomen left, but genitalia destroyed), Pt. Denison / *Clivina monilicornis*, Sl. / PARATYPE (blue) (ANIC-MMS).

Type locality. “Port Denison” (= Townsville), North Queensland.

Other material (13 ex.). **QLD:** 1 ♀, Cape York H. Eigner / *Clivina* Cape York (QMB); 1 ♀, Silver Plains Cape York, Q. May–June '58 Darlington (MCZ); 1 ♂, Qld:19°07.8'Sx145°20.2'E Gregory & Herveys Ra Dev. Rds crossing. 350m 14736 17Dec2006–15Feb2007. Monteith&Cook.pitfall.OF (QMB); 1 ♀, Endeavour River Queensland / *Clivina monilicornis* Sl. Id. by T. G. Sloane / Pres by T. G. Sloane Esq. 12-6-16 (NMV COL-5380); 1 ♂, 1 ♀ (defect), Pt. Denison (MMS); 1 ♀, Port Nales (?) Queensland Elgner (SAMA 25-033590); 1 ♂, Queensland (SAMA); 1 ♀, Nat. Mus. Victoria Queensland (NMV); 1 ♀, Cape York H. Eigner / *Clivina* Cape York (QMB); 1 ♀, AUSTRALIEN Cape York. (SMNS); 1 ♂ (defect), 5589 N. Qu. / sp. nov. near *macleani* prostern sulcate at base / I. 6863 *Clivina* Queensland (SAMA 25-033694). – **NT:** 1 ♂, Brock's Crk N.T. 13-1-32 T.G.Campbell. (ANIC).

Diagnosis. Comparatively small to medium sized, black species with wide and shallow, quadrangular clypeal excision, More or less sulcate, sparsely punctate head, dark legs, conical prothorax, impunctate proepisternum, elongate but not absolutely parallel-sided elytra, deeply impressed, barely punctate elytral striae, and short, straight, parallel-sided, at tip obtuse apex of the aedeagus.

Description

Measurements. Length: 9.1–13.0 mm; width: 2.6–3.6 mm. Ratios. Length/width of pronotum: 1.06–1.09; base/apex of pronotum: 1.35–1.37; width pronotum/head: 1.49–1.52; length/width of elytra: 1.93–2.02; length/width of protibia: ♂: 3.1–3.2, ♀: 2.8–2.85; length/width of metatibia: ♂: 5.1–5.2, ♀: 4.9–5.0.

Colour. Unicolourous black. Legs dark piceous to black.

Head. Eye fairly large, laterally moderately projected, orbit short, oblique-convex. Clypeus with rather shallow, wide, almost quadrangular excision, though the lateral margins of the excision being rather oblique. Labrum usually 5-setose, rarely 6-setose. Clypeus usually divided from frons; upper surface with more or less distinct transverse sulci, rather sparsely punctate. Surface without microreticulation, glossy.

Pronotum. Rather elongate, rather conical, dorsally gently convex. Lateral margin straight and oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove shallow, rather punctiform, impunctate. Disk rarely with some fine, transverse striae in middle, impunctate, without microreticulation, very glossy.

Elytra. Rather elongate, but not absolutely parallel-sided, slightly widened apicad, convex but on disk depressed. Basal angle little produced. Stria-

tion complete, but lateral striae less distinct. Striae deep, becoming slightly shallower towards apex, impunctate or almost so. Intervals slightly convex, impunctate, without or with very weak transverse striae, with very faint, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus indistinct.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with few irregular, elongate dorso-ventral striae and some short transverse striae, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, slightly >2× as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface faintly impressed; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia moderately elongate, rather sparsely setose. Metatarsomere shorter than the following three tarsomeres.

Male genitalia (Fig. 20). Aedeagus wide, fairly elongate, asymmetrically narrowed apicad; lower surface almost regularly concave. Apical half of lower surface with two longitudinal, parallel ridges, the surface between concave. Apical part bisinuate on the left side; apex fairly short, straight, narrow, parallel-sided, tip obtusely angulate. Both parameres short and stout, the left one considerably stouter than the right one; both with very short but acute, asetose apical part,

Female gonocoxites. Very similar to those of *C. conicollis*, spec. nov.

Variation. Considerable variation noted in body size.

Distribution. North QLD, doubtfully also in northern NT.

Collecting circumstances. Not recorded.

Clivina conicollis, spec. nov.

Figs 21, 59, 127

Examined types. Holotype: ♂, NT.A.L.Hertog Kakadu NP Jabiru NT May 1998 (ANIC). – Paratypes: 1 ♂, 1 (?sex, defect), King R' N.T. 24.12.15 Nat. Mus. Victoria Coll.leg. W.McLennan / *Clivina monilicornis* Sl. (large form) Id. by T. G. Sloane (ANIC, NMV COL-5386); 1 ♂, King R' N.T. Nat. Mus. Victoria Coll.leg. W.McLennan 24.12.15 / *Clivina monilicornis* Sl. Det by T. G. Sloane 3 - 17 / (NMV COL-14020); 1 ♂, King R' N.T. 24.12.15 /

Coll. By W. Mc Lennan sp 64 H.L.White prp. 14.10-16 / *Clivoina monilicornis* Sl. Det by T. G. Sloane 3 - 17 (NMV COL-5381); 1♂, King R' N.T. 24.12.15 / Coll. By W. Mc Lennan sp 64 H.L.White prp. 14.10-16 (NMV COL-14024); 2♂♂, 1♀, AUSTRALIA: Howard Springs N.T. 22.iii.68 B.P.Moore (ANIC); 1♂, Australia, NT Kakadu, 10/14.I.2004 lgt. R. Novák (CKZ); 1♂, 2♀♀, AUSTRALIA Elizabeth R. N.T. 21.iii.68 B.P.Moore / *Clivoina monilicornis* Sl. det. B.P.Moore#79 (ANIC); 1♀, N.T. M. Armstrong Mary River Area N.T. PWCNT Study MS 01 Jun 1999 (ANIC); 1♀, 12.48S 132.42E Nourlangie Creek, N.T. 8km N. of Mt. Cahill, 16.vi.73, Upton & Feehan (ANIC); 1♂, 1♀, AUS13, NT3, Leaning Tree Lagoon, 35 km e.Stuart Hwy.T/O 12°42'34"S,131°25'20"E 25m, 4.4.2013, M.Baehr (CBM); 1♀, Groote Eylandt N. B. Tindale (SAMA No. 25-033513); 2♀♀, AUSTRALIA NT; 190m alt. 70km SW of Mataranka 15°19'S 132°50'E 14-16.I.2009 St Jakl (CBM, CJP); 1♂, 1♀, Kakadu Nat. Park, CSIRO Biodiversity Survey, Site 134B, 13.41257 S, 132.48407 E, S. Oberprieler, Feb-Mar 2014 (CBM); 13♂♂, 31♀♀, 3/06 N-AUSTR, NT, KAKADU NP MUIRELLA, 10.06.2006 40M S12°51'15" E132°45'16" LIGHT LG BERGER-DOSTAL (CBM, CDW); 2♂♂, 3♀♀ 8/06 N-AUSTR, NT, 40KM v PORT ROPER, 15.05.2006, S14°54'04.8" E135°03'24.7" 134M, LT. BERGER-DOSTAL (CBM, CDW); 2♂♂, Weipa NQ 12.35S 141.53E pitfall 17.i-30.vi.1993 A. Thomas (AMS K 225355); 1♂, QLD Weipa Cape York 12°36'±7'S 141°53'±7'E 17 Jan. 1992-30 June, 1983 A.J.Thomas, Pitfall Trap (AMS K 249708); 2♂♂, Cape York H. Eigner (QMB); 1♀, C. 2199 (QMB); 1♀, Horn Is.N. Queensl. 4/2/39 from wind / cf. *monilicornis* Sl. det.'59 Darlington / *Clivoina monilicornis* Sl. (MCZ); 1♂, Prince of Wales Is. Australia 2/19/39 (MCZ).

Etymology. The name refers to the elongate, markedly conical prothorax.

Diagnosis. Medium sized to rather large, black species with wide and shallow, quadrangular clypeal excision, not or barely sulcate, sparsely punctate head, dark legs, very conical prothorax, impunctate proepisternum, elongate but not absolutely parallel-sided elytra, deeply impressed, barely punctate elytral striae, and short, straight, parallel-sided, at tip slightly incurved apex of the aedeagus.

Description

Measurements. Length: 10.6-14.5 mm; width: 2.9-3.75 mm. Ratios. Length/width of pronotum: 1.10-1.13; base/apex of pronotum: 1.40-1.51; width pronotum/head: 1.47-1.52; length/width of elytra: 2.06-2.12; length/width of protibia: ♂: 3.35-3.5, ♀: 2.9-3.1; length/width of metatibia: ♂: 5.25-5.5, ♀: 5.2-5.3.

Colour (Fig. 127). Uniformly black. Legs dark piceous to black.

Head (Fig. 127). Eye fairly large, laterally moderately projected, orbit short, oblique-convex. Clypeus with rather shallow, wide, almost quadrangular

excision, though the lateral margins of the excision being rather oblique. Labrum usually 7-setose, rarely 5-setose. Clypeus usually shallowly divided from frons; upper surface without or with faint transverse sulci, rather sparsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 127). Elongate, markedly conical, dorsally gently convex. Lateral margin straight and oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove shallow, oval shaped, impunctate. Disk rarely with some fine, transverse striae in middle, impunctate, with faintest and extremely superficial traces of isodiametric microreticulation, very glossy.

Elytra. Elongate, but not absolutely parallel-sided, slightly widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae deep, becoming slightly shallower towards apex, impunctate or almost so. Intervals slightly convex, impunctate, without or with very weak transverse striae, with very faint, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus indistinct.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with few irregular, elongate dorso-ventral striae and some short transverse striae, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, slightly >2× as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface faintly impressed; lower surface with a row of 6-8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia moderately elongate, rather sparsely setose. Metatarsomeres shorter than the following three tarsomeres.

Male genitalia (Fig. 21). Aedeagus wide, fairly elongate, narrowed apicad; lower surface in basal third concave, then almost straight, but the apex slightly bent down, surface longitudinally striolate. Apical half of lower surface with two longitudinal, parallel ridges, the surface between concave. Apical part asymmetrically narrowed; apex elongate, straight, very narrow, parallel, near tip bent down; tip obtuse. Both parameres short and stout, the left one considerably stouter than the narrower right one; both with short but acute, aetose apical part.

Female gonocoxites (Fig. 59). Gonocoxites narrow and elongate, little curved, with rather acute apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, three or four setae at middle of the medio-dorsal surface, and with a tiny nematiform seta near apex. Lateral plate basally with one elongate seta, apically with two or three shorter seta.

Variation. Considerable variation noted in body size.

Distribution. Northern NT, north QLD: CYP; also on islands in the Gulf of Carpentaria and in Torres Strait.

Collecting circumstances. Little recorded. More recently sampled specimens collected at light near lagoons, and in pitfall traps.

Clivina dubia, spec. nov.

Figs 22, 128

Examined types. Holotype: ♂, Austr / Soc.Ent.Belg. Coll. PUTZEYS (IRSNB).

Etymology. The name refers to unknown type locality.

Diagnosis. Medium sized, black species with deep, quadrangular clypeal excision, impressed clypeal suture, sparsely punctate head, rufo-piceous legs, rather conical prothorax, impunctate and very glabrous proepisternum, moderately elongate, almost parallel-sided elytra, impunctate elytral striae, and elongate, parallel-sided curved left apex of the aedeagus with obtuse tip.

Description

Measurements. Length: 12.8 mm; width: 3.45 mm. Ratios. Length/width of pronotum: 1.05; base/apex of pronotum: 1.2; width pronotum/head: 1.35; length/width of elytra: 2.0; length/width of protibia: ♂: 3.3; length/width of metatibia: ♂: 5.25.

Colour (Fig. 128). Unicolourous black. Middle and hind legs rufous, paler than the anterior leg.

Head (Fig. 128). Eye fairly large, laterally moderately projected, orbit relatively long, oblique. Clypeus with moderately deep, almost quadrangular excision. Labrum 7-setose. Clypeus divided from frons by a deep and wide sulcus; upper surface without transverse sulci, rather sparsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 128). Elongate, conical, dorsally gently convex. Lateral margin straight and oblique, faintly concave in apical third. Apex slightly concave. Marginal channel narrow; median line well im-

pressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove shallow, elongate, posteriorly deepened, impunctate. Disk with some fine, transverse striae in middle, impunctate, without microreticulation, very glossy.

Elytra. Rather elongate, almost parallel-sided, slightly widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae deep, becoming slightly shallower towards apex, impunctate. Intervals slightly convex, impunctate, without transverse striae, without perceptible microreticulation, very glossy. Epipleura narrow, basal sulcus indistinct.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with few irregular, very faint, elongate dorso-ventral striae and some short transverse striae, markedly glabrous, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, slightly $>2\times$ as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate. Longitudinal sulcus on upper surface well impressed; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia moderately elongate, rather sparsely setose. Metatarsomere shorter than the following three tarsomeres.

Male genitalia (Fig. 22). Aedeagus very wide, moderately elongate, very asymmetrically narrowed apicad; lower surface in basal half concave, then almost straight. Apical half of lower surface slightly concave. Apex moderately elongate, parallel-sided, conspicuously curved left, tip obtusely rounded. Both parameres moderately elongate, the left one stouter than the right one; both with rather short, narrow, aetose apical part.

Female gonocoxites. Unknown.

Variation. Unknown.

Distribution. Not recorded.

Collecting circumstances. Not recorded.

Clivina regularis Sloane

Figs 23, 60, 87

Clivina regularis Sloane, 1896a: 238. – Sloane 1896a: 227; Csiki 1927: 510; Moore et al. 1987: 76; Lorenz 2005: 143.

Examined types. Lectotype (by present designation): ♂ (head missing, male genitalia partly destroyed), New

England / *Clivina regularis* Sl. Cotype / PARATYPE (blue) (ANIC).

Type locality. "New England", New South Wales.

Other material (6 ex.). **QLD:** 1 ♂, Queensland AUSTRALIA Challenger Exp / *Clivina regularis* Sl. det. K. Kult / COLLECTIO KAREL KULT COLL.A.DOSTAL,1989 (CDW); 1 ♀, Oakey Q. 25 1 1982 P. Alsopp / T 5436 (QD-PIB); 1 ♂, C 2189 (QDPIB); 1 ♀, Queensland Challenger Exp. 85-44 / *Clivina regularis* Sl. det. K. Kult (NHM); 2 ♂♂ (defect), New England (CBM, MMS).

Diagnosis. Rather small to medium sized, dark piceous to black species with wide and shallow, quadrangular clypeal excision, not sulcate, moderately densely punctate head, dark rufous middle and hind legs, slightly oblique lateral pronotal margin, impunctate and glabrous proepisternum, elongate, but not completely parallel-sided elytra, and short, obtusely triangular apex of the aedeagus that is slightly curved left.

Description

Measurements. Length: 9.2-11.9 mm; width: 2.65-3.3 mm. Ratios. Length/width of pronotum: 1.05-1.11; base/apex of pronotum: 1.22-1.27; width pronotum/head: 1.31-1.40; length/width of elytra: 1.93-2.02; length/width of protibia: ♂: 2.7-2.85, ♀: 2.35-2.45; length/width of metatibia: ♂: 5.7-5.8, ♀: 5.7-5.8.

Colour (Fig. 87). Unicolourous dark piceous to black. Middle and hind legs dark rufous, slightly paler than the anterior leg.

Head (Fig. 87). Eye fairly large, laterally moderately projected, orbit comparatively elongate, oblique-convex. Clypeus with rather shallow, wide, almost quadrangular excision, though the lateral margins of the excision being rather oblique. Labrum 7-setose. Clypeus not divided from frons; upper surface smooth, without transverse sulci, moderately densely but finely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 87). Rather elongate, slightly narrowed apicad, dorsally gently convex. Lateral margin straight and oblique, faintly concave in apical third. Apex distinctly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated in front of apical fifth. Basal groove fairly deep, elongate, linear, straight, impunctate, deepest posteriorly. Disk with or without some fine, transverse striae in middle, extremely finely punctate, without microreticulation, very glossy.

Elytra (Fig. 87). Moderately elongate, but not absolutely parallel-sided, slightly widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae deep, becoming slightly shallower towards apex, barely punctate. Intervals slightly convex, impunctate, without or with very weak transverse striae, without microreticulation, very glossy. Epipleura narrow, basal sulcus shallow.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, and almost without striae, remarkably glabrous, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2× as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia moderately narrow and elongate, in the male narrower than in the female. Longitudinal sulcus on upper surface distinct; lower surface with a row of 6-8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia fairly elongate, rather sparsely setose. Metatarsomere shorter than the following three tarsomeres.

Male genitalia (Fig. 23). Aedeagus wide, moderately elongate, very asymmetrically narrowed apicad; lower surface in basal half gently concave, then almost straight. Apical half of lower surface gently concave. Apex moderately elongate, slightly curved left, gently narrowed, at tip obtusely convex. Both parameres rather stout, the left one considerably stouter than the right one; both with rather short, narrow, aetose apical part.

Female gonocoxites (Fig. 60). Gonocoxites rather narrow but fairly short, little curved, with obtusely transverse apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, two stout setae at middle of the medio-dorsal surface, without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically with two shorter seta.

Variation. Some variation noted in body size and in relative length of prothorax.

Distribution. North-eastern NSW, south-eastern QLD.

Collecting circumstances. Not recorded.

elegans group

Diagnosis. Rather small to large species with shallow to moderately deep, more or less quadrangular clypeal excision; hind body almost always widened posteriad or oval shaped; clypeus 5- or more commonly 7-setose, but in some species the number of setae varies from 2–8. The aedeagus usually has an arrow-shaped, or club-shaped, or claw-shaped, or spatulate apex, except *C. robusta* Sloane, the aedeagus of which matches the aedeagi of the *procera* group. Several species possess shortened metathoracic wings and a short metepisternum.

This species group is less homogeneous in body shape and structure than the *procera* group, and is herein subdivided into subgroups of apparently more closely related species.

Distribution. 33 species and one subspecies. The majority is distributed in northern Australia.

elegans subgroup

Diagnosis. Rather large species with conical prothorax and elongate-oval elytra; clypeal excision wide and shallow; clypeus 5- or 7-setose; aedeagus with elongate apical stalk and small, club-shaped apex; in most species the metathoracic wings are reduced, Most of the 7 species occur in northern Australia, only one in south-western QLD.

The *Clivina elegans* complex

Three populations of quite similarly shaped and structured species with elongate, oviform elytra, more or less distinctly arrow-shaped apex of the aedeagus, and serrulate margin of one of the folds in the internal sac occur in the northern half of the Cape York Peninsula. Two of these already have received names as separate species. The third, unnamed population which occurs between the ranges of these species, is also intermediary in some characters. Therefore the question arises which taxonomic status should be attributed to the three populations, i.e., whether all three populations should be regarded separate species or subspecies of a single species. This is a matter of opinion, but for easier use, and because the characterization of subspecies is much more difficult than that of species, for the present I prefer to regard all three populations distinct species, being aware, however, that they are closely related. Perhaps application of molecular techniques may clarify the question in future.

Clivina elegans Putzeys

Figs 24, 61, 79, 88

Clivina elegans Putzeys, 1862: 44. – Putzeys 1866: 36; 1867: 179; Sloane 1896a: 231, 233; Sloane 1905a: 731; 1916: 605; Csiki 1927: 502; Moore et al. 1987: 70; Lorenz 2005: 142.

Examined types. Holotype: ♂, Austral. Somerset / C.E.By. / Soc. Ent. Belg. Coll. Putzeys / det Putzeys *Clivina elegans* Putz. / TYPE (red) (IRSNB).

Type locality. “Somerset”, North Queensland.

Other material (52 ex.). **QLD:** Lockerbie N.Cape York, Q. Jan.'58 Darlington (CBM, MCZ); Lockerbie, Cape York, N.Qld. 10.–15.VI.1969 G. B. Monteith UQIC Reg. #90497 (QMB); Lockerbie, N.Q. 7–14.Apr.1977 A. & M. Walford-Huggins / WALFORD-HUGGINS COLLECTION Carnegie Museum Accession 35338 / *Clivina elegans* Putz. det. B. P. Moore '86 (CMP); Lockerbie, Q. 3.iv.64 I.F.B.Common & M.S. Upton (ANIC); Lockerbie (N.Qld) 16.Xii.14 D.J.Rogers (QMB); 3km E Lockerbie, Cape York, N.Qld. 9–23 Mar 1987 G.B. Monteith rainforest pitfall traps (CBM, QMB); 3km E Lockerbie, Cape York, N.Qld. Jan.30–Feb.4, 1975 G.B. Monteith Rainforest Pitfall trap No. 1/3, 2/10 (QMB); Lockerbie Area, Cape York, N.Qld. 13–27 Apr., 1973 G.B. Monteith (QMB); Bamaga Cape York, N.Qld. 18–25 Mar 1987 G.B. Monteith (QMB); Bamaga Qld M. Golding / March'84 / Golding/Powell Collection donated 12 Feb 2002 (WAM); AUSTRALIA: CYP Bamaga.II.1994 G. A. Wood at light (DPIM); Prince of Wales Is., Torres Strait, N. Qld. 6–15.ii.1975 E. Cameron / Strand vegetation (QMB); Qld: 10°36.0'Sx142°18.2'E Horn Is. Quarry RF. 60m. 1–8Jan2008. open forest. G.Monteith & K.Aland. dung & fungus trap **15483, 15493** (QMB); Qld: 10°36.6'Sx142°17.7'E Horn Is. Airport. 60m. 1–3Apr2008. K.Aland. open forest. dung & mushroom pitfall. 10m **15954** (QMB); Thursday Is. NQ. 19.3.75 W.WALSH. / WALFORD-HUGGINS COLLECTION Carnegie Museum Accession 35338 / *Clivina procera* Putzeys [♀ det. by A.Walford-Huggins] / *Clivina elegans* Putz. det. M.Baehr'95 (CMP); Cape York Eigner (QMB); Cape York Queensland / Lea has not / *Clivina* Cape York (QMB); Murray (?) Australia / Collectio Karel Kult (CDW); Queensland Gehr. W. Müller Vermächtnis (SMTD). – **AUS:** Bunawang J.J.F. / *Clivina elegans* Putz. Id. by T. G. Sloane (ANIC).

Diagnosis. Rather large to large, black species with wide and rather shallow, quadrangular clypeal excision, glabrous, not sulcate head, usually 5-setose labrum, black legs, convexly oblique lateral pronotal margin, impunctate proepisternum, elongate, oviform elytra, finely punctate elytral striae, symmetric, obtusely arrow shaped apical part of the aedeagus, and strongly serrate margin of one fold in the internal sac.

Description

Measurements. Length: 11.8–17.5 mm; width: 2.9–4.7 mm. Ratios. Length/width of pronotum: 1.09–1.18; base/apex of pronotum: 1.36–1.42; width pronotum/head: 1.34–1.52; length/width of elytra: 2.02–2.27; length/width of protibia: ♂: 3.7–3.8, ♀: 3.4–3.5; length/width of metatibia: ♂: 7.2–7.4, ♀: 6.5–6.7.

Colour (Fig. 88). Unicolourous black. Legs black.

Head (Figs 79, 88). Eye moderately large, laterally projected, but orbit rather elongate, c. $\frac{1}{3}$ of length of eye, oblique-convex. Clypeus with wide and rather shallow, almost quadrangular excision, though the lateral margins of the excision markedly oblique. Labrum usually 5-setose, rarely 7-setose. Clypeus not or shallowly divided from frons; upper surface rather convex, glabrous, without any sulci, finely and sparsely punctate. Vertex with a shallow transverse sulcus. Surface without microreticulation, glossy.

Pronotum (Fig. 88). Elongate, considerably narrowed apicad, dorsally gently convex. Lateral margin oblique and convex. Apex slightly concave. Marginal channel narrow; median line impressed but shallow, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove shallow, elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, very sparsely and extremely finely punctate, with very faint, superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 88). Elongate, oval, widened towards middle, convex but on disk depressed. Basal angle little produced. Striation incomplete, 6th stria very shallow, 7th stria usually absent. Median striae deep, becoming slightly shallower towards apex, moderately finely punctate at least in basal half. Intervals slightly convex, impunctate, without or with very weak transverse striae, with fine though distinct, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Almost completely reduced.

Lower surface. Proepisternum impunctate, almost not striolate, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, c. 1.25× as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate, in the male slightly more than in the female. Longitudinal sulcus on upper surface barely visible; lower surface with a row of 3 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with two rows of few setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 24). Aedeagus large, length >3 mm; moderately wide, elongate, almost regularly narrowed apicad; lower surface in basal fourth concave, in middle almost straight to gently concave, in apical fourth concave again. Apical part very narrow, almost symmetric; apex short, wide, obtusely trigonal to arrow-shaped, tip rounded. Lower surface not or little concave. One of the folds in the internal sac strongly denticulate on the upper surface. Both parameres very elongate, the left one considerably stouter than the right one; both with elongate, very narrow, unisetose or asetose apical part; setae if present very short, situated right at tip.

Female gonocoxites (Fig. 61). Gonocoxites rather narrow but fairly short, little curved, with obtusely transverse apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, four setae at middle of the medio-dorsal surface, and a tiny nematiform seta near apex. Lateral plate basally with one elongate seta, apically with one or two shorter seta.

Variation. This is a very variable species, in body size, shape of prothorax and elytra, and distinctness of the punctuation of the elytral striae; the aedeagus, however, is very similar. Specimens from Horn Island (Torres Strait Islands) are large and compact, and they almost lack the punctuation of the striae. Specimens from Lockerbie near the tip of CYP usually are also large and rather compact, but the striae are distinctly and rather coarsely punctate. Most specimens from Bamaga, slightly more to the south, are rather small, with narrow prothorax and slender and elongate, or very elongate, elytra, and usually with coarse punctuation of the striae. Because some of these character states are somewhat mixed within the populations, no taxonomical subdivision of the species has been attempted.

Distribution. Tip of Cape York Peninsula and Torres Strait Islands, extreme northern QLD.

Collecting circumstances. Largely unrecorded. Single specimens were collected at light, in pitfall trap or “fungus traps”, in rain forest, open forest and strand vegetation. The species does not seem to be definitively hygrophilous.

Clivina interposita, spec. nov.

Figs 25, 89

Examined types. Holotype: ♂, 11.51S 142.38 QLD 12km SSE Heathlands 26Jan.–1.Mar.1992 P.Feehney FIT #2 / F.I.T. ANIC 1241 closed forest #2 (ANIC). – Paratypes: 2 ♂♂, 6 ♀♀, 11.51S 142.38 QLD 12km SSE Heathlands 26Jan.–1.Mar.1992 P.Feehney FIT #2 /

F.I.T. ANIC 1241 closed forest #2 (ANIC, CBM); 2 ♀♀, 11.51S 142.38 QLD 12km SSE Heathlands 2–22 Mar.1992 P.Feehney FIT #2 / F.I.T. ANIC 1241 closed forest #2 (ANIC); 3 ♂♂, 4 ♀♀, 11.51S 142.38 QLD 12km SSE Heathlands 15–26 Jan 1992 T.A.Weir, I.D.Naumann / F.I.T. ANIC 1221 closed forest #2 (ANIC, CBM); 1 ♀, 11.45S 142.35E Heathlands QLD Jan.–Feb.1993 J.Stuart pitfall traps / unburnt grassland (ANIC); 1 ♀, 11.45S 142.35E, Heathlands QLD 1–6 Apr 1993 by hand P. Zborowski (ANIC); 1 ♀, 11.37E 142.48E QLD 5 km WNW Captain Billy Landing 2 Apr 1993 at light monsoon forest P.Zborowski (ANIC); 2 ♂♂, 4 ♀♀, ABRS Area 2, 142°45'E, 11°40'S, Dividing Range, 15 km W. of Captain Billy Creek, Cape York Pen. N. Qld. 5–12.ii.1976 G.B.Monteith (CBM, QMB); 1 ♀, QLD: 13.8km S 3 ways to Bamaga & Heathlands; 18–22.III.1992; G. Cassis pitfall; rainforest / *Clivina* sp. det. B. P. Moore 1999 (AMS).

Etymology. The name refers to the intermediate geographical range and also the intermediate morphology between *C. elegans* and *C. kershawi*.

Diagnosis. Rather large, black species with wide and rather shallow, quadrangular clypeal excision, glabrous, sulcate head, usually 7-setose labrum, black legs, convexly oblique lateral pronotal margin, impunctate proepisternum, elongate, oviform elytra, punctate elytral striae, symmetric, obtusely arrow shaped apical part of the aedeagus, and faintly serrate margin of one fold in the internal sac.

Description

Measurements. Length: 11.7–13.2 mm; width: 3.3–3.6 mm. Ratios. Length/width of pronotum: 1.03–1.08; base/apex of pronotum: 1.43–1.45; width pronotum/head: 1.44–1.54; length/width of elytra: 1.94–2.02; length/width of protibia: ♂: 3.7–3.8, ♀: 3.3–3.5; length/width of metatibia: ♂: 7.1–7.5, ♀: 6.4–6.7.

Colour (Fig. 89). Unicolourous black. Legs black.

Head (Fig. 89). Eye moderately large, laterally projected, but orbit rather elongate, c. $\frac{1}{3}$ of length of eye, oblique-convex. Clypeus with wide and rather shallow, almost quadrangular excision, though the lateral margins of the excision markedly oblique. Labrum usually 7-setose, rarely 5-setose. Clypeus divided from frons by a deep sulcus; upper surface rather convex, glabrous, without any sulci, finely and sparsely punctate. Vertex with a shallow transverse sulcus. Surface without microreticulation, very glossy.

Pronotum (Fig. 89). Elongate, considerably narrowed apicad, dorsally gently convex. Lateral margin oblique and convex. Apex slightly concave. Marginal channel narrow; median line impressed but shallow, impunctate. Basal sulcus narrow. Anterior marginal

seta situated about at apical fourth. Basal groove shallow, elongate, linear, straight, impunctate. Disk with some fine, irregularly transverse striae in middle, very sparsely and extremely finely punctate, with very faint, superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 89). Rather elongate, oval, considerably narrowed towards base, convex but on disk depressed. Basal angle little produced. Striation complete, but 7th stria usually fine. Median striae deep, becoming slightly shallower towards apex, moderately coarsely punctate at least in basal half. Intervals slightly convex, impunctate, without or with very weak transverse striae, with very fine, slightly superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Almost completely reduced.

Lower surface. Proepisternum impunctate, with or without some fine dorso-ventral striae, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, $< 1.25 \times$ as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate, in the male slightly more than in the female. Longitudinal sulcus on upper surface barely visible; lower surface with a row of 3–4 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with two rows of few setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 25). Aedeagus comparatively small, length < 2.5 mm; moderately wide, elongate, almost regularly narrowed apicad; lower surface in basal fourth concave, in middle almost straight to gently concave, in apical fourth concave again. Apical part very narrow, almost symmetric; apex short, rather narrow, slightly knobbed, tip rounded. Lower surface not or little concave. One of the folds in the internal sac distinctly but faintly denticulate on the upper surface. Both parameres very elongate, the left one considerably stouter than the right one; both with elongate, very narrow, unisetose or asetose apical part; setae if present very short, situated right at tip.

Female gonocoxites. Very similar to those of *C. elegans* Putzeys.

Variation. Some variation noted in length of elytra, shape and relative length of pronotum, and degree of punctuation of the elytral striae.

Distribution. Northern Cape York Peninsula south of Jardine River, i.e. the area around Heathlands, northern QLD.

Collecting circumstances. Most specimens were collected in rain forest and monsoon forest, mainly in pitfall traps, one specimen in “unburnt grass-land”. The species does not seem to be definitively hygrophilous.

Clivina kershawi Sloane

Figs 26, 90

Clivina kershawi Sloane, 1916: 605. – Csiki 1927: 506; Moore et al. 1987: 72; Lorenz 2005: 143.

Examined types. Holotype: ♂, Coll. by F. G. Kershaw Nat. Mus. Victoria Claudie R. 11.13 Queensland / *Clivina kershawi* Sl. Id. by T. G. Sloane / Type / Type (red) / Del by T. G. Sloane Esq. Rae 12.6.16 / HOLOTYPE T-16912 *Clivina kershawi* Sloane (red) (NMV). – Paratypes: 1 ♂, same data / Cotype (green) / PARATYPE T-16913 *Clivina kershawi* Sloane (blue) (NMV); 1 (sex?, only hind body left, but genitalia destroyed), same data / Co-type / PARATYPE (blue) (ANIC).

Type locality. “Claudie River”, North Queensland.

Other material (5 ex.). QLD: 1 ♂, 2 ♀♀, Cape York Pen. Iron Range, NQ 14-21.Apr.1977 WALFORD-HUGGINS / WALFORD-HUGGINS COLLECTION Carnegie Museum Accession 35338 / *Clivina elegans* Putzeys [Series det. By A.Walford-Huggins] (CMP); 1 ♀, AUSTRALIA: Queensland N NW Cairns, Iron National Park 12°42.61'S, 143°17.53'E Cook Hut Camp env. 12-18.XI.2010, L. Hovorka (CBM); 1 ♂, Gordon's Mine Area, Iron Range, N.Qld. 12.-18.ii.1976 G.B.Monteith Rainforest (QMB).

Diagnosis. Rather large, black species with wide and rather shallow, quadrangular clypeal excision, glabrous, sulcate head, usually 7-setose labrum, black legs, convexly oblique lateral pronotal margin, impunctate proepisternum, elongate, moderately oviform elytra, little punctate elytral striae, symmetric, obtusely arrow shaped apical part of the aedeagus, and faintly serrate margin of one fold in the internal sac.

Description

Measurements. Length: 12.2-14.1 mm; width: 3.3-3.95 mm. Ratios. Length/width of pronotum: 1.06-1.13; base/apex of pronotum: 1.51-1.56; width pronotum/head: 1.40-1.47; length/width of elytra: 2.03-2.11; length/width of protibia: ♂: 3.7-3.8, ♀: 3.3-3.4; length/width of metatibia: ♂: 7.3-7.5, ♀: 6.5-6.6.

Colour (Fig. 90). Unicolourous black. Legs black.

Head (Fig. 90). Eye moderately large, laterally projected, but orbit rather elongate, c. 1/3 of length of eye, oblique-convex. Clypeus with wide and rather shallow, almost quadrangular excision, though the lateral margins of the excision markedly oblique.

Labrum usually 7-setose, rarely 5- or 6-setose. Clypeus divided from frons by a fairly deep sulcus; upper surface rather convex, glabrous, without any sulci, variously punctate. Vertex with a shallow transverse sulcus. Surface without microreticulation, very glossy.

Pronotum (Fig. 90). Elongate, considerably narrowed apicad, dorsally gently convex. Lateral margin oblique and convex. Apex slightly concave. Marginal channel narrow; median shallow, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal groove absent or barely indicated. Disk with some fine, irregularly transverse striae in middle, very sparsely and extremely finely punctate, with very faint, superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 90). Elongate, oval, but little narrowed towards base, convex but on disk depressed. Basal angle little produced. Striation complete, but 7th stria usually fine. Median striae deep, becoming slightly shallower towards apex, rather finely punctate at least in basal half. Intervals slightly convex, impunctate, without or with very weak transverse striae, with very fine, slightly superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Almost completely reduced.

Lower surface. Proepisternum impunctate, almost without striae, glabrous, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, <1.25 × as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate, in the male slightly more than in the female. Longitudinal sulcus on upper surface barely visible; lower surface with a row of 3 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with two rows of few setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 shorter than the following three tarsomeres.

Male genitalia (Fig. 26). Aedeagus moderately large, length 2.7-2.8 mm; moderately wide, elongate, almost regularly narrowed apicad; lower surface in basal fourth concave, in middle almost straight to gently concave, in apical fourth concave again. Apical part very narrow, almost symmetric; apex short, rather narrow, slightly knobbed, tip rounded. Lower surface not or little concave. One of the folds in the internal sac distinctly but faintly denticulate on the upper surface. Both parameres very elongate, the left one considerably stouter than the right one; both with elongate, very narrow, unisetose or asetose apical part; setae if present fairly elongate, situated right at tip.

Female gonocoxites. Very similar to those of *C. elegans* Putzeys.

Variation. Some variation noted in length of prothorax and elytra.

Distribution. Iron Range, central Cape York Peninsula, northern QLD.

Collecting circumstances. Little recorded; one specimen was collected in rain forest. The species does not seem to be definitively hygrophilous.

Clivina varisetata, spec. nov.

Figs 27, 91

Examined types. Holotype: ♂, Cairns / Lea has not / Cairns dist. J. A. Anderson / *Clivina* Cairns (QMT234904). – Paratype: 1 ♀, AUS15, QLD36, c.25 km ene. Bramwell Jct. Rdh., 115m, 11°56'21.9"S, 142°38'07.2"E, 10.5.2015, M.Baehr (CBM).

Etymology. The name refers to the variable number of elytral punctures and setae,

Diagnosis. Large, black species with wide and rather shallow, quadrangular clypeal excision, glabrous, sulcate head, 7-setose labrum, black legs, short prothorax with convexly oblique lateral margin, impunctate proepisternum, elongate, oviform elytra with 5–7 discal punctures, fairly impressed, finely punctate elytral striae, and symmetric, obtusely arrow shaped apical part of the aedeagus.

Description

Measurements. Length: 17.0–17.8 mm; width: 5.3–5.4 mm. Ratios. Length/width of pronotum: 0.99–1.01; base/apex of pronotum: 1.55–1.58; width pronotum/head: 1.55–1.57; length/width of elytra: 1.83–1.90; length/width of protibia: ♂: 5.0, ♀: 3.9; length/width of metatibia: ♂: 7.3, ♀: 6.7.

Colour (Fig. 91). Unicolourous black. Legs black.

Head (Fig. 91). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with wide and rather shallow, almost quadrangular excision, though the lateral margins of the excision markedly oblique. Labrum 7-setose. Clypeus divided from frons by a fairly deep sulcus; upper surface rather convex, irregularly impressed, sparsely and very finely punctate. Surface without microreticulation, very glossy.

Pronotum (Fig. 91). Short and wide, considerably narrowed apicad, dorsally rather convex. Lateral margin oblique and slightly convex. Apex concave. Marginal channel narrow; median line very shallow, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal

groove barely indicated. Disk with some fine, irregularly transverse striae in middle, apparently impunctate, with very faint, superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 91). Moderately elongate, oval, widest in middle, convex but on disk depressed. Basal angle little produced. Striation incomplete, 6th and 7th stria not or barely visible. three or four median striae at least in basal half impressed and punctate, becoming shallower towards apex. Intervals almost depressed, impunctate, without or with very weak transverse striae, with very fine, slightly superficial, isodiametric microreticulation, glossy. 3rd interval with 5–7 discal punctures. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Almost completely reduced.

Lower surface. Proepisternum impunctate, with or without some very fine dorso-ventral striae, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, <1.25 × as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate, in the holotype extremely narrow, perhaps due to some abrasion of the external teeth. Longitudinal sulcus on upper surface shallow but distinct; lower surface with a row of 3–5 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with two rows of rather few setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsus extremely elongate, metatarsomere 1 shorter than the following three tarsomeres.

Male genitalia (Fig. 27). Aedeagus moderately large, length 2.7–2.8 mm; narrow, elongate, slightly asymmetrically narrowed apicad; lower surface almost regularly concave. Apical part very narrow, almost symmetric; apex short, comparatively narrow, knobbed to slightly arrow-shaped, tip rounded. Lower surface barely concave. Both parameres elongate, the left one considerably stouter than the right one; both with short, narrow, unisetose apical part; setae very short, situated right at tip.

Female gonocoxites. Very similar to those of *C. elegans* Putzeys.

Variation. Some variation noted in distinctness of the elytral striae which are shallower in the holotype.

Distribution. Cape York Peninsula, northern QLD. The holotype is labelled “Cairns district” which does not automatically mean the immediate vicinity of Cairns, but at the time when it was written, it could just so mean Cape York Peninsula.

Collecting circumstances. The paratype was collected in a pitfall trap exposed near a muddy pit in a disturbed area in tropical woodland.

Clivina triseriata, spec. nov.

Figs 92, 135

Examined types. Holotype: ♀, Australia, NT, Malbinbandju Billabong, 13 km s. Jabiru, 2.-3.11.1984, M. Baehr (CBM).

Etymology. The name refers to the biseriata punctation of the elytra, i.e. the presence of series of setiferous punctures on 3rd, 5th, and 7th intervals.

Diagnosis. Large, elongate, black species with wide and shallow, quadrangular clypeal excision, glabrous, barely sulcate head, 7-setose labrum, black legs, trapezoidal prothorax with very oblique lateral margin, impunctate proepisternum, elongate, markedly oviform elytra, and presence of three series of numerous setiferous punctures on the elytra.

Description

Measurements. Length: 15.7 mm; width: 5.0 mm. Ratios. Length/width of pronotum: 0.98; base/apex of pronotum: 1.65; width pronotum/head: 1.62; length/width of elytra: 1.90; length/width of protibia: ♀: 3.8; length/width of metatibia: ♀: 6.6.

Colour (Fig. 92). Unicolourous black. Legs black.

Head (Fig. 92). Eye large, laterally well projected, orbit very short, oblique. Clypeus with wide and very shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose. Mandibles short. Clypeus not divided from frons; upper surface rather convex, sparsely, moderately coarsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 92). Moderately elongate, trapezoidal, remarkably narrowed apicad, dorsally rather convex. Lateral margin very oblique but almost straight. Apex gently concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical third. Basal groove deep, comparatively short, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, impunctate, with very fine but distinct, isodiametric microreticulation, moderately glossy.

Elytra (Fig. 92, 135). Soldered together. Elongate, narrow at base, oval shaped, convex but on disk depressed. Basal angle little produced. Striation almost complete, but 7th stria weak. Striae rather deep, apicad slightly shallower, almost impunctate. Intervals slightly convex, impunctate, without transverse striae, with fine, slightly superficial,

isodiametric microreticulation, rather glossy. Three scutellar punctures present on either side. 3rd stria with 14, 5th stria with 11-13, 7th stria with 13-15 small punctures. Epipleura narrow, basal sulcus slightly impressed and punctate.

Metathoracic wings. Much reduced.

Lower surface. Proepisternum impunctate, with some very fine dorso-ventral striae, in lower part also with faint, short, transverse striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum rather short, c. 1.25 × as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate. Longitudinal sulcus on upper surface only near apex distinct; lower surface transversely striolate, with a row of 7-8 stout setae along basal part of inner margin. Mesotibia elongate, dorsal rim barely crenulate, with two rows of many setae on the dorsal surface; subapical spur elongate. Metatibia very elongate, rather sparsely setose. Metatarsus very elongate, metatarsomere 1 shorter than the following three tarsomeres.

Male genitalia. Unknown.

Female gonocoxites. Very similar to those of *C. elegans* Putzeys.

Variation. Unknown.

Distribution. Kakadu NP, northern NT. Known only from type locality.

Collecting circumstances. The holotype was collected in a pitfall trap near the shore of a billabong.

Clivina inopinata, spec. nov.

Figs 28, 129

Examined types. Holotype: ♂, QLD: 18°09'Sx144°19'E Mount Surprise. 18-29 Jan 2005. A.Ewart. 450m. at light. 12187 (QMT234905).

Etymology. The latin name means "surprising" and refers to the type locality Mt. Surprise.

Diagnosis. Fairly large, black species with wide and rather shallow, quadrangular clypeal excision, glabrous, not sulcate head, 5-setose labrum, moderately elongate mandible, rufo-piceous legs, short, trapezoidal prothorax with convexly oblique lateral margin, impunctate proepisternum, oviform elytra, punctate elytral striae, and symmetric, spatulate apex of the aedeagus.

Description

Measurements. Length: 13.4 mm; width: 4.2 mm. Ratios. Length/width of pronotum: 1.02; base/

apex of pronotum: 1.62; width pronotum/head: 1.54; length/width of elytra: 1.90; length/width of protibia: ♂: 4.8; length/width of metatibia: ♂: 8.0.

Colour (Fig. 129). Unicolourous black. Legs rufo-piceous.

Head (Fig. 129). Eye large, laterally well projected, orbit very short, oblique. Clypeus with wide and rather shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 5-setose. Mandibles moderately elongate. Clypeus not divided from frons; upper surface rather convex, glabrous, rather sparsely and very finely punctate. Surface without microreticulation, very glossy.

Pronotum (Fig. 129). Rather short and wide, fairly trapezoidal, considerably narrowed apicad, dorsally rather convex. Lateral margin oblique and convex. Apex gently concave. Marginal channel narrow; median line faintly impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal groove very weak, linear. Disk with some fine, irregularly transverse striae in middle, apparently impunctate, with faint, superficial, isodiametric microreticulation, glossy.

Elytra. Moderately elongate, wide at base, not completely parallel sided, convex but on disk depressed. Basal angle little produced. Striation almost complete, but 7th stria only in basal half visible. Striae punctate, more coarsely in basal half. Intervals slightly convex, impunctate, without transverse striae, with fine, distinct, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus slightly impressed and punctate.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with some very fine dorso-ventral striae, in lower part also with faint, short, transverse striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum moderately elongate, slightly $< 2 \times$ as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate. Longitudinal sulcus on upper surface barely visible; lower surface with a row of 4 stout setae along basal part of inner margin. Mesotibia elongate, dorsal rim crenulate, with two rows of rather few setae on the dorsal surface; subapical spur elongate. Metatibia very elongate, rather sparsely setose. Metatarsus extremely elongate, metatarsomere 1 shorter than the following three tarsomeres.

Male genitalia (Fig. 28). Aedeagus rather wide, elongate, asymmetrically narrowed apicad; lower surface in basal third concave, then convex, towards apex deeply convex and almost vertically curved down. Apex short, rather wide, spatulate and at lower surface denticulate, tip rounded. Lower surface

in apical half with two sharp ridges, surface between the ridges concave. Both parameres elongate, the left one considerably stouter than the right one; both with elongate, very narrow, unisetose apical part; setae rather short, situated right at tip.

Female gonocoxites. Unknown.

Variation. Unknown.

Distribution. North QLD, west of Atherton Tableland. Known only from type locality.

Collecting circumstances. The holotype was sampled at light.

Clivina profundestriolata, spec. nov.

Figs 62, 93

Examined types. Holotype: ♀, Barcaldine, C.Qld. 10 Feb. 1981 M.S. & B.J.Moulds / *Clivina* nr. *ovipennis* Sl. Set. B.P.Moore'81 (ANIC). – Paratype: 1 ♀, AUSTRALIA. sw Queensland 12km W of Windorah; 110m 28–31.i.2011; sanddunes 25°21'S, 142°32'E; St.Jakl lgt. (CBM).

Etymology. The name refers to the strong and deep striae on the pronotum.

Diagnosis. Fairly large, black species with wide but rather deep, quadrangular clypeal excision, glabrous, barely sulcate head, 5-setose labrum, short mandible, rufo-piceous legs, short prothorax with convexly oblique lateral margin, impunctate proepisternum, slightly oviform elytra, and deep, punctate elytral striae.

Description

Measurements. Length: 12.9–13.8 mm; width: 4.4–4.6 mm. Ratios. Length/width of pronotum: 0.92–0.94; base/apex of pronotum: 1.62–1.66; width pronotum/head: 1.65–1.67; length/width of elytra: 1.75–1.80; length/width of protibia: ♀: 3.8; length/width of metatibia: ♀: 7.65–7.7.

Colour (Fig. 93). Unicolourous black. Middle and hind legs rufous to piceous, slightly darker than the anterior leg.

Head (Fig. 93). Eye large, laterally well projected, orbit very short, oblique. Clypeus with wide but rather deep, almost quadrangular excision. Labrum 5-setose. Mandibles rather short. Clypeus not divided from frons; upper surface rather convex, moderately densely, finely punctate. Surface without microreticulation, very glossy.

Pronotum (Fig. 93). Short and wide, considerably narrowed apicad, dorsally rather depressed. Lateral margin oblique and convex. Apex gently concave. Marginal channel narrow; median line

faintly impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal groove weak, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, very sparsely and extremely finely punctate, with extremely faint and superficial traces of isodiametric microreticulation, very glossy.

Elytra (Fig. 93). Rather short, wide at base, slightly oval, convex but on disk depressed. Basal angle little produced. Striation almost complete, but 7th stria only in basal half visible. Striae in basal half deep, apical increasingly shallower, punctate, more coarsely in basal half. Intervals slightly convex, impunctate, with or without fine transverse striae, with fine, slightly superficial, isodiametric microreticulation, rather glossy. Epipleura narrow, basal sulcus slightly impressed and punctate.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with some very fine dorso-ventral striae, in lower part also with faint, short, transverse striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum moderately elongate, slightly <2× as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate. Longitudinal sulcus on upper surface barely visible; lower surface with a row of 5–6 stout setae along basal part of inner margin. Mesotibia elongate, dorsal rim crenulate, with two rows of rather few setae on the dorsal surface; subapical spur elongate. Metatibia very elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 shorter than the following three tarsomeres.

Male genitalia. Unknown.

Female gonocoxites (Fig. 62). Gonocoxites rather narrow and moderately elongate, little curved, with rather acute apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, two longer and one shorter setae at middle of the medio-dorsal surface, and a tiny nematiform seta near apex. Lateral plate basally with one elongate seta, apically with two or three shorter seta.

Variation. Little variation noted.

Distribution. Central and south-western Queensland.

Collecting circumstances. Largely unrecorded; the paratype was sampled in “sanddunes”, most probably at light.

gracilipes subgroup

Diagnosis. Moderately large species with conical prothorax and short-oval elytra; clypeal excision wide and shallow; clypeus 5- or 7-setose; aedeagus with small, club-shaped apex: metathoracic wings fully developed. The most striking character is the narrow and elongate mandible. Two species and one subspecies occur in northern Australia.

Clivina gracilipes Sloane

Clivina gracilipes Sloane, 1896a: 247.

Note. This characteristically shaped species occurs in two populations which are slightly differently shaped and occupy widely separated areas: the nominate form northern Australia from north-western QLD to the Kimberleys in extreme northern WA, the other population the northern half of Cape York Peninsula. In view of their different body shape and the disjunct distribution, and because only females are so far known of the population from north Queensland, they are provisionally described as subspecies.

Clivina gracilipes gracilipes Sloane

Figs 29, 63, 94

Clivina gracilipes Sloane, 1896a: 247. – Sloane 1896a: 228, 231; Csiki 1927: 505; Moore et al. 1987: 71; Lorenz 2005: 143.

Examined types. Holotype: ♀, (defect, head and abdomen lacking), Gulf C.F. 24/4/93 1040 / *C. gracilipes*, Sl Burketown Dis^{ct}. (C.F.) / HOLOTYPE *Clivina gracilipes* Sl. PJD (ANIC).

Type locality. “Burketown District”, North Queensland.

Other material (112 ex.). NT: 100ml. E. of Kununurra, W.A., light trap, 27.3.66, J.A. Mahon (ANIC, CBM); 12.51S 132.47E 10km N by E of Mt. Cahill, 21.v.73, E. G. Matthews (ANIC); Keep Creek, 29 Mar. 1984 at light K. & E. Carnaby (ANIC); Howard Springs 12 May 1981 J.T. Doyen coll. (ANIC); Katherine, XII.57 leg. H. Demarz (ZSM); Mataranka 1 Mar 1967 M.S. Upton (ANIC); October Ck. on Borroloola Rd 7.iv.1976 T. Weir. (ANIC); 12.48S 132.42E Nourlangie Creek 8km N of Mt. Cahill, 21.v.73, at light, E.G. Matthews (ANIC); 12.48S 132.42E Nourlangie Creek 8km N of Mt. Cahill, 21.v.73, T. Weir & T. Angeles / 12370 (NTD); 12.49S 132.44E Nourlangie Creek 6km NE. of Mt. Cahill, 2.v.73, T. Weir & T. Angeles / 12396 (NTD); 12.51S 132.47E 8km E by N of Mt. Cahill, 22.v.73, T. Weir & T. Angeles / 12334 (NTD); 12.20S 131.19E Nabarlek Dam, 15km S by W. of Nimbuwah Rock, 2.vi.73, at light, E.G. Matthews (ANIC); 12.06S

133.04E Cooper Creek, 19km E by SW. of Mt.Borradaile, 5.vi.73, M.S.Upton (ANIC); 12.06S 133.04E Cooper Creek, 19km E by SW. of Mt.Borradaile, 31.vi.73, at light, E.G.Matthews (ANIC); 12.06S 133.04E Cooper Ck., 19km E by SW. of Mt.Borradaile, 5.vi.73, T.Weir & A.Allwood / 12300 (NTD); 12.06S 133.04E Cooper Ck., 19km E by SW. of Mt.Borradaile, 5.vi.73, T.Weir & A.Allwood / 12300, 12414 (NTD); 12.06S 133.04E Cooper Ck., 19km E by SW. of Mt.Borradaile, 31.vi.73, T.Weir & N.Forrester / 12467 (NTD); 12.57S 132.32E Jim Jim Ck. 19km WSW. of Mt.Cahill, 19.v.73, T.Weir & T.Angelas / 11284, 11291-4 (NTD); 12.54S 132.32E Jim Jim Airstrip 1.v.1973, T.Weir & T.Angelas / 11289-90 (NTD); 12.36S 132.52E Magela Ck. 1km NNW. of Mudginberry H.S., 25.v.1973, T.Weir & N.Forrester (ANIC, NTD 12230); 12.25S 132.58E 1km N. of Cahills Crossing (East Alligator R.) 29.v.1973 T.Weir & N.Forrester / 11243 (NTD); 12.31S 132.54E 9km N by E of Mudginberry H.S., 28.v.1973 T.Weir & N.Forrester / 11233, 35 (NTD); Milner Lagoon nr. Dunmara 16.41S 133.25E M.V.Light 2 Apr 1981 M.Malipatil & J.Hawkins (NTD); Kakadu NP c. 1km S of Arnhem Hwy on Pine Creek Rd. M.V.Light 25-30 Mar 1980 M.B.Malipatil (NTD); Junction of Arnhem Hwy & Oenpelli Road M.V.Light 26-27 Jun 1980 M.B.Malipatil (NTD); (am Stuart Hwy.) ca. 25 km N Elliott (Bauplatz) 20.IV.2011 LF; H=274m S17°23'59.9" E133°27'12.2" leg. Michael Langer (CBM); Kakadu 10-14.I.2004 Lgt. R. Novák (CKZ); Kakadu N.P. 22-25/3/93 Cooinda at light/al lume Leg. L. Toledano / *Clivina gracilipes* Sl. det.M.Baehr'96 (CBM, CTV, CGT); Bachelor 26-27/3/93 at light/al lume Leg. L. Toledano *Clivina gracilipes* Sl. det.M.Baehr'96 (CBM); 70km SW of Mataranka, 14-15.1.09, 15°19'S 132°50'E 190m, Sv. Bílý leg. (CBM, NMPC); 190m alt. 70km SW of Mataranka 15°19'S 132°50'E 14-16.I.2009 St Jakl (CBM, CBP, CJP); 190m alt. 70km SW of Mataranka 15°19'S 132°50'E 22-23. XII.2008 L.Hovorka lgt. (CBM, CBP); Coll. C. Lecourt 01/2000 Darwin (CBP); Litchfield NP Adelaide River; 29.V.2000 leg.M.Langer (CBP); AUS13, NT25, c.12 km wnw. Elliott, 204m, 17°37'06"S, 133°28'31"E, 17.4.2013, M.Baehr (CBM); AUS13, NT23, 5 km s. Larrimah, Birdum Crk., 184m, 15°32'02"S, 133°22'33"E, 16.4.2013, M.Baehr (CBM); 17m alt, Kakadu NP, Ubirr env, 12°25'S 132°57'E 25-26.iv.2009, St. Jakl lgt. (CBM, CJP); 15.45S 129.06E GPS Keep River Xing 1 km ENE Jarmarm Keep River Nat.Pk. 25-27 May 2001 T.Weir, P.Bouchard / at light open forest (ANIC); 12.22S 133.01E 6km SW by S of Oenpelli, 30.v.1973 T.Weir & N.Forrester / 11250 (NTD); East Alligator R. 10 ml.s.W.Oenpelli Misson, 22.vi.1971 A.Allwood & T.Angelas / *Clivina* sp. / 11229 (NTD); King R. Coll by W.Melliman 24. 12. 16 / *Clivina gracilipes* Sl. Det. by T.G.Sloane 3. 17 / COL-5324-5 (NMV); King R. Coll by W.Melliman 24. 12. 16 / *Clivina gracilipes* Sl. Det. by T.G.Sloane (Legs darker than type) (ANIC); Oenpelli (unreadable) P.Cahill leg 3. 12. 19 / Conspecific with *Clivina gracilipes* S. Id by T.G. Sloane / COL-5323 (NMV); Kakadu N.P. 22-25/3/93 Leg Leech / *Clivina gracilipes* Sl. det.M.Baehr'96 (CBM); Kakadu N.P. 22-25/3/93 Leg Leech / Cooinda / *Clivina* sp. Det. P. M. Giachino 1995 (CGT); 318m alt. 14°53'S (wrong latitude, must be 18°53'S!), 132°01'E, Banka

env., road to Tennant Creek, 12-14.i.2009, St. Jakl lgt. (CJP); 40km W of Katherine, 63m, 13°15'S, 130°44'E 28.11.2008, Sv. Bílý leg. (CBM, NMPC); 3/06 KAKADU NP MUIRELLA, 10.06.2006 40M S12°51'15" E132°45'16" LIGHT LG BERGER-DOSTAL (CDW); Katherine, at light, 6-10.ii.68 E. Matthews (ANIC). – WA: 15-16.iv.2009, Hidden Valley NP, Kununurra 15°46S 128°44E 64 m alt. St. Jakl lgt. (CJP); 12m alt. Home Valley Station 14°42'S 127°51'E; 15-18.iv.2009 nr. Pentecost river; S.Jakl lgt. (CBP); Fitzroy Crossing, 125:35E, 18:10S. 17 Mar., 23 Mar 1984, at light K. & E. Carnaby (ANIC); Wyndham 20.iv.1975 K. & E. Carnaby (ANIC); Kimberley, 3m, Wyndham env., 15°31'S 128°10'E, 20-21.iv.2009, St. Jakl lgt. (CJP).

Diagnosis. Medium sized to fairly large, black species with wide and rather shallow, quadrangular clypeal excision, glabrous, not sulcate head, usually 5-setose labrum, narrow and elongate mandible, rufous to dark piceous legs, short, trapezoidal prothorax with convexly oblique lateral margin, impunctate proepisternum, oviform elytra, deep, punctate median elytral striae, and symmetric, knobbed apex of the aedeagus.

Description

Measurements. Length: 9.5-13.4 mm; width: 3.15-4.5 mm. Ratios. Length/width of pronotum: 0.94-0.96; base/apex of pronotum: 1.51-1.61; width pronotum/head: 1.42-1.59; length/width of elytra: 1.76-1.80; length/width of protibia: ♂: 4.7-4.9, ♀: 3.5-3.7; length/width of metatibia: ♂: 8.0-8.3, ♀: 7.5-7.6.

Colour (Fig. 94). Unicolourous black. Legs rufous to dark piceous, in latter case tibiae usually slightly paler than femora.

Head (Fig. 94). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with wide and rather shallow, almost quadrangular excision, though the lateral margins of the excision markedly oblique. Labrum most commonly 5-setose, rarely 3- or 7-setose. Mandibles narrow and very elongate, regularly curved, with very acute tip. Clypeus not divided from frons; upper surface rather convex, glabrous, rather sparsely and finely punctate. Surface without microreticulation, very glossy.

Pronotum (Fig. 94). Short and wide, markedly trapezoidal, considerably narrowed apical, dorsally rather convex. Lateral margin oblique and slightly convex. Apex almost straight. Marginal channel narrow; median line slightly impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal groove very weak, linear, very elongate. Disk with some fine, irregularly transverse striae in middle, apparently impunctate, with very faint, superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 94). Rather short, wide at base, oval, widest in middle, convex but on disk depressed.

Basal angle little produced. Striation incomplete, 1st–6th striae in basal half distinct, 7th stria not or barely visible, from second third outer striae succeeding, therefore the apical third laterally estriate. Striae near base distinctly punctate, the four or five median striae punctate at least in basal half. Intervals slightly convex, impunctate, without transverse striae, with fine, distinct, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus more or less impressed.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with some very fine dorso-ventral striae, in lower part also with faint, short, transverse striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum rather short, c. 1.5 × as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate, less so in females. Longitudinal sulcus on upper surface absent; lower surface with a row of 3–5 stout setae along basal part of inner margin. Mesotibia elongate, dorsal rim barely crenulate, with two rows of rather few setae on the dorsal surface; subapical spur short. Metatibia very elongate, rather sparsely setose. Metatarsus extremely elongate, metatarsomere 1 shorter than the following three tarsomeres.

Male genitalia (Fig. 29). Aedeagus rather wide, elongate, regularly narrowed apicad; lower surface in basal third concave, in apical part straight, only near apex slightly concave. Apical part almost symmetrically triangular; apex short, straight, narrow, gently knobbed, tip slightly turned down, obtusely rounded. Lower surface in apical half with two sharp ridges, surface between the ridges concave. Both parameres very elongate, the left one considerably stouter than the right one; both with elongate, very narrow, uni- or bisetose apical part; setae very short, situated right at tip.

Female gonocoxites (Fig. 63). Gonocoxites moderately stout and rather short, little curved, with obtuse apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, three setae at middle of the medio-dorsal surface, and a tiny nematiform seta near apex. Lateral plate basally with one elongate seta, apically with three shorter seta.

Variation. Considerable variation noted in body size, also in shape of the pronotum and coarseness of the punctuation of the elytral striae.

Distribution. North-western QLD, northern NT, northeastern Kimberleys, WA.

Collecting circumstances. Several specimens were collected at light, usually near rivers, larger creeks, and lagoons

Clivina gracilipes longior, subspec. nov.

Examined types. Holotype: ♀, Iron Range, Cape York Pen., N.Qld. 26–31 May, 1971 G. B. Monteith / UQIC Reg. #90544 (QMT234906). – Paratypes: 1 ♀, 6903 N.Qu / ? *gracilipes* Sl. immature / I.6865 *Clivina gracilipes* Sl.? immature Queensland (SAMA); 1 ♀, AUSTRALIEN VICTORIA Cap York. / Sammlung H. HESSE SMNS 1995 (SMNS); 2 ♀♀, Stewart R., Q. Jan.–Feb. 1927 Hale & Tindale (SAMA No. 25-033728, 25-033653); 1 ♀, Iron Range Cape York, Q. Jan.'58 Darlington (MCZ); 1 ♀, Silver Plains Cape York, Q. May–June '58 Darlington / ♀ / *gracilipes* Sl. det.'59 Darlington / *Clivina gracilipes* Sl. (MCZ); 1 ♂, Silver Plains Cape York, Q. May–June '58 Darlington / ♂ / return / *gracilipes* (MCZ); 1 ♀, Silver Plains Cape York, Q. Jan.'58 Darlington (CBM); 1 ♂, found dead in dry sand place / Coen, C.York V. 9 '82, Q. / Australia, Harvard Ex., Darlington / *ovalipennis* (Il *ovipennis*) Sl. det. 59 Darlington / *Clivina ovalipennis* Sl. (MCZ).

Etymology. The name refers to the longer elytra as compared with *C. g. gracilipes* Sloane, 1896.

Diagnosis. Distinguished from the nominate subspecies by significantly longer elytra and longer elytral striae.

Description

Measurements. Length: 11.4–12.9 mm; width: 3.7–4.15 mm. Ratios. Length/width of pronotum: 0.92–0.96; base/apex of pronotum: 1.47–1.54; width pronotum/head: 1.43–1.53; length/width of elytra: 1.89–1.91; length/width of protibia: ♀: 3.5–3.6; length/width of metatibia: ♀: 7.5–7.6.

Colour. As in the nominate subspecies.

Head. As in the nominate subspecies.

Pronotum. Much as in the nominate subspecies, but usually less narrowed apicad.

Elytra. Much as in the nominate subspecies, but elytra decidedly longer and the striae longer, the median ones almost reaching the apex.

Metathoracic wings. Fully developed.

Lower surface. As in the nominate subspecies.

Legs. As in the nominate subspecies.

Male genitalia. Unknown.

Female gonocoxites. As in the nominate subspecies.

Variation. Some variation noted in shape of the pronotum and degree of the punctuation of the elytral striae.

Distribution. Northern half of Cape York Peninsula, north QLD.

Collecting circumstances. Not recorded.

Clivina marginata (Putzeys)

Figs 30, 64, 95

Scolyptus marginatus Putzeys, 1868: 8. – Sloane 1896a: 228, 246; Csiki 1927: 493; Moore et al. 1987: 72; Lorenz 2005: 143.

Examined types. Lectotype (by present designation): ♂, Rockhampton / Rockhampton (Australia) Coll. Castelnau / *Scolyptus marginatus* Putz. ♂ (red) / SYNTYPUS *Scolyptus marginatus* Putzeys, 1868 (red) (MCSN). – Paralectotypes: 1 ♀, Rockh (red) / Rockhampton (Australia) Coll. Castelnau / *Scolyptus marginatus* P. / SYNTYPUS *Scolyptus marginatus* Putzeys, 1868 (red) (MCSN); 1 ♂, Rockh (red) / *Scolyptus marginatus* P. / Soc. Ent. Belg. Coll. Putzeys / Type (red) / Syntype (red) (IRSNB).

Type locality. “Rockhampton”, Queensland.

Other material (65 ex.). **QLD:** Rockhampton PJD Q. (ANIC); Rockhampton. Q 20.2.43 E.Vallis (?) E.Sutton (QMB); Rockhampton Mar'58, Q.Darlingtons / *marginata* Pz. det.'69 Darlington topotype / *Clivina marginata* Putz. (MCZ); Mackay 2. 99 / *Clivina marginata* Putz. (ANIC); Mackay 1. 00 / C. French's Coll. 5.11.08 / *Clivina marginata* Putz. Queensland / COL-13774 (NMV); Townsville / B.Malkin 1.1945 / *Clivina* sp. (long tarsi) det. 48 Darlington (USNM); 17°54'28"S/141°08'45"E, Rd. to Broadwater @ Blackbull Ck. 7m. 31.xii.2007, K. Will AUS2007.xii.31, 5 1866 (EMEB); Iron Range Cape York Jan.'58 Darlingtons (ANIC, MCZ); 7851 N.Qd. / 493 *Clivina marginatus* Putz.Townsville Q / I.6864 *Clivina marginata* Putz Queensland (SAMA); 473 / 8279 *Clivina marginata* Putz. Townsville. Q (SAMA); *marginata* Putz. immature / Townsville Feb. 09 F. P. Dodd / 6629 *Clivina marginata* Ptz (immature) Queensland (SAMA); v.Townsville, Q. Mar.58 Darlingtons (MCZ); Pt. Denison / *Clivina marginata*. Putz. Port Denison (MMS); Dawson R. / *Scolyptus marginatus*. Putz. Dawson River (MMS); Cooktown / C. *marginata* Putz. det. K. Kult 1948 (CDW); 65 km SW Mt.Garnet 18 Mar 1974 A & M. Walford-Huggins / Walford-Huggins Collection Carnegie Museum / *Clivina obscuripes* (Black.) [Series det. by A.Walford-Huggins] / *Clivina marginata* Putz. det.M.Baehr'95 (CMP); Walker Ck., 25 ml. S.E. of Karumba, 28.v.1972 G.B. & S.R.Monteith / UQIC Reg.'90390 (QMB); Cairns NQ. 1/59. GB. / *Clivina marginata* Putz. det. B. P. Moore'69. / *marginata* Putz. 3170 / J.G. Brooks Bequest, 1976 (ANIC); 14 Mile Ck., N. of Normanton, N.Qld. 15 Mar. 1985 at light K. & E. Carnaby (ANIC). – NT: Coll. G. Lecourt 01/00 Katherine (CBP, CKZ); Katherine XII.57 leg.H.Demarz / *Clivina marginata* Putz. det.M.Baehr'95 (CBM, ZSM); m 50 Victoria River Road House 20-21/24-25.III.1996 P.M. Giachino leg. (CGT); 100ml. E.of Kununurra,

W.A., light trap, 27.3.66, J.A.Mahon (ANIC); Kakadu N.P. 22-25/3/93 Cooida at light/al lume Leg. L. Toledano (CTV); Kakadu N.P. Cooida 25-26/12/96 at light/al lume Leg. L.Toledano, R.Olivieri (CBM, CTV); Kakadu N.P. 22-25/3/93 Leg. Leech (CSM); 19.24S 135.58E 15 km SW of Alroy Downs H.S. 10.IV.1975 Key & Balderson (ANIC); 190m alt. 70km SW of Mataranka 15°19'S 132°50'E 14-16.I.2009 St Jakl (CJP); Stuart Hwy c.25 km N Elliott, 274m S17°23'59.9"E 133°27'12.2" 20.iv.2011, Michael Langer (CBM); 10 km S of Banka Banka 18°52'S, 134°04'E, 318 m, 20.12.2008, Sv. Bilý leg. (NMPC); Victoria Hwy Lily Creek, 150 km E Kununurra, 50 m, 12.8. 1999 Hendrich leg, coll. Loc. 3/103 (CBM); 12.31S 132.54E 9km N by E of Mudginberry H.S., 28.v.1973 T.Weir & N.Forrester / 11249 (NTD). – WA: Wyndham 20.iv.1975 K. & E. Carnaby (ANIC); Fitzroy River, at light 16 March 1980 K. & E. Carnaby (ANIC); Fitzroy River 16 Apr 1976 Ex. Carnaby Coll. (ANIC); Fitzroy Crossing 125:35E, 18:10S 17 Mar. 1984, at light K. & E. Carnaby (ANIC); Willare Bridge on Fitzroy River. 20 Feb. 1985, at light K. & E. Carnaby (ANIC); S15.64975 E128.71519 light trap in plowed field FWI. Kununurra, 25.iii.2005 C.Y.Norwood / Agriculture (Dept.) Western Australia 122168 (WADAK). – AUS: B. Mus. Godeffroy, No. 8279 (ANIC); Agriculture (Dept.) Western Australia 117923 (WADAK); Wyandotte 17- 9- 46 / S.R.E. Brock Collection (ANIC).

Diagnosis. Medium sized to fairly large, black species with wide pale margin of the elytra, shallow, quadrangular clypeal excision, glabrous, not sulcate head, 7-setose labrum, narrow and elongate mandible, yellow legs, short, trapezoidal prothorax with convexly oblique lateral margin, impunctate propiternum, oviform elytra, deep, finely punctate median elytral striae, and symmetric, knobbed apex of the aedeagus.

Description

Measurements. Length: 10.2–14.5 mm; width: 3.3–4.6 mm. Ratios. Length/width of pronotum: 0.89–0.97; base/apex of pronotum: 1.48–1.58; width pronotum/head: 1.43–1.47; length/width of elytra: 1.82–1.88; length/width of protibia: ♂: 5.3–5.6, ♀: 4.1–4.3; length/width of metatibia: ♂: 8.8–9.0, ♀: 7.4–7.7.

Colour (Fig. 95). Black, but lateral margin of the elytra, from 6th interval, yellow to red. Legs yellow to pale red.

Head (Fig. 95). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with wide and rather shallow, almost quadrangular excision, though the lateral margins of the excision markedly oblique. Labrum 7-setose. Mandibles narrow and elongate, regularly curved, with acute tip. Clypeus not divided from frons; upper surface rather convex, rather densely, finely punctate, with very fine, rather superficial microreticulation, moderately glossy.

Pronotum (Fig. 95). Short and wide, markedly trapezoidal, considerably narrowed apicad, dorsally rather convex. Lateral margin oblique and slightly convex. Apex slightly concave. Marginal channel narrow; median line slightly impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal groove distinct, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, apparently impunctate, with fine but distinct, isodiametric microreticulation, moderately glossy.

Elytra (Fig. 95). Moderately elongate, wide at base, oval, widest in middle, convex but on disk depressed. Basal angle little produced. Striation incomplete, 1st–6th striae in basal half distinct, 7th stria not or barely visible, from second third on outer striae increasingly faded, therefore the apical third laterally estriate. Striae near base distinctly punctate, the four or five median striae punctate at least in basal half. Intervals slightly convex, impunctate, without transverse striae, with fine, distinct, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus more or less impressed.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with some very fine dorso-ventral striae, in lower part also with faint, short, transverse striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum rather short, c. 1.5 × as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate, less so in females. Longitudinal sulcus on upper surface absent; lower surface with a row of 4–5 stout setae along basal part of inner margin. Mesotibia elongate, dorsal rim barely crenulate, with two rows of rather few setae on the dorsal surface; subapical spur rather short. Metatibia very elongate, rather sparsely setose. Metatarsus extremely elongate, metatarsomere 1 shorter than the following three tarsomeres.

Male genitalia (Fig. 30). Aedeagus moderately wide, elongate, regularly narrowed apicad; lower surface in basal third concave, in apical part straight, towards apex curved down. Apical part almost symmetrically triangular; apex short, straight, fairly wide, knobbed to obtusely triangularly arrow-shaped, tip obtusely triangular. Lower surface in apical half concave. Both parameres very elongate, the left one considerably stouter than the right one; both with elongate, very narrow, bisetose or even trisetose apical part; setae comparatively elongate, situated right at tip or one seta situated on the lower surface slightly removed from tip.

Female gonocoxites (Fig. 64). Gonocoxites narrow and elongate, with slightly obtuse apex; with one more or less elongate, rather stout seta basally

at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, three setae at middle of the medio-dorsal surface, and a tiny nematiform seta near apex. Lateral plate basally with one elongate seta, apically with one to three shorter seta.

Variation. Reasonable variation is noted in body size, shape of pronotum, and pilosity of parameres which may bear two setae at apex, or one at apex and another removed from the apex at the lower surface.

One male from Rockhampton has a rather aberrant apex of the aedeagus: it is straight but not bent down as usual and as in the holotype from Rockhampton, and it is slightly sinuate when seen from laterally. This aedeagus is regarded an individual variation.

Distribution. North-eastern and northern QLD, northern NT, Kimberleys in northern WA.

Collecting circumstances. Several specimens were collected at light, usually near rivers, larger creeks, and lagoons.

oblonga subgroup

Diagnosis. Medium sized to large species with slightly conical prothorax and moderately oval elytra; clypeal excision wide and shallow; clypeus 7-setose; orbit large, oblique, eye comparatively little protruded; apex of aedeagus not arrow- or club-shaped; metathoracic wings reduced, elytra soldered together. Two species distributed in south-eastern QLD and eastern NSW. This group seems to be intermediary between the *procera* and *elegans* groups.

Clivina oblonga (Putzeys)

Figs 31, 65, 96

Scolyptus oblongus Putzeys, 1873: 10. – Blackburn 1890: 1249; Sloane 1896a: 227, 233, 247; 1905a: 731; Csiki 1927: 502; Moore et al. 1987: 73; Lorenz 2005: 143.
Scolyptus abbreviatus Putzeys, 1873: 11. – Blackburn 1890: 1249; Sloane 1896a: 227, 231, 235, 238; 1905a: 733; 1916: 606; Csiki 1927: 496; Moore et al. 1987: 73; Lorenz 2005: 143.

Examined types. Lectotype of *oblonga* (by present designation): ♂, *Scol.* n. sp. Sidney (Dhn) / *oblongus*. P. / Type (red) / Soc. Ent. Belg. Coll. Putzeys / Syntype (red) / det Putzeys *Scolyptus oblongus* Putz. (IRSNB). – Paralectotype: 1 ♂ (probable), same data (IRSNB). – Lectotype of *abbreviata* (by present designation): ♂, 43 / C. Dhn Queensland Wide Bay. / *abbreviatus*. P. / Type (red) / Soc. Ent. Belg. Coll. Putzeys / Syntype (red) / det Putzeys *Scolyptus abbreviatus* Putz. (IRSNB).

Type localities. Of *oblonga*: "Sydney", New South Wales. – Of *abbreviata*: "Wide Bay", South Queensland.

Other material (17 ex.). **QLD**: Noosa Head lnd 8.ii. 59 L.S.Dillon / *Clivina abbreviata* Putz. det B.P.Moore'69 / *Clivina onlonga* Putz. comp. w. types B.P.Moore'84 (ANIC); Noosa Nat. Park 2.9.1956 J. Balderson (ANIC); Wide Bay / 4268 *Clivina abbreviata* Putz. Queensland (SAMA); *abbreviata* Putz.! / Wide Bai *Clivina* / Compared with T Y P E K. Kult 1946 / Collectio Karel Kult (CDW); Wide Bay / K12756 / *C. oblonga* (AMS); Wide Bay / Coll. Castelnau / *Scolyptus oblongus* Ptz. t. Putzeys 1913 (MCSM); K12756 / *Clivina abbreviata* Putz. Id. by T. G. Sloane (AMS); Wide Bay / Coll. Castelnau (MCSN); Wide Bay / Coll. Castelnau / Com¹⁶ a Putz. e (unreadable) (MCSN); 93595 / Masters / Nov. Holl. Queensl^d (NHM); Queens-land Wide Bay (ZMHB); Bu... (unreadable) ? River Spencer / *S. abbreviatus* Putz. (unreadable) 27/7/92 (ANIC). – **AUS**: *abbreviata* SL / Collectio Karel Kult (CDW); Collectio Karel Kult (CBM).

Diagnosis. Medium sized to fairly large, black species with wide and shallow, quadrangular clypeal excision, barely sulcate head, 7-setose labrum, rufopiceous legs, prothorax with slightly oblique lateral margin, impunctate proepisternum, fairly elongate, oviform elytra, deep, impunctate elytral striae, and spatulate apex of the aedeagus.

Description

Measurements. Length: 10.7–14.1 mm; width: 3.1–4.05 mm. Ratios. Length/width of pronotum: 0.99–1.01; base/apex of pronotum: 1.31–1.35; width pronotum/head: 1.40–1.45; length/width of elytra: 1.91–1.96; length/width of protibia: ♂: 3.1–3.3, ♀: 3.1–3.2; length/width of metatibia: ♂: 6.0–6.1, ♀: 5.6–5.8.

Colour (Fig. 96). Unicolourous black. Legs rufopiceous.

Head (Fig. 96). Eye fairly large, laterally well projected, orbit rather elongate, c. 1/3 of length of eye, regularly oblique. Clypeus with wide and very shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose. Mandibles short. Clypeus divided from frons by a shallow sulcus; upper surface rather convex, sparsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 96). Moderately elongate, wide at apex, slightly narrowed apicad, dorsally gently convex. Lateral margin slightly oblique but almost straight. Apex gently concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal groove shallow, elongate, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, sparsely and very finely punctate, with very fine but distinct, isodiametric microreticulation, moderately glossy.

Elytra (Fig. 96). Soldered together. Rather elongate, rather narrow at base, oval shaped, convex but on disk slightly depressed. Basal angle little produced. Striation complete, but 7th stria weak. Striae deep, apicad barely shallower, impunctate. Intervals slightly convex, impunctate, without transverse striae, with fine, distinct, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus shallow, irregularly punctate.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral striae, in lower part also with fine, short, transverse striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, c. 1.25 × as long as wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate. Longitudinal sulcus on upper surface deep; lower surface with a row of 6 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of several setae on the dorsal surface; subapical spur very elongate. Metatibia elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 31). Aedeagus rather wide, fairly elongate, slightly asymmetrically narrowed apicad; lower surface in basal fourth concave, in middle straight, apex slightly curved down. The very apex rather wide, slightly spatulate, straight, tip obtusely transverse. Lateral margins of lower surface gently ridge-like, surface between slightly concave. Both parameres very elongate, the left one considerably stouter than the right one; both with elongate, very narrow, uni- or bisetose apical part; setae moderately short, situated right at tip, or, if a second seta is present, this is situated on the lower surface slightly removed from the apex.

Female gonocoxites (Fig. 65). Gonocoxites fairly narrow but rather short, little curved, with obtusely transverse apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, three setae at middle of the medio-dorsal surface, without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically with three to four shorter seta.

Variation. Some variation noted in body size and in shape of the pronotum.

Distribution. Eastern NSW, south-eastern QLD. Of this species, only old records are available.

Collecting circumstances. Not recorded.

Clivina robusta Sloane

Figs 32, 66, 130

Clivina robusta Sloane, 1905a: 731. – Csiki 1927: 510; Moore et al. 1987: 76; Lorenz 2005: 144.

Ceratoglossa foveiceps Macleay, 1863 (non *Clivina foveiceps* Putzeys, 1846). – Putzeys 1866: 33; Blackburn 1890: 1249; Sloane 1896a: 233, 235; 1905a: 731; Csiki 1927: 502; Moore et al. 1987: 76; Lorenz 2005: 144.

Clivina macleayana, **nom. nov.** for the preoccupied name *C. foveiceps* (Macleay, 1863).

Examined types. Lectotype of *robusta* (**by present designation**): ♂, Gosford 10.02. HJC / 571 *Clivina elegans*, Putz ? / HOLOTYPE *Clivina robusta* Sl. PJD (ANIC). – Paralectotypes: 2♂♂, 1♀, Gosford Carter / *Clivina robusta* Sl. / PARATYPE (blue) (ANIC-MMS). – Lectotype of *foveiceps* (**by present designation**): ♀ (abdomen destroyed), N. S. Wales / *Clivina foveiceps*, Macl. Richmond R. (ANIC-MMS).

Type localities. Of *robusta*: “Gosford”, New South Wales. – Of *foveiceps*: “Richmond River”, New South Wales.

Note. Two additional specimens are labelled “SYNTYPE / *Clivina foveiceps*, Macl.” and “SYNTYPE”. However, they do not belong to *C. foveifrons*, i.e. *C. robusta*, but to *C. procera* Putzeys.

Other material (127 ex.). **VIC:** Swan Hill C. Oke / *Clivina oblonga* Putz. Id. by T. G. Sloane / COL-5273 (NMV); Austral Melbour / *Clivina oblonga* Putz. det. K. Kult (NHM); Australie Victoria / *Cl. elegans* Putz. / *C. oblonga* Putz. det. K. Kult 1948 / Collectio Karel Kult (CDW); AUSTRALIEN VĚTĚŘA Cape York / Sammlung H. Hesse SMNS 1995 (SMNS). – **NSW:** 6136 Ourimbah / *oblonga*, Putz. / *elegans*, Putz. (SAMA); *Clivina elegans* Putz Ourimbah N.S.W. / I.6862 *Clivina elegans* Putz N. S. Wales (SAMA); *Clivina elegans* Putz Ourimbah N.S.W. / COL-18904 (NMV); Ourimbah *Clivina elegans* Putz. Id. by T. G. Sloane / T93788 / F.E.Wilson Collection / COL-5276 (NMV); Ourimbah J.G.S. 27.11.04 (ANIC); 511 / Ourimbah J.G.S. *Clivina elegans* Putz. Id. by T. G. Sloane (QMB); Ourimbah (SAMA 25-033406, 033610); Ourimbah N.S.W. 6-10-09 C. Gibbons. / *Clivina elegans* / *Clivina procera* Putz. Det. B.P.Moore 1999 (AMS K 147955-6); Ourimbah 17.3.1963 / *Clivina procera* Putz. Det. B.P.Moore 1999 (AMS K147954); Ourimbah Sydney district J.J.W. Sep.1903 Ex misc. Coleoptera 24 Coleoptera-Australia; Walker (OUM); Ourimbah Sydney district J.J.W. Oct.1903 / Ex J. J. Walker bequest 1939 (OUM); *Clivina elegans* Putzeys (Ourimbah) (Wadap 5193); Ourimbah 12.XI.1903 / W. W. Froggatt Collection (ANIC); Ourimbah J. Armstrong (MCZ); Gosford / *Clivina elegans* Putz. (Gosford) (MMS); Gosford, NSW UQIC Reg. #90760-1 (QMB); Gosford Carter / UQIC Reg. #90363 / *Clivina procera* Gosford (QMB); Gosford Carter / *Clivina elegans* Putz. (ANIC); Gosford Carter / UQIC Reg. #90363 / *Clivina robusta* Sl. HJC det. / *Clivina robusta* Sloane / COL 18905 (NMV); Gosford 10.02 HJC / 494 ♀ *Clivina oblonga* Putz. / Ex misc. Coleoptera 24

Coleoptera-Australia; Walker (OUM); Gosford Carter / *Clivina robusta* Sl. (AMS K 149370); Gosford Carter / *elegans* Putz. det. K. Kult (NHM); Gosford Carter (WADAP 5194); *Clivina elegans* Putz. v. *robusta* Sl. (Gosford) / Pres. by HW Cox Sydney 14.2.18 / COL-5283 (NMV); Gosford Carter / *Clivina robusta* Sl / Collectio Karel Kult (CDW); Gosford N.S.W. H. W. Cox / Pres. by HW Cox Sydney 14.2.18 / COL-5278 (NMV); Austr. Gosford / *elegans* Putz. 47 det. K. Kult / Collectio Karel Kult (CDW); Woy Woy 9.38. C.D. / F.E. Wilson Collection / COL-5275 (NMV); Woy Woy NSW. Sept. 1908 C. Deane / COL-5272 (NMV); Woy Woy 30.8.1975 / *Clivina procera* Putz. Det. B.P.Moore 1999 (AMS K 147963); Woy Woy 9.08 C.D. / UQIC Reg. #90753 (QMB); Nora Head, Woy Woy, N.S.W. 25th November, 1984 J.Balderson (ANIC); Hunt. Riv. / C. French's Coll. 5.11.08. / 917 / *Clivina elegans* Putz. Id. by T. G. Sloane / Det. by T.G. Sloane Esq Rec 12.6.16 / COL-5279 (NMV); North Sydney / H. J. Carter Coll. (NMV); K 17711 / North Sydney 5-04 HJC (AMS); Gosford 9.03 HJC / 511 *Clivina elegans* Putz. / COL-5282 (NMV); New ? (unreadable) N. Sydney G. E. Bryant 13.X.08 / *elegans* Putz. Exchange with British Museum / *Clivina elegans* Putz. (MCZ); Gosford 19.02 HJC / H. J. Carter Coll. / COL-14025 (NMV); Gosford N.S.W. H.W.Cox / Pres by H. W. Cox 14.2.14 / COL 14088 (NMV); Gosford N.S.W. H.W.Cox / *Clivina robusta* Sl N. S. Wales / E. T. Smith Collection / COL 14416-7 (NMV); Gosford N.S.W. H.W.Cox / *Clivina elegans* Putz. var. *obtusata* Sln. / *C. oblonga* Putz. (= *robusta* Sl.) det. K. Kult 1948 (DEI); Gosford N.S.W. H.W.Cox (DEI); N.W.Cox (Wyong) / Coll. Hacker (DEI); Wyong Sydney district N.S.W. J.J.W. Aug.1903 / 6192 ♂ *Clivina oblonga* Putz. / Ex misc. Coleoptera 24 Coleoptera-Australia; Walker (OUM); Wyong (ANIC); Gosford N.S.W. H.W.Cox / *Clivina robusta* Sln. / *C. oblonga* Putz. (= *robusta* Sl.) det. K. Kult 1948 / Coll. Kraatz (DEI); Sydney / *C. elegans* Putz. / E. W. Ferguson Collection / *Clivina elegans* Putz. (ANIC); K. W. Ferguson Collection / Ourimbah / *C. elegans* Putz. (ANIC); Palm Beach HJC. 1.16 (ANIC); Toronto J.W. Filmer leg. (ZSM); Toronto N.S.W. / *Clivina elegans* Putz. Id. by T. G. Sloane (WADAP 5192); Wyee 9:9:1978 D. A. Doolan (AMS K 255336-7); Wyee 9:6:1973 D. A. Doolan / D. A. Doolan Collection / *Clivina procera* Putz. Det. B.P.Moore 1999 (AMS); Wyee 7:7:1973 D. A. Doolan / D. A. Doolan Collection / *Clivina procera* Putz. Det. B.P.Moore 1999 (AMS); Wyee 9:9:1978 D. A. Doolan / D. A. Doolan Collection / *Clivina procera* Putz. Det. B.P.Moore 1999 (AMS K 147961); Newport N.Sydney G. E. Bryant 13.X.08 / G. Bryant Coll. 1919-147 / *C. elegans* Putz. det. K. Kult 1948 / Collectio Karel Kult (CDW); Newport N.Sydney G. E. Bryant 13.X.08 / G. Bryant Coll. 1919-147 / *elegans* / Collectio Karel Kult (CDW); N.S.Wales / *Scolyptus oblongus* Putz. Burrawang (MMS); (unreadable) N. S. Wales IV 31 Dr. K. K. Spence / K. K. Spence Collection / *Clivina* sp. det. B. P. Moore 1999 (AMS); Narrabeen 8.02 (Wadap 5195); Brisbane Water NP, - 2km E of Mt. Kariiong, 33°27'50"S, 151°17'04"E, 1-15 Dec 1999 M.Gray, G.Millidge & H.Smith, pitfalls HS NTH SYD. -6 (AMS K 266326); Brisbane Water NP, GIRRAKOOL-PATONGA Walking Track, 33°31'41"S, 151°16'55"E, 1-15 Dec 1999

M.Gray, G.Millidge & H.Smith, pitfalls HS NTH SYD. -5 (AMS K 266324); Brisbane Water NP, 2km E of Mt. Kariong, 33°27'50"S, 151°17'04"E, 1-15 Dec 1999 M.Gray, G.Millidge & H.Smith, pitfalls HS NTH SYD. -6 (AMS K 266325-6); Wangi Point Lake Macquarie Nov.1976 K.R.Norris (ANIC); 33.12 S 151.36 E Geebung Camp, Lake Dunmoorah, 15 Nov. 1983 D.Rentz, M.Harvey Stop 47 (ANIC); Newcastle HJC 11.33 / *Clivina elegans* Putz. (ANIC); Newcastle HJC 11.33 / *Clivina robusta* Sl. (ANIC); Morisset N.S.W. J. Sedlacek / COL 14016 (NMV); Morisset N.S.W. J. Sedlacek lgt. / *Clivina* sp. / *Clivina ovipennis* Sl. det. Balkenohl X.97 (CBP); Dorrigo N.S.W. Jan. 1931 C. Oke / COL 13672-4 (NMV); Coffs Harbour N.S.W H. W. Cox / Pres. by HW Cox Sydney 14.2.18 / COL-5281 (NMV); Newcastle IX.1957 / *Clivina* sp. (USNM); Woy-Woy 9.08 CD. / *Clivina robusta* Sl. Woy Woy N.S.W. (QMB); Location. Nords Wharf Altitude 6' Date April 68 Collector. G. Purnell / ANIC Univ. of New England Coll. Donated 1983 (ANIC); *Clivina procera* NSW / UQIC Reg. # 90751 (QMB); New South Wales UQIC Reg. # 90757 (QMB); N. S. Wales / W. W. Ferguson Collection (ANIC); N. S. Wales / W. W. Ferguson Collection / *Clivina procera* Putz. N. S. Wales (ANIC); N.S.Wales / Coll. Franklin Müller / *Clivina procera* / det. *Scolyptus procerus* (DEI). – AUS: H. J. Carter Coll. / COL-5274 (NMV); H. J. Carter Coll. / *Scolyptus oblongus* (Putz) / COL-5271 (NMV); Morisset (?) Oct-Mar 37 E.Stoyles / E. Sutton Collection (QMB); Nara... (unreadable) 20/10/89 (ANIC); K 17711 (AMS); Na 7/96 / *C. oblonga* Putz. / Ex misc. Coleoptera 24 Coleoptera-Australia; Walker (OUM); N.W.Austr. / *Clivina oblonga* Putz. (ANIC-MMS); 193 / *C. oblonga* Putz. = *C. foveiceps* Maccl. comp. with type / *Clivina elegans* Putz. Id. by T. G. Sloane (ANIC); *Clivina obscuripes* / COL 5398 (NMV); N. S. Wales / 2238 / *biplagiata* / *Clivina elegans* var. *obtusata* N.S.Wales / COL 5277 (NMV); 2232 / Bowring 63-47* (NHM); *Clivina oblonga* Putz. det. K. Kult / Collectio Karel Kult (CDW).

Notes. Sloane (1905a) misidentified *Clivina elegans* Putzeys, 1862, and synonymized *Clivina oblonga* (Putzeys, 1873) and *Clivina foveiceps* (Macleay, 1863) under that name.

Two of the three syntypes of *C. foveiceps* do not belong to that species but to *C. procera* Putzeys.

Clivina foveiceps (Macleay, 1863) is a junior homonym of *C. foveiceps* Putzeys, 1846 and therefore is herein renamed *Clivina macleayana*, nom. nov.

Diagnosis. Medium sized to rather large, black species with wide and shallow, quadrangular clypeal excision, barely sulcate head, 7-setose labrum, black legs, apicad narrowed, depressed prothorax with oblique-convex lateral margin, impunctate proepisternum, fairly elongate, oviform elytra, deep, impunctate elytral striae, and narrow, remarkably sinuate apex of the aedeagus.

Description

Measurements. Length: 12.5–17.2 mm; width: 3.3–4.6 mm. Ratios. Length/width of pronotum: 1.02–1.08; base/apex of pronotum: 1.27–1.32; width pronotum/head: 1.36–1.42; length/width of elytra: 1.86–2.0; length/width of protibia: ♂: 4.0–4.4, ♀: 3.2–3.3; length/width of metatibia: ♂: 6.5–6.7, ♀: 5.5–5.7.

Colour (Fig. 130). Unicolourous black. Legs dark piceous to black.

Head (Fig. 130). Eye comparatively small, laterally moderately projected, orbit elongate, almost as long as the eye, regularly oblique. Clypeus with wide and shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose. Mandibles short. Clypeus divided from frons by a fairly deep sulcus; upper surface rather convex, not sulcate, rather densely but finely punctate. Neck with a distinct transverse sulcus. Surface with or without traces of isodiametric microreticulation, rather glossy.

Pronotum (Fig. 130). Moderately elongate, slightly narrowed apicad, dorsally rather depressed. Lateral margin oblique but little convex. Apex gently concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated slightly in front of apical fourth. Basal groove very shallow or barely perceptible, elongate, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, sparsely, finely punctate, with very fine but distinct, isodiametric microreticulation, moderately glossy.

Elytra. Soldered together. Rather elongate, rather narrow at base, oval shaped, convex but on disk slightly depressed. Basal angle little produced. Striation complete, striae deep, apicad barely shallower, impunctate to finely punctate in basal half. Intervals convex, impunctate, without transverse striae, with fine, distinct, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus shallow, irregularly punctate.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with fine dorso-ventral striae, in lower part also with fine, short, transverse striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short and very small, little longer than wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, less so in females. Longitudinal sulcus on upper weak or absent; lower surface with a row of 5–6 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of several setae on the dorsal surface; subapical spur very elongate. Metatibia elongate, rather sparsely setose.

Metatarsus rather elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 32). Aedeagus rather wide, elongate, in apical third remarkably sinuate; lower surface gently concave, but near apex slightly bisinuate. Apical part narrow, sinuate, tip curved left, slightly obtuse. Both parameres rather elongate, large and stout, the left one considerably stouter than the right one; both with fairly elongate, narrow, aetose apical part.

Female gonocoxites (Fig. 66). Gonocoxites narrow and elongate, with slightly obtuse apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1 and one additional seta in middle of gonocoxite 2, four setae at middle of the medio-dorsal surface, and usually a tiny nematiform seta near apex in some specimens, however, only the pit is present. Lateral plate basally with one elongate seta, apically with three to four shorter seta.

Variation. Considerable variation noted in body size, also in relative length of elytra, shape of prothorax, and degree of elytral striation.

Distribution. Eastern VIC, eastern NSW. The records from Cape York and "NW.Austr" certainly are erroneous.

Collecting circumstances. Little recorded. Single specimens were sampled at light and in pitfall traps.

obliquicollis subgroup

Diagnosis. Medium sized with moderately conical, laterally slightly convex prothorax but elongate, almost parallel-sided elytra; clypeal excision rather wide and shallow; clypeus 7-setose; eye large, protruded; apex of aedeagus arrow- or club-shaped; metathoracal wings complete.

The five species occur in northern and central Australia. In the shape of the elytra this group matches the *procera* group.

Clivina obliquicollis Sloane

Figs 33, 97

Clivina obliquicollis Sloane, 1905a: 732. – Sloane 1916: 606; Csiki 1927: 508; Moore et al. 1987: 73; Lorenz 2005: 143.

Examined types. Lectotype (by present designation): ♂, *Clivina obliquicollis*, Sl. Carnot Bay N.W.A. / HOLOTYPE *Clivina obliquicollis* Sl PJD (ANIC).

Type locality. "Carnot Bay", northwestern Australia.

Note. Moore et al. (1987) noted the above specimen as the holotype. Actually it is a syntype, because in the description (Sloane 1905, p. 733) an additional female is explicitly noted. But apparently this specimen is lost.

Other material (4 ex.). NT: 1 ♂, Pine Creek District N. Territory / *procera* (MCZ). – AUS: 1 ♂ (defect), ex. J. J. Walker bequest 1939 / Ex Misc. Coleoptera 21 Coleoptera-Australia; Walker (OUM); 2 ♂♂ (defect) (ANIC, CBM).

Diagnosis. Medium sized, black species with wide and shallow, quadrangular clypeal excision, slightly sulcate, moderately densely punctate head, rufous middle and hind legs, rather conical prothorax, impunctate and very glabrous proepisternum, elongate but not absolutely parallel-sided elytra, finely punctate elytral striae, and symmetric, arrow-shaped apex of the aedeagus.

Description

Measurements. Length: 11.4–12.5 mm; width: 3.35–3.7 mm. Ratios. Length/width of pronotum: 1.0–1.02; base/apex of pronotum: 1.28–1.34; width pronotum/head: 1.39–1.45; length/width of elytra: 1.95–1.97; length/width of protibia: ♂: 3.9–4.1; length/width of metatibia: ♂: 7.4–7.5.

Colour (Fig. 97). Unicolourous black. Middle and hind legs rufous, paler than the piceous anterior leg.

Head (Fig. 97). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with rather shallow, wide, almost quadrangular excision, though the lateral margins of the excision being rather oblique. Labrum 7-setose. Clypeus divided from frons by a deep sulcus; frons anteriorly with some faint transverse sulci, moderately densely but inconspicuously punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 97). Moderately elongate, narrowed apicad, dorsally gently convex. Lateral margin straight to slightly convex, and oblique, faintly concave in apical third. Apex slightly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove shallow, elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, extremely finely punctate, with very fine, superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 97). Moderately elongate, not absolutely parallel-sided, slightly widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae deep, becoming slightly shallower

towards apex, punctate at least in basal two thirds. Intervals slightly convex, finely and sparsely punctate, without or with weak transverse striae, with very faint, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus indistinct, shallowly punctate.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, and almost without striae, remarkably glabrous, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum moderately elongate, c. 2× as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate, in the male more than in the female. Longitudinal sulcus on upper surface shallow; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 33). Aedeagus rather wide, moderately elongate, asymmetrically narrowed apicad; lower only near base concave, then straight, towards apex slightly curved down. Apical half of lower surface slightly concave. Apical part very asymmetric, deeply concave at the left side; apex wide, arrow shaped, and denticulate on the lower surface; arrow symmetrically situated, tip obtusely triangular. Both parameres elongate, the left one stouter than the right one; both with short, wide, uni- or bisetose apical part; setae rather elongate, situated right at tip; but left paramere with an additional seta at the lower surface near apex.

Female gonocoxites. Unknown.

Variation. Little variation noted in the punctuation of the elytral striae.

Distribution. Largely unrecorded, the holotype collected in north-western WA.

Collecting circumstances. Not recorded.

Clivina bankae, spec. nov.

Figs 34, 67, 131

Examined types. Holotype: ♂, AUSTRALIA NT 318m alt. 14°53'S (wrong longitude, must be 18°53'S!), 132°01'E, Banka Banka env., road to Tennant Creek, 12–14.i.2009, St. Jakl lgt. (NTD). – Paratypes: 3 ♂♂, 10 ♀♀, same data (CBM, CBP, CJP); 1 ♂, AUSTRALIA NT; 190m alt. 70km SW of Mataranka 15°19'S 132°50'E 14–16.I.2009 St Jakl (CBM); 2 ♂♂, AUSTRALIA NT; 190m alt. 70km SW of Mataranka 15°19'S 132°50'E 22–23.XII.2008 L.Hovorka

lgt. (CBP); 1 ♀, AUSTRALIA NT 10 km S of Banka Banka. 18°52'S, 132°04'E, 316 m, 12–13.I.2009, Sv. Bílý leg. (CBM); 1 ♀, Ti-Tree N.T. 30/12/1982 D.P.Carne At Light (ANIC); 1 ♀, 18.59S 134.12 E NT South Attack Ck 16 Mar. 1983 I.Archibald & D.Percival (NTD); 1 ♀, NT, 23km S of Tennant Creek 24 Feb. 1982 G.R. Brown at head light (NTD); 1 ♀, NT Three Ways N of Tennant Ck. 17 March 1983 I.Archibald & D.Percival (CBM).

Etymology. The name refers to the locality of the holotype, Banka Banka in central NT.

Diagnosis. Rather large to large, black species with rather shallow, quadrangular clypeal excision, sulcate, densely punctate head, red femora on all legs, convexly oblique lateral pronotal margin, impunctate proepisternum, elongate, almost parallel-sided elytra, finely punctate elytral striae, and asymmetric apical part of the aedeagus with large, club-shaped tip.

Description

Measurements. Length: 11.6–14.9 mm; width: 3.3–4.5 mm. Ratios. Length/width of pronotum: 0.93–1.0; base/apex of pronotum: 1.37–1.43; width pronotum/head: 1.40–1.50; length/width of elytra: 2.06–2.11; length/width of protibia: ♂: 3.0–3.1, ♀: 2.9–3.0; length/width of metatibia: ♂: 6.8–6.9, ♀: 6.5–6.9.

Colour (Fig. 131). Unicolourous black. Femora of all legs rufous, tibiae darker.

Head (Fig. 131). Eye large, laterally markedly projected, orbit very short, oblique. Clypeus with wide and rather shallow, almost quadrangular excision. Labrum 7-setose. Clypeus divided from frons by a deep sulcus; upper surface with several transverse sulci, densely and rather coarsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 131). Rather short, considerably narrowed apicad, dorsally gently convex. Lateral margin oblique and convex. Apex slightly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated slightly behind apical fifth. Basal groove shallow, elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, more or less densely punctate, with very faint, superficial, isodiametric microreticulation, glossy.

Elytra. Elongate, almost parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae deep, becoming slightly shallower towards apex, very finely punctate at least in basal half. Intervals slightly convex, very sparsely punctate, without or with very weak transverse striae, with very faint, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus fairly distinct, punctate.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, with some dorso-ventral and more or less distinct, short transversal striae, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.25 × as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male slightly more than in the female. Longitudinal sulcus on upper surface distinct; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 34). Aedeagus rather wide, fairly elongate, narrowed apically; lower surface gently concave. Apical part asymmetrically narrowed; apex short, markedly club-shaped and hooked at the lower surface; at tip convex. Internal sac in apical third with three large, denticulate and rather sclerotized folds. Both parameres very elongate, the left one considerably stouter than the narrower right one; both with elongate, very narrow, uni- or bisetose apical part; setae short, situated right at tip, or on the right paramere in some specimens one seta inserted at apex, the other at the lower surface near apex.

Female gonocoxites (Fig. 67). Gonocoxites very narrow and elongate, little curved, with rather acute apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, three setae at middle of the medio-dorsal surface, and a tiny nematiform seta near apex. Lateral plate basally with one elongate seta, apically with two to three shorter setae.

Variation. Some variation noted in body size, depth of clypeal excision, and density of head punctation.

Distribution. Central NT.

Collecting circumstances. Most specimens were collected at light, those from Banka Banka at the bank of a small river.

Clivina incurvicollis, spec. nov.

Figs 35, 68, 98

Examined types. Holotype: ♂, Australia, WA, PHYE08 7.5 km E Warrawagine Hs 20°51'49"S, 120°45'55"E 3.7.2005–23.5.2006 CALM PBS01247 (WAM). –Paratypes: 1 ♂, same data (WAM); 1 ♂, 3 ♀♀, Australia, WA, OYW09 6 km NE Warrambo Cr. on North West Coastal Hwy.

21°41'21"S, 115°50'35"E 14.5.–29.8.2006 CALM PBS01232 (WAM); 1 ♂, Australia, WA, OYW02 29.5 km ESE Peedamulla Hs 21°57'00"S, 115°53'15"E 28.9.2005–13.5.2006 CALM PBS01244 (WAM); 1 ♂, Australia, WA, MBW07 15 km NE Wodjina 21°03'49"S, 118°45'39"E 23.9.2005–15.5.2006 CALM PBS01241 (WAM); 2 ♀♀, Australia, WA, MBW10 13 km SSE Wodjina 21°16'47"S, 118°41'56"E 23.9.2005–15.5.2006 CALM PBS01243 (WAM); 1 ♀, Australia, WA, MBE08 4 km SE The Island Hill 21°20'25"S, 119°21'36"E 12.10.2005–7.5.2006 CALM PBS01240 (WAM); 1 ♀, Australia, WA, BORS13 20 km ESE Wheelara Hill 23°24'46"S, 120°19'00"E 4.9.2005–23.5.2006 CALM PBS01239 (WAM); 1 ♀, Australia, WA, TCMBE06 9.5 km ESE Mt. Bruce 22°38'10"S, 118°13'32"E 1.9.2005–28.5.2006 CALM PBS01253 (WAM); 1 ♂, Australia, WA, OYW02 29.5 km ESE Peedamulla Hs 21°57'00"S, 115°53'15"E 28.9.2005–13.5.2006 CALM PBS01244 (WAM); 1 ♀, Australia, WA, DRC08. s. Roeburne, 20.51.14.5S 118.05.40.2E 12.11.2003–1.5.2004 N. Gutthrie (WAM); 2 ♀♀, Australia, WA, PW05. s. Fortescue, 21.03.18.8S 116.07.56.6E 23.11.2003–8.5.2004 N. Gutthrie (WAM); 2 ♂♂, Fortescue R. Hamersley Range N. W. A.: W. D. Dodd / *Clivina obliquicollis* Sl. mss. Id. by T. G. Sloane (SAMA); 1 ♂, 20 km NE Mt. Clere Stn. W. Aust. 25.x.1986 L. A. Dyson K. T. Richards (Wadap 5243); 1 ♀, 23 km, WSW. of Barradale, WA 30 Mar. 1971 Upton & Mitchell (ANIC); 1 ♀, 93 COLEOPTERA R2 008 NHC AL / Barrow Island Western Australia S. Callan 17.v.2005 20°47'38"S 115°26'34"E (WADAP 140255); 1 ♂, Skull Springs 5-I-1971 WA J. Wombey (ANIC); 1 ♂, WA Cape Range 22°09'55"S, 113°59'25"E 25 June 1989 cave C-83 R. Wood CR # 4218 (WAM no. 39186); 1 ♂, WA Cape Range 22°09'S, 113°59' 28 July 1985 E. Pryor / BES: 1446 4m outside entrance to cave C-118 wet pitfall on surface (WAM no. 39187); 1 ♀, WA Cape Range 22°01'00"S, 114°02'37"E 30 July 1989 cave C-263 R.D. Brooks CR # 3443 / *Clivina* sp. Det. B. P. Moore 1990 (WAM no. 39185); 1 ♂, Wiluna 27-391 (WAM no. 38933); 1 ♂, 7.5 km SE of BANJIWARN HS (27°42'S 121°37'E) W.AUST. 22-28 FEB. 1980 T.F. HOUSTON ET AL 316-10 / AT LIGHT AT NIGHT / Western Australian Museum, Dept. of Biological Survey Site BW Camp (WAM no. 39077); 1 ♂, Ashburton River WA. / Nat. Mus. Victoria C. French's Coll. 6.I.08 (NMV COL-5395); 1 ♀, Ashburton River WA. / After careful consideration I consider only a robust spec. of *C. obliquicollis* Sl. 4.5.07 (ANIC); 1 ♂, 2 ♀♀ (partly defect), Asburton River, WA (ANIC); 1 ♂, 1 ♀, Murchison District, W.A. / Nat. Mus. Victoria C. French's Coll. 6.I.08 (NMV COL-5394/7); 1 ♀, Nickol Bay N.W. Australia DuBoulay 1869 (OUM); 1 ♀, Nulubi H'stead WA. B. Clarke / Golding/Powell Collection donated 12 Feb 2002 (WAM no. 39191); 1 ♀, 8 km. SWbyW of Cane R.HS., WA. 22.07S 115.33E 31 Mar. 1971 Upton & Mitchell (ANIC); 1 ♀, Roebuck B M. G. (unreadable) (IRSNB); 2 ♂♂, Fortescue R. Hamersley Range N. W. A.: W. D. Dodd / *Clivina obliquicollis* Sl. mss. Id. by T. G. Sloane (SAMA); 1 ♂, 20 km NE Mt. Clere Stn. W. Aust. 25.x.1986 L. A. Dyson K. T. Richards (Wadap 5243); 1 ♀, 23 km, WSW. of Barradale, WA 30 Mar. 1971 Upton & Mitchell (ANIC); 70 ♂♂, 107 ♀♀, Australia, WA 06, 132, Karinjij NP, 8 km S

Visitors Centre 22.55353S, 118.45290E 714m, 21.2.2006, M.Baehr (ANIC, CBM, CBP, CDW, MCZ, QMB); 2♂♂, 3♀♀, Australia, WA06, 117 Ashburton R., 5km s. mouth 21.76114S, 114.94970E 1m, 19.2.2006, M.Baehr (CBM); 2♂♂, 1♀, Australia, WA06, 101, Yalgar River, 10 km s. Moorarie, 2595233S, 117.69858E 439m, 3.2.2006, M.Baehr (CBM); 3♀♀, Australia, WA06, 155, Millie Soak, 10 km n. Cue, 424m 27.29033S, 117.91034E 1m, 25.-27.2.2006, M.Baehr (CBM); 2♂♂, Australia, WA06, 114, Cane River Cr. 22.02838S, 115.58598E 79m, 19.2.2006, M.Baehr (CBM); 1♂, Australia, WA06, 120, Peter Cr., 15 km ne. Robe R. Cr. 21.49982S, 116.00387E 68m, 19.2.2006, M.Baehr (CBM); 1♂, Australia, WA06, 135, Beasley R., Cheel Plains. 22.95945S, 116.97655E 283m, 18.2.2006, M.Baehr (CBM); 1♂, Australia, WA06, 103, Gascoyne Junction 25.04722S, 115.20700E 147m, 5.2.2006, M.Baehr (CBM); 1♀, Australia, WA06, 122, Karratha 20.75383S, 116.81295E 41m, 11.2.2006, M.Baehr (CBM); 1♂, 1♀, W.A.: CALM Pilbara Survey 20km ESE Whim Creek Hotel 20°54'36.2"S, 117°58'58.1"E DRE12, 14.XI.2003-13.V.2004 / CALM PBS00062 (WAM); 2♂♂, 1♀, W.A.: CALM Pilbara Survey 3.5km S Marla Pool 21°3'55.9"S, 116°9'1.7"E DRW11, 28.XI.2003-11.V.2004 / CALM RBS00069 (WAM); 1♀, W.A.: CALM Pilbara Survey 12.5km N Nullagine 21°46'13.1"S, 120°5'30.7"E NW03, 17.XI.2003-19.V.2004 / CALM PBS00072 (WAM); 1♀, W.A.: CALM Pilbara Survey 62km E Meekatharra Outcamp 21°18'57.6"S, 121°2'53.4"E NE10, 17.V.-12.X.2004 / CALM PBS00071 (WAM); 1♀, W.A.: CALM Pilbara Survey 12.5km N Nullagine 21°46'13.1"S, 120°5'30.7"E NW03, 17.XI.2003-19.V.2004 / CALM PBS00072 (WAM); 1♀, West Aust / TYLDEN COLL., formed by Rev. W. Tylden, M.A., abt 1841-1875. Pres. '75 by Mrs. E. C. Tylden (OUM); 1♂, 33959 / Du Boulay / Nov. Holl. Occid. (NHM); 1♂, 2♀♀, Fitzroy River WA 20.iv.1976 K.&E. Carnaby (ANIC); 1♂, defect (ANIC); 1♂, Victoria / Nat. Mus. Victoria C. French's Coll. 6.I.08 (NMV COL-10511).

Etymology. The name refers to the convex, apicad incurved lateral margins of the prothorax.

Diagnosis. Medium sized to fairly large, black species with wide and shallow, quadrangular clypeal excision, sulcate, moderately densely punctate head, rufous middle and hind legs, rather conical prothorax, impunctate and very glabrous propisternum, elongate but not absolutely parallel-sided elytra, rather coarsely punctate elytral striae, and symmetric, wide, arrow-shaped apex of the aedeagus.

Description

Measurements (those of an aberrant male specimen in brackets). Length: 11.1-14.5 mm; width: 3.3-4.35 mm. Ratios. Length/width of pronotum: 0.93-0.96 (0.99); base/apex of pronotum: 1.40-1.44 (1.46); width pronotum/head: 1.42-1.48 (1.51); length/width of elytra: (1.92) 1.98-2.02; length/width of

protibia: ♂: 3.1-3.4 (3.8), ♀: 3.3-3.45; length/width of metatibia: ♂: 6.3-6.7 (8.1), ♀: 6.6-7.2.

Colour (Fig. 98). Unicolourous black. Middle and hind legs rufous, paler than the piceous anterior leg.

Head (Fig. 98). Eye large, laterally well projected, orbit short, oblique-convex. Clypeus with rather shallow, wide, almost quadrangular excision, though the lateral margins of the excision being rather oblique. Labrum 7-setose. Clypeus divided from frons by a deep sulcus; frons in anterior half usually with additional transverse sulci, moderately densely but inconspicuously punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 98). Rather short, narrowed apicad, dorsally gently convex. Lateral margin oblique, slightly convex. Apex slightly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove shallow, elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, very finely punctate, with very fine, superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 99). Moderately elongate, not absolutely parallel-sided, slightly widened apicad, convex but on disk remarkably depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae deep, becoming slightly shallower towards apex, rather coarsely punctate at least in basal two thirds. Intervals slightly convex, extremely finely and sparsely punctate, without transverse striae, with very faint, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus indistinct, shallowly punctate.

Metathoracic wings. Fully developed.

Lower surface. Propisternum impunctate, and almost without striae, remarkably glabrous, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum moderately elongate, c. 2× as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the male not more than in the female. Longitudinal sulcus on upper surface distinct; lower surface with a row of 6-8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia rather elongate, rather sparsely setose. Metatarsomer 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 35). Aedeagus wide, moderately elongate, asymmetrically narrowed apicad; lower only near base concave, then straight, towards apex curved down. Apical half of lower surface

slightly concave. Apical part asymmetric, deeply concave at the left side; apex wide, arrow shaped with wide, convexly triangular tip, denticulate on the lower surface; arrow almost symmetrically situated. Both parameres elongate, the left one stouter than the right one; both with short, bisetose apical part; upper seta elongate, situated right at tip, the lower seta short.

Female gonocoxites (Fig. 68). Gonocoxites rather narrow and elongate, little curved, with slightly obtuse apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, four to five setae at middle of the medio-dorsal surface, without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically with three to four shorter seta.

Variation. This is a rather variable species with respect to shape of pronotum and elytra, surface structure and microreticulation, and relative length of protibia and metatibia. A large male from Murchison District has particularly narrow and elongate pro- and metatibiae, which by far surpass the average range within the species. However, because the male genitalia of all dissected specimens, taken from several disjunct localities, are similarly shaped, the aberrant specimens are yet included in the species.

Distribution. North-western WA: from about Mee-katharra to Fitzroy Crossing in the southern Kimberleys.

Collecting circumstances. Many specimens collected in pitfall traps near ponds and billabongs, or at light.

Clivina platynota, spec. nov.

Figs 36, 132

Examined types. Holotype: ♂, 8 km SW by W of Cane R. HS., WA. 22.07S 115.33E 31 Mar 1971 Upton & Mitchell (ANIC). – Paratype: 1 ♂, same data (CBM).

Etymology. The name refers to the depressed surface of the prothorax.

Diagnosis. Medium sized, piceous species with wide and rather shallow, quadrangular clypeal excision, sulcate, moderately densely punctate head, markedly protruded eye, rufous middle and hind legs, rather quadrate, dorsally depressed prothorax, impunctate and very glabrous propisternum, elongate, almost parallel-sided elytra, finely punctate elytral striae, and rather spatulate apex of the aedeagus.

Description

Measurements. Length: 13.0–13.2 mm; width: 3.5–3.75 mm. Ratios. Length/width of pronotum: 1.01–1.04; base/apex of pronotum: 1.33–1.34; width pronotum/head: 1.34–1.37; length/width of elytra: 2.11; length/width of protibia: ♂: 3.4–3.6; length/width of metatibia: ♂; 7.4–7.5.

Colour (Fig. 132). Unicolourous piceous. Middle and hind legs rufous, paler than the piceous anterior leg.

Head (Fig. 132). Eye large, laterally remarkably projected, orbit very short, oblique-convex. Clypeus with rather shallow, wide, almost quadrangular excision. Labrum in the holotype 7-setose, in the paratype 5-setose. Clypeus divided from frons by a deep sulcus; frons in anterior half with or without another shallow transverse sulcus, with moderately dense, rather coarse punctures. Surface without microreticulation, glossy.

Pronotum (Fig. 132). Moderately elongate, rather quadrate, little narrowed apicad, dorsally remarkably depressed. Lateral margin straight, slightly oblique. Apex slightly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical sixth. Basal groove shallow, elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, finely but rather densely punctate, with finest traces of very superficial, isodiametric microreticulation, very glossy.

Elytra. Elongate, parallel-sided, barely widened apicad, convex but on disk remarkably depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae deep, becoming slightly shallower towards apex, very finely punctate-crenulate in basal two thirds. Intervals slightly convex, impunctate, with fine transverse striae, with extremely faint and superficial, isodiametric microreticulation, very glossy. Epipleura narrow, basal sulcus indistinct, shallowly punctate.

Metathoracic wings. Fully developed.

Lower surface. Propisternum impunctate, and almost without striae, remarkably glabrous, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, almost 2.5× as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate. Longitudinal sulcus on upper surface distinct; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia (Fig. 36). Aedeagus rather wide, moderately elongate, asymmetrically narrowed apicad; lower only near base concave, then straight, towards apex slightly curved down. Apical half of lower surface slightly concave. Apical part asymmetric, deeply concave at the left side; apex wide, arrow shaped with wide, somewhat spatulate tip, denticulate on the lower surface; arrow slightly asymmetrically situated. Both parameres elongate, the left one stouter than the right one; both with short, bisetose apical part; upper seta elongate, situated right at tip, the lower seta short.

Female gonocoxites. Unknown.

Variation. Little variation noted.

Distribution. North-western WA, south of Great Sandy Desert. Known only from type locality.

Collecting circumstances. Not recorded.

Clivina rectipennis, spec. nov.

Figs 69, 99

Examined types. Holotype: ♀, IRRUNYTJU ROCK-HOLE HINCKLEY RANGE WA 26.07 S, 128.58 E 19-21 JAN 1990 T.F. HOUSTON & M.S. HARVEY 759-11 / AT LIGHT (MV) AT NIGHT (WAM No. 39180). – Paratype: 1 ♀, Ayers Rock NT 23 Apr 1981 D.P.Carne At light (ANIC).

Etymology. The name refers to the straight, parallel lateral margins of the elytra.

Diagnosis. Medium sized to fairly large, black species with wide and rather shallow, quadrangular clypeal excision, sulcate, moderately densely punctate head, rufous middle and hind legs, rather conical prothorax, impunctate and glabrous proepisternum, elongate, parallel-sided elytra, and finely punctate elytral striae.

Description

Measurements. Length: 11.8–14.1 mm; width: 3.4–4.0 mm. Ratios. Length/width of pronotum: 0.96–0.97; base/apex of pronotum: 1.37–1.40; width pronotum/head: 1.39–1.43; length/width of elytra: 2.10–2.13; length/width of protibia: ♀: 3.0–3.2; length/width of metatibia: ♀: 6.9–7.2.

Colour (Fig. 99). Uniformly pale red. Mouth parts and antenna pale red, middle and hind legs yellow to pale red, anterior leg slightly darker.

Head (Fig. 99). Eye large, laterally remarkably projected, orbit very short, oblique-convex. Clypeus with rather shallow, wide, almost quadrangular excision. Labrum 7-setose. Clypeus divided from frons by a deep sulcus; frons in anterior half usually

with additional transverse sulci, moderately densely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 99). Rather short, convexly narrowed apicad, dorsally rather convex. Lateral margin oblique, distinctly convex. Apex slightly concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fifth. Basal groove shallow, elongate, linear, straight, impunctate. Disk with some fine, transverse striae in middle, very finely punctate, with very fine traces of superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 99). Elongate, parallel-sided, barely widened apicad, convex but on disk depressed. Basal angle little produced. Striation complete, but lateral striae less distinct. Striae deep, becoming slightly shallower towards apex, finely punctate at least in basal half. Intervals slightly convex, extremely finely and sparsely punctate, with or without fine transverse striae, with very faint, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus indistinct, shallowly punctate. Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, and almost without striae, remarkably glabrous, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum elongate, c. 2.25 × as long as wide, in posterior half with a deep longitudinal sulcus. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate. Longitudinal sulcus on upper surface distinct; lower surface with a row of 6–8 stout setae along basal part of inner margin. Mesotibia moderately elongate, dorsal rim crenulate, with several rows of setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsomere 1 almost as long as the following three tarsomeres.

Male genitalia. Unknown.

Female gonocoxites (Fig. 69). Gonocoxites narrow and elongate, little curved, with rather acute apex; with one elongate, rather stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, two elongate setae at middle of the medio-dorsal surface, and a tiny nematiform seta near apex. Lateral plate basally with one elongate seta, apically with three shorter seta.

Variation. Considerable variation noted in body size.

Distribution. Southern central NT, adjacent extreme eastern WA.

Collecting circumstances. Little recorded. Both specimens were collected at light.

brevisterna subgroup

Diagnosis. Medium sized to large species with short, conical prothorax and usually rather short, oval-shaped elytra; clypeal excision wide and shallow; clypeus 7-setose; eye large, usually very much protruded; apex of aedeagus arrow- or club-shaped: metathoracic wings reduced and elytra commonly soldered together. 10 species occur in northern Australia.

Clivina brevisterna Sloane

Figs 37, 100

Clivina brevisterna Sloane, 1916: 606. – Sloane 1917: 406; Csiki 1927: 498; Moore et al. 1987: 68; Baehr 1987: 190; Lorenz 2005: 142.

Examined types. Holotype of *brevisterna*: sex? (only hindbody, but genitalia destroyed), Pine Creek Dist. N. Ter. (C.F. 09) Type / *Clivina brevisterna*, Sl. Type / HOLOTYPE *Clivina brevisterna* Sl. PJD (ANIC).

Type locality. “Pine Creek”, Northern Territory.

Other material (9 ex.). NT: 2 ♀♀, Kakadu Nat. Park, CSIRO Biodiversity Survey, Site 14, 13.73101 S, 132.77066 E, S. Oberprieler, Feb–Mar 2014 (CBM); 1 ♂, 20 km N.T. Ry. w. Pt. Darwin G. Sc....(unreadable) (SAMA 033658); 1 ♀, Pt Darwin / *Clivina brevisterna* Sl. Id. by T. G. Sloane / F. E. Wilson Collection (NMV COL-5199); 1 ♀, Pt. Darwin / H. J. Carter Coll. p. 20.4.22. (NMV COL-5200); 1 ♂, N. Territory / H. J. Carter Coll. p. 20.4.22. / *Clivina brevisterna* Sl. mss. (NMV COL-5198); 1 ♂, Northern Territory (ANIC); 2 ♀♀, N. Territory (WADAP 5184-5).

Diagnosis. Medium sized, black species with moderately shallow, quadrangular clypeal excision, slightly sulcate head, 7-setose labrum, dark piceous to black legs, apicad narrowed prothorax with oblique lateral margin, impunctate propisternum, moderately elongate, oviform elytra, deep, coarsely punctate elytral striae, and wide, club-shaped apex of the aedeagus.

Description

Measurements. Length: 11.3–12.8 mm; width: 3.5–3.8 mm. Ratios. Length/width of pronotum: 0.97–1.02; base/apex of pronotum: 1.42–1.45; width pronotum/head: 1.52–1.53; length/width of elytra: 1.81–1.86; length/width of protibia: ♂: 3.5–3.8, ♀: 3.25–3.4; length/width of metatibia: ♂: 6.4–6.5, ♀: 6.35–6.5.

Colour (Fig. 100). Unicolourous black. Legs dark piceous to black.

Head (Fig. 100). Eye large, laterally markedly projected, orbit very short, almost perpendicular. Clypeus with moderately shallow, almost quadrangular

excision. Labrum 7-setose. Mandibles short. Clypeus divided from frons by a sulcus; upper surface rather convex, with an irregularly triangular sulcus in middle of frons, rather densely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 100). Moderately elongate, trap-ezoidal, narrowed apicad, dorsally gently convex. Lateral margin oblique and usually slightly convex. Apex gently concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical third. Basal groove shallow, elongate, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, impunctate, with very fine but distinct, isodiametric microreticulation, moderately glossy.

Elytra (Fig. 100). Soldered together. Moderately elongate, rather narrow at base, oval shaped, convex, on disk barely depressed. Basal angle little produced. Striation complete, striae deep, apicad slightly shallower, coarsely punctate. Intervals convex, impunctate, with or without fine transverse striae, with fine, slightly superficial, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Reduced.

Lower surface. Propisternum impunctate, without or with some extremely fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short and small, little longer than wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in females slightly less so. Longitudinal sulcus on upper surface deep; lower surface with a row of 3–4 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim little crenulate, with two rows of few setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 37). Aedeagus wide, fairly elongate, asymmetrically narrowed apicad; lower surface in basal half gently concave, then almost straight, apical part turned down. Apical half of lower surface deeply concave. Apex short, markedly club-shaped and hooked at the lower surface, club short and wide, at tip convex. Both parameres moderately elongate, the left one considerably stouter than the right one; both with rather short, narrow, uni- or bisetose apical part; setae very short, situated at or very near to apex.

Female gonocoxites. Very similar to those of *C. major* Sloane.

Variation. Little variation noted.

Distribution. Northern part of NT.

Collecting circumstances. Not recorded.

Clivina major Sloane (stat. nov.)

Figs 38, 70, 101

Clivina brevisterna major Sloane, 1917: 406. – Csiki 1927: 499; Moore et al. 1987: 68; Lorenz 2005: 142.

Examined types. Lectotype of *brevisterna major* (by present designation): ♂, King R. N.T. Nat. Mus. Victoria Coll. by W. McLennan 22.12.15 / *Clivina brevisterna* (Sl.) var. *major* Sl. Id. by T. G. Sloane / SYNTYPE T-16907 *Clivina brevisterna* var. *major* Sloane (red) / Type (red) (NMV).

Paralectotypes: 2 ♂♂, 2 ♀♀, same data / SYNTYPE T-16903-06 (red) (NMV); 1 ♂, same data / PARATYPE (blue) (ANIC).

Type locality. “King River”, Northern Territory.

Note. *C. major* was described as a variation of *C. brevisterna* Sloane, 1916, and therefore was synonymized with that species and on labels considered a “large variation”. However, Sloane himself stated the striking differences in body size, relative length of the elytra, and punctuation of the elytral striae, and thus clearly expressed that this “variation” is different from *C. brevisterna* s. str. Therefore, according to the rules of ICZN (articles 45f, g), this “variation” is to be regarded a subspecies. Because it is not possible, per definitionem, that two subspecies of the same species occur sympatrically, *C. brevisterna major* herein is raised to the status of a species.

Other material (32 ex.). NT: 5 ♂♂, 14 ♀♀, King R. N.T. 24-12-15 / Coll’ by W. Mc-Lemman Rev. (?) leg. H. L. White 14-10-16 (NMV COL-5201, 14019, 23, 26, 28, 29-37-41, 56; 14031, 39 CBM); 1 ♂, King R. N.T. 24-12-15 / Coll’ by W. Mc-Lemman Rev. (?) leg. H. L. White 14-10-16 / *ovipennis* by Sl. key, P.J.D. (MCZ); 1 ♀, King R. N.T. 24-12-15 / Coll’ by W. Mc-Lemman Rev. (?) leg. H. L. White 14-10-16 / *ovipennis* Sl. (tr. with *mastersi* ?) det. ’59 Darlington (MCZ); 1 ♂, 1 ♀, 24.12.15 Nat. Mus. Victoria King R. N.T coll. by W. McLennan (ANIC); 1 ♀, King R. N.T Nat. Mus. Victoria Coll. by W. McLemman 24.12.15 / Det. by T. G. Sloane to be *Clivina brevisterna* var. *major* Rec. 3-17 (DEI); 1 (?sex, defect), King R. N.T Nat. Mus. Victoria Coll. by W. McLemman 24-12-15 (ANIC); 1 ♀, Caught on flooded arm King R. N.T by W. McLennan 24-12-15 / *Clivina* sp.? probably a large form of *brevisterna* Sl. Id. by T. G. Sloane / ?*C. brevisterna* Sl. det. K. Kult 1948 (DEI); 1 ♂, NT. 12.816°S 131.569°E 30kmW of Adelaide R. 30m 21–22Feb2012 G. Monteith. open forest. dung trap. 35341 (QMB); 1 ♂, Adelaide River N. Aust. J. Farr / *Clivina brevisterna* Sl. (NMV COL-5203); 1 ♂, Northern Territory / *Clivina brevisterna* Sl. var. *major* SL. Id. by T. G. Sloane / F. E. Wilson Collection (NMV COL-5202). – WA: 1 ♀, Kellerberrin W. Australia J. Clark

/ Conspecific with *Clivina brevisterna* Sl. (WADAP 5183). – AUS: 2 ♂♂, AUSTRALIEN v. Müller 1892 (SMNS).

Diagnosis. Medium sized to large, black species with wide and shallow, quadrangular clypeal excision, slightly sulcate head, 7-setose labrum, black legs, trapezoidal prothorax with oblique-convex lateral margin, impunctate proepisternum, elongate, oviform elytra, deep, moderately punctate elytral striae, and wide, club-shaped apex of the aedeagus.

Description

Measurements. Length: 14.2–16.8 mm; width: 4.1–5.0 mm. Ratios. Length/width of pronotum: 1.0–1.01; base/apex of pronotum: 1.51–1.58; width pronotum/head: 1.51–1.56; length/width of elytra: 1.91–1.98; length/width of protibia: ♂: 4.3–5.0, ♀: 3.7–4.0; length/width of metatibia: ♂: 7.3–7.7, ♀: 7.5–7.6.

Colour (Fig. 101). Unicolourous black. Legs black.

Head (Fig. 101). Eye large, laterally markedly projected, orbit short, almost perpendicular. Clypeus with shallow, almost quadrangular excision. Labrum 7-setose. Mandibles short. Clypeus divided from frons by a deep sulcus; upper surface rather convex, with or without a second transverse sulcus and an irregularly triangular sulcus in middle of frons; rather sparsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 101). Moderately elongate, trapezoidal, narrowed apicad, dorsally gently convex. Lateral margin oblique and slightly convex. Apex gently concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical third. Basal groove fairly deep, elongate, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, impunctate or almost so, with very fine but distinct, isodiametric microreticulation, moderately glossy.

Elytra (Fig. 101). Soldered together. Rather elongate, narrow at base, oval shaped, convex, on disk barely depressed. Basal angle little produced. Striation complete, striae deep, apicad shallower, in basal half moderately coarsely punctate. Intervals convex, impunctate, with or without fine transverse striae, with fine, slightly superficial, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, without or with some extremely fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short and small, little longer than wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in females less so. Longitudinal sulcus on upper surface deep; lower surface with a row of 5–6 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim little crenulate, with two rows of few setae on the dorsal surface; subapical spur elongate. Metatibia very elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 38). Aedeagus wide, fairly elongate, slightly asymmetrically narrowed apicad; lower surface in basal third gently concave, in middle gently convex, apical part curved down. Apical half of lower surface slightly concave. Apex short, markedly club-shaped and hooked at the lower surface, club short and wide; at tip convex. Both parameres elongate, the left one considerably stouter than the right one; both with very elongate, narrow, uni or bisetose apical part; setae short, situated right at apex.

Female gonocoxites (Fig. 70). Gonocoxites wide and rather short, little curved, with rather acute apex; with one elongate, stout seta basally at lateral surface and a smaller seta below, four elongate setae on the ventral surface of gonocoxite 1, two setae at middle of the medio-dorsal surface, without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically apparently without setae.

Variation. Some variation noted in body size, surface structure of head, shape of prothorax, length of elytra, and degree of punctation of the elytral striae.

Distribution. Northern parts of NT. The record from south-western WA is certainly erroneous.

Collecting circumstances. Little recorded. One specimen “caught on flooded arm King R.”, another in “open forest, dung trap”.

Clivina mastersi Sloane
Figs 39, 71, 102

Clivina mastersi Sloane, 1896a: 242. – Sloane 1896a: 228, 245; Csiki 1927: 508; Moore et al. 1987: 72; Lorenz 2005: 143.

Examined types. Holotype: fragment (sex?, only hind body left, but genitalia destroyed), Port Darwin N. Territory / HOLOTYPE (red) (ANIC-MMS).

Type locality. “Port Darwin”, Northern Territory.

Other material (37 ex.). NT: Pt. Darwin / K. K. Spence Collection. / *C. mastersi* (?) Sloane id. K.K.Spence / *Clivina* sp. Det. B.P. Moore 1999 (AMS); Port Darwin N. Territory / Griffith Collection Id. by A. M. Lea (SAMA 25-033667-69, 75-81); Port Darwin N. Territory (SAMA 25-033-607); G. F. Hill Alligator Riv. Darwin.

N.T. / *Clivina mastersi* Sl. Id. by T. G. Sloane (SAMA); N.T. Fogg Dam Area 12.34S 131.18E pit trap no. 5 rain forest Nov. 1980 N.T. Field Nat. Club (CBM, NTD); Howard Springs N.T. 22.iii.68 B.P. Moore (ANIC, CBM); NT: 12.393°S 130.9191°E Vanderlin Drive, Darwin 22-23 Feb 2012 G. Monteith. open forest mushroom trap 53559 (QMB). – AUS: *C. mastersi* Sl. Comp. with type 7/7/21 (ANIC); Australia / *Clivina mastersi* Sl. Bänninger det. 1944 / COLLECTIO KAREL KULT COLL. A. DOSTAL, 1999 (CDW).

Diagnosis. Large, black species with wide and rather shallow, quadrangular clypeal excision, barely sulcate head, 7-setose labrum, black legs, trapezoidal prothorax with convex-oblique lateral margin, impunctate proepisternum, elongate, oviform elytra, deep, almost impunctate median elytral striae, and short, club-shaped apex of the aedeagus.

Description

Measurements. Length: 15.4–21.1 mm; width: 4.5–6.0 mm. Ratios. Length/width of pronotum: 0.98–1.05; base/apex of pronotum: 1.50–1.55; width pronotum/head: 1.50–1.57; length/width of elytra: 1.96–2.07; length/width of protibia: ♂: 4.6–4.8, ♀: 3.9–4.0; length/width of metatibia: ♂: 7.5–7.8, ♀: 6.7–6.8.

Colour (Fig. 102). Unicolourous black. Legs dark piceous to black.

Head (Fig. 102). Eye fairly large, laterally well projected, orbit rather short, c. 1/4 of length of eye, oblique. Clypeus with wide and rather shallow, almost quadrangular excision. Labrum 7-setose. Mandibles short. Clypeus not or indistinctly divided from frons; upper surface rather convex, densely but very finely punctate, frons in middle with a shallow fovea. Surface without microreticulation, glossy.

Pronotum (Fig. 102). Moderately elongate, convexly trapezoidal, strongly narrowed apicad, dorsally gently convex. Lateral margin oblique-convex. Apex gently concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated slightly in front of apical third. Basal groove elongate, linear, impunctate, situated in a wide depression. Disk with some fine, irregularly transverse striae in middle, impunctate, with very fine, slightly superficial, isodiametric microreticulation, rather glossy.

Elytra (Fig. 102). Soldered together. Elongate, rather narrow at base, oval shaped, convex but on disk slightly depressed. Basal angle little produced. Striation incomplete, only the median four or five striae distinct in basal half. Median striae deep, impunctate. Apical half or third almost striate. Median intervals in basal half convex, impunctate, without transverse striae, with very fine, slightly superficial, isodiametric microreticulation, rather glossy. Epipleura narrow, basal sulcus barely perceptible.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with or without some fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, c. 1.25 × as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate, less so in females. Longitudinal sulcus on upper surface deep; lower surface with a row of 3–5 stout setae along basal part of inner margin. Mesotibia rather elongate, dorsal rim barely crenulate, with two rows of few setae on the dorsal surface; subapical spur moderately elongate. Metatibia very elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 39). Aedeagus wide, fairly elongate, narrowed apicad; lower surface in basal third gently concave, then almost straight, but apex suddenly turned down. Apical half of lower surface with two longitudinal, parallel ridges, the surface between deeply concave. Apical part slightly asymmetrically narrowed; apex short, markedly club-shaped and hooked at the lower surface, club short and wide; at tip convex. Both parameres elongate, the left one considerably stouter than the narrower right one; both with elongate, very narrow, asetose apical part,

Female gonocoxites (Fig. 71). Gonocoxites rather narrow and elongate, little curved, with rather acute apex; with one elongate, fairly stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, three or four setae at middle of the medio-dorsal surface, without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically apparently without setae.

Variation. Considerable variation noted in body size, also in relative length of prothorax and elytra, and in degree of elytral striation.

Distribution. Northern NT.

Collecting circumstances. Little recorded. One specimen collected in “pit trap in rain forest”, another in “mushroom trap”.

Clivina cobourgiana, spec. nov.

Figs 40, 103

Examined types. Holotype: ♂, N.T. Murgarella 11.34 S 132.52 E 3–7 Feb. 1987 pitfall trap P. Horner / burnt *Eucalyptus tetradonta* forest (NTD). – Paratype: 2 ♂♂, 11.09 S 132.09 E Black Point Coburg Pen. N.T. 15–23 Feb. 1977 T.A. Weir (ANIC, CBM).

Etymology. The name refers to the range of the species, Cobourg Peninsula in the northernmost part of Northern Territory.

Diagnosis. Large, black species with wide and rather shallow, quadrangular clypeal excision, barely sulcate head, 7-setose labrum, black legs, trapezoidal prothorax with oblique lateral margin, impunctate proepisternum, elongate, oviform elytra, deep, almost impunctate elytral striae, and elongate, spatulate apex of the aedeagus.

Description

Measurements. Length: 17.8–18.9 mm; width: 5.25–5.4 mm. Ratios. Length/width of pronotum: 1.0–1.01; base/apex of pronotum: 1.51–1.54; width pronotum/head: 1.51–1.54; length/width of elytra: 1.93–1.98; length/width of protibia: ♂: 4.5–4.65; length/width of metatibia: ♂: 6.9–7.2.

Colour (Fig. 103). Unicolourous black. Legs black.

Head (Fig. 103). Eye fairly large, laterally well projected, orbit rather short, < 1/4 of length of eye, oblique. Clypeus with wide and rather shallow, almost quadrangular excision. Labrum 7-setose, in one specimen 6-setose, one paralateral seta lacking. Mandibles short. Clypeus distinctly divided from frons; upper surface rather convex, sparsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 102). Moderately elongate, markedly trapezoidal, strongly narrowed apicad, dorsally gently convex. Lateral margin oblique but straight. Apex gently concave. Marginal channel narrow; median line well impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated slightly in front of apical third. Basal groove rather deep, elongate, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, extremely finely and sparsely punctate, with very fine, extremely superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 103). Soldered together. Elongate, rather narrow at base, oval shaped, convex but on disk slightly depressed. Basal angle little produced. Striation almost complete, but the 7th stria very weak. Striae deep, impunctate or very finely punctate, becoming slightly shallower apicad. Most intervals convex, impunctate, without transverse striae, with extremely fine and superficial, barely perceptible, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus barely perceptible.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with or without some fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticula-

tion. Metepisternum short, c. 1.25 × as long as wide. Abdominal sterna impunctate.

Legs. Protibia very narrow and elongate. Longitudinal sulcus on upper surface deep; lower surface with a row of 6–7 stout setae along basal part of inner margin. Mesotibia rather elongate, dorsal rim barely crenulate, with two rows of few setae on the dorsal surface; subapical spur moderately elongate. Metatibia elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 40). Aedeagus wide, fairly elongate, very asymmetrically narrowed apicad; lower surface in basal third concave, then markedly convex, apical part suddenly turned down. Apical half of lower surface with two longitudinal ridges which form a triangle, the surface between the ridges deeply concave. Apex rather elongate, markedly spatulate and hooked at the lower surface, the club elongate and asymmetrically curved left, at tip obtusely convex. Both parameres elongate, the left one considerably stouter than the right one; both with elongate, narrow, aetose or unisetose apical part; setae, if present, very short and situated right at apex.

Female gonocoxites. Unknown.

Variation. Little variation noted in striation of the elytra and distinctness of punctuation of the striae.

Distribution. Cobourg Peninsula, extreme northern NT.

Collecting circumstances. Little recorded. Holotype collected in “pitfall trap in burnt *Eucalyptus tetrodonta* forest”.

Clivina nyctosyloides Putzeys

Figs 41, 72, 104

Clivina nyctosyloides Putzeys, 1868: 10. – Sloane 1896a: 181, 227, 231, 239, 242; 1905a: 732, 733; 1907: 349; 1916: 606; Csiki 1927: 508; Moore et al. 1987: 73; Baehr 1987: 190; Lorenz 2005: 143.

Clivina interstitialis Sloane, 1896a: 241. – Sloane 1896a: 227; 1905a: 733; Csiki 1927: 508; Moore et al. 1987: 73; Lorenz 2005: 143.

Clivina propinqua nom. nov. = *interstitialis* Sloane, 1896a (non *C. interstitialis* Kolbe, 1883).

Examined types. Lectotype of *nyctosyloides* (by present designation): ♂, Rockhampton / Rockhampton (Australia) Coll. Castelnau / *C. nyctosyloides* P. (red) / SYNTYPUS *Clivina nyctosyloides* Putzeys, 1868 (red) (MCSN). – Paralectotypes: 1 ♀, Rockhampton / Rockhampton (Australia) Coll. Castelnau / SYNTYPUS *Clivina nyctosyloides* Putzeys, 1868 (red) (MCSN); 1 ♂, Rockhampton / *C. nyctosyloides* P. Rockh. ♂ / Soc.

Ent. Belg. Coll. Putzeys / Type (red) / Syntype (red) (IRSNB). – Holotype of *propinqua* (= *interstitialis* Sloane, 1896): ♀ (probable, abdomen destroyed), *C. interstitialis*, Sl. N. Queensl^d. (C.F.) (ANIC).

Type localities. Of *nyctosyloides*: “Rockhampton”, Queensland. – Of *propinqua*: “Cooktown”, Queensland.

Other material (25 ex.). **QLD:** 8 ♀♀, Townsville Australia / BMalkin Jan 1945 / *Clivina nyctosyloides* Putz. det Darlington ‘48 (CBM, MCZ, USNM); 1 ♀, Townsville Australia / *nyctosyloides* det Darlington ‘48 / COLLECTOR KAREL KULT COLL.A.DOSTAL,1989 (CDW); 1 ♀, Townsville Qld Feb 01 F. P. Dodd / *C. nyctosyloides* Putz. Townsville P. FPD (ANIC); 1 ♀, Townsville Q. T. G. S. 6-06 (ANIC); 1 ♀, Pt. Denison / *Clivina nyctosyloides* Putz. Port Denison (MMS); 1 ♀, Cooktown C. French (QMB); 1 ♀, Endeavour R. N.S. Wales / *oblongicollis* Putz. (ZISP); 1 ♀, End. Riv. / Nat. Mus. Victoria C. French’s Coll. 6.I.08 / *Clivina nyctosyloides* Putz. Queensland (NMV COL-5391); 1 ♀, Endeavour R. / Nat. Mus. Victoria C. French’s Coll. 6.I.08 (NMV COL-5392); 1 ♀, Coen R. Q. W. D. Dodd (SAMA 25-033673); 1 ♀, Cairns dist. F. P. Dodd / I.6872 *Clivina nyctosyloides* Putz. Id. by T. G. Sloane (SAMA); 1 ♂, 3 ♀♀, Mutchilba, N. Q. Nov. 1933 A. D. Selby / F. E. Wilson Collection (NMV COL-13676-9); 1 ♀, AUSTRALIA N Queensland 5km S of Prairie, 44km E of Hughenden, 19-21.I.2011, 433m 20°53’S, 144°36’E; St. Jakl lgt. (CJP); 1 ♀, AUSTRALIA, C. Queensland PODDY CREEK, 90 km W Winton 23-24.I.2011, 198 m alt. S22°12’ E 142°12’ St Jakl lgt. (CBM); 1 ♂, Australia Qld. Normanston Lamond / 15-i-2000, / E. Gowing-Scopes Collection (NHM); 1 ♂, Edungalba CQ 1-12-46 E Adams E Sutton / E. Sutton Collection don.-Dec.1964. (QMB).

Notes. According to Moore et al. (1987) only the holotype of *C. nyctosyloides* exists, but this is a misinterpretation of a note in the description about an aberrantly coloured specimen (Putzeys 1868: 12). Moreover, Moore certainly had not seen any type material. The mentioned note, therefore, reveals that more than a single specimen was available for the description. Accordingly, a lectotype is designated from the three existing type specimens. The mentioned aberrant specimen is the female paralectotype.

C. interstitialis Sloane was thought by Sloane to be identical with, or only a minor variation of, *C. nyctosyloides* Putzeys. Therefore Sloane (1905, p. 733) synonymized both species. Although the types of the two species differ rather in body size and are also somewhat different in the shape of their elytra, a number of specimens exist along the eastern coast of Queensland which are intermediary in body size and shape between both. Therefore I think that this synonymy is justified.

Moore et al. (1987) give “Port Darwin, N. T.” as type locality of *C. interstitialis*. This is an error, as can be taken as well from the description as from the label of the holotype.

Because the name *interstitialis* Sloane, 1896 is preoccupied by *C. interstitialis* Kolbe, 1883, it is renamed "*propinqua*".

Diagnosis. Medium sized, black species with wide and shallow, quadrangular clypeal excision, barely sulcate head, 7-setose labrum, piceous to black legs, trapezoidal prothorax with oblique lateral margin, impunctate proepisternum, rather short, oviform elytra, deep, coarsely punctate elytral striae, absolutely glabrous dorsal surface, and short and wide, arrow-shaped, asymmetric apex of the aedeagus.

Description

Measurements. Length: 9.6–13.0 mm; width: 3.1–4.05 mm. Ratios. Length/width of pronotum: 0.90–0.97; base/apex of pronotum: 1.56–1.67; width pronotum/head: 1.56–1.66; length/width of elytra: 1.80–1.85; length/width of protibia: ♂: 3.75–3.85, ♀: 3.4–3.5; length/width of metatibia: ♂: 6.3–6.4, ♀: 5.5–5.7.

Colour (Fig. 104). Unicolourous black. Legs piceous to black.

Head (Fig. 104). Eye large, laterally markedly projected, orbit very short, almost perpendicular. Clypeus with wide and very shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose. Mandibles short. Clypeus not or indistinctly divided from frons. Upper surface rather convex, not sulcate, very sparsely punctate. Surface without microreticulation, very glossy.

Pronotum (Fig. 104). Rather short and wide, trapezoidal, markedly narrowed apicad, dorsally gently convex. Lateral margin oblique and slightly convex. Apex gently concave. Marginal channel narrow; median line shallow, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical third. Basal groove shallow or absent, elongate, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, sparsely and extremely finely punctate, without microreticulation, very glossy.

Elytra (Fig. 104). Free. Rather short, narrow at base, oval shaped, convex, on disk barely depressed. Basal angle little produced. Striation complete, striae deep, even apicad barely shallower, coarsely punctate. Intervals convex, impunctate, without transverse striae, without microreticulation, very glossy. Epipleura narrow, basal sulcus shallowly punctate.

Metathoracic wings. In most specimens reduced to about $\frac{2}{3}$ of normal length.

Lower surface. Proepisternum impunctate, without or with some extremely fine dorso-ventral

striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum moderately short, c. 1.5× as long as wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in females less so. Longitudinal sulcus on upper surface deep; lower surface with a row of 4–5 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of elongate setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsus fairly elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 41). Aedeagus wide, fairly elongate, slightly asymmetrically narrowed apicad; lower surface in basal third gently concave, then almost straight, apical part barely down. Apical half of lower surface gently concave. Apex short, markedly arrow-shaped, arrow short and rather wide, triangular, asymmetrically situated, at tip obtusely convex. Both parameres stout, the left one considerably stouter than the right one; both with rather short to very short, trisetose apical part, that in the left paramere is almost not existent; the two longer setae situated right at the apex, the shorter one slightly below apex.

Female gonocoxites (Fig. 72). Gonocoxites moderately wide and rather short, little curved, with slightly convex, transverse apex; with one elongate, stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, two setae at middle of the medio-dorsal surface, without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically with five to six setae.

Variation. Some variation noted in body size, surface structure of head, and shape of prothorax.

Distribution. Northern and eastern QLD.

Collecting circumstances. Little recorded. Two specimens were collected at light, according to the collector.

Clivina ovalior, spec. nov.

Fig. 105

Examined types. Holotype: ♀, AUSTRALIA QLD MOSSMAN 27/28.XII. (MCSV).

Diagnosis. Medium sized, black species with wide and shallow, quadrangular clypeal excision, barely sulcate head, 7-setose labrum, black legs, apicad narrowed prothorax with oblique lateral margin,

impunctate proepisternum, rather short, oviform elytra, deep, coarsely punctate elytral striae, and finely microreticulate pronotum and elytra.

Etymology. The name refers to the more oval-shaped elytra as compared with *C. nyctosyloides* Putzeys, 1868.

Description

Measurements. Length: 13.1 mm; width: 4.0 mm. Ratios. Length/width of pronotum: 0.96; base/apex of pronotum: 1.46; width pronotum/head: 1.53; length/width of elytra: 1.82; length/width of protibia: ♀: 3.8; length/width of metatibia: ♀: 6.9.

Colour (Fig. 105). Unicolourous black. Legs black.

Head (Fig. 105). Eye large, laterally markedly projected, orbit very short, almost perpendicular. Clypeus with wide and shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose. Mandibles short. Clypeus divided from frons. Upper surface rather convex, not sulcate, sparsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 105). Rather short and wide, moderately narrowed apicad, dorsally gently convex. Lateral margin oblique and slightly convex. Apex gently concave. Marginal channel narrow; median line shallow, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical third. Basal groove shallow, elongate, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, sparsely and extremely finely punctate, with very fine though distinct microreticulation, rather glossy.

Elytra (Fig. 105). Soldered together. Rather short, narrow at base, oval shaped, convex, on disk barely depressed. Basal angle little produced. Striation complete, striae deep, but in apical half shallower, in basal half rather coarsely punctate. Intervals convex, impunctate, with some fine, transverse striae, with very fine and rather superficial microreticulation, fairly glossy. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some extremely fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, slightly longer than wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate. Longitudinal sulcus on upper surface deep; lower surface with a row of 5 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of elongate setae on the dorsal surface; subapical spur elongate. Metatibia elongate,

rather sparsely setose. Metatarsus fairly elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia. Unknown.

Female gonocoxites. Very similar to that of *C. nyctosyloides* Putzeys.

Variation. Unknown.

Distribution. North-eastern QLD. Known only from type locality.

Collecting circumstances. Not recorded.

Clivina nitescens, spec. nov.

Figs 43, 106

Examined types. Holotype: ♂, AUS13, NT21, T/O Stuart Hwy./Edith River Rd., 145m, 14°11'10"S, 132°02'04"E, 15.4.2013, M.Baehr (NTD). – Paratypes: 1 ♂, *Scarites* n. sp. Westaustralien 53. Schmeltz / *Clivina oblongicollis* Putz. (ZISP); 1 ♀, 3/06 N-AUSTR, NT, KAKADU NP MUIRELLA, 10.06.2006 40M S12°51'15" E132°45'16" LIGHT LG BERGER-DOSTAL (CBM).

Diagnosis. Rather small to medium sized, black species with wide and shallow, quadrangular clypeal excision, barely sulcate head, 7-setose labrum, black legs, trapezoidal prothorax with oblique-convex lateral margin, impunctate proepisternum, rather short, oviform elytra, deep, coarsely punctate elytral striae, absolutely glabrous dorsal surface, and elongate, arrow-shaped, asymmetric apex of the aedeagus.

Etymology. The name refers to the very glossy dorsal surface.

Description

Measurements. Length: 10.3–11.7 mm; width: 3.0–3.6 mm. Ratios. Length/width of pronotum: 0.92–0.95; base/apex of pronotum: 1.54–1.60; width pronotum/head: 1.56–1.61; length/width of elytra: 1.84–1.92; length/width of protibia: ♂: 3.45–3.5, ♀: 3.25; length/width of metatibia: ♂: 6.3–6.35, ♀: 6.2.

Colour (Fig. 106). Unicolourous black. Legs piceous to black.

Head (Fig. 106). Eye large, laterally markedly projected, orbit very short, almost perpendicular. Clypeus with wide and very shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose. Mandibles short. Clypeus not or indistinctly divided from frons. Upper surface rather convex, not sulcate, very sparsely punctate. Surface without microreticulation, very glossy.

Pronotum (Fig. 106). Rather short and wide, trapezoidal, markedly narrowed apicad, dorsally

rather convex. Lateral margin oblique and slightly convex. Apex gently concave. Marginal channel narrow; median line shallow, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical third. Basal groove shallow or absent, elongate, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, extremely sparsely and finely punctate, without microreticulation, very glossy.

Elytra (Fig. 106). Free. Rather short, rather wide at base, slightly oval shaped, convex, on disk slightly depressed. Basal angle little produced. Striation complete, striae deep, even apicad barely shallower, coarsely punctate. Intervals convex, impunctate, without transverse striae, without microreticulation, very glossy. Epipleura narrow, basal sulcus shallowly punctate.

Metathoracic wings. Fully developed.

Lower surface. Proepisternum impunctate, without or with some fine dorso-ventral striae; with finest traces only of isodiametric microreticulation. The lower surface without or with traces of fine, isodiametric microreticulation. Metepisternum moderately elongate, $>1.5\times$ as long as wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, in the female slightly less so. Longitudinal sulcus on upper surface distinct; lower surface with a row of 4–6 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of elongate setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsus fairly elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 43). Aedeagus rather wide, moderately elongate, almost symmetrically narrowed apicad; lower surface in basal third concave, then straight, towards apex very slightly curved down. Apical half of lower surface with two longitudinal ridges which are arranged in a triangle, the surface between concave. Apex wide, arrow shaped, and denticulate on the lower surface; arrow elongate, asymmetrically situated, tip obtusely angulate. Both parameres elongate, the left one stouter than the right one; both with short, bisetose apical part; setae rather elongate, situated right at tip.

Female gonocoxites. Very similar to that of *C. myctosyloides* Putzeys.

Variation. Little variation noted in length and shape of elytra and in distinctness of the microreticulation on proepisternum and abdomen.

Distribution. Northern NT, probably also northern WA.

Collecting circumstances. The holotype and one paratype were collected at light near billabongs and ponds.

Clivina ovalipennis Sloane

Fig. 107

Clivina ovalipennis Sloane, 1896a: 244 (non *Clivina ovalipennis* Chaudoir, 1846). – Sloane 1896a: 228, 244; 1905a: 733; Csiki 1927: 509; Moore et al. 1987: 74; Lorenz 2005: 143.

Clivina ovalipennis Sloane, 1905a: 733 (nom. nov. for *Clivina ovalipennis* Sloane, 1896). – Csiki 1927: 509; Moore et al. 1987: 74; Lorenz 2005: 143.

Examined types. Holotype: ♀ (probable, head and abdomen lacking), *C. ovalipennis*, Sl. N. Queensl^d (C.F.) / HOLOYTPE *Clivina ovalipennis* Sl PJD (ANIC).

Type locality. “North Queensland”.

Note. Because the type of *C. ovalipennis* is badly defect and no specimens of similar shape of the elytra have been found in the available material, this species is regarded quite doubtful.

Other material. None.

Diagnosis. Medium sized, black species with piceous legs, trapezoidal prothorax with oblique-convex lateral margin, impunctate proepisternum, elongate, oviform elytra, deep, coarsely punctate elytral striae, and finely microreticulate dorsal surface.

Description

Measurements. Length: c. 12.6 mm; width: 4.05 mm. Ratios. Length/width of pronotum: 1.0; base/apex of pronotum: 1.48; width pronotum/head: ?; length/width of elytra: 1.85; length/width of protibia: ♀: c. 3.4; length/width of metatibia: ♀: c. 6.5.

Colour (Fig. 107). Unicolourous black. Legs piceous.

Head. Lacking.

Pronotum (Fig. 107). Moderately short, strongly narrowed apicad, dorsally gently convex. Lateral margin oblique and slightly convex. Apex gently concave. Marginal channel narrow; median line very shallow, impunctate. Basal sulcus narrow. Anterior marginal seta situated about at apical third. Basal groove shallow, very elongate, linear, impunctate. Disk with some fine, irregularly transverse striae in middle, barely punctate, with very fine but superficial, isodiametric microreticulation, rather glossy.

Elytra (Fig. 107). Soldered together. Rather elongate, rather narrow at base, oval shaped, convex, on disk barely depressed. Basal angle little produced. Striation complete, but 7th stria very weak. Striae

deep, median striae in apical third, lateral striae in apical half fading, apex barely striate. Striae in basal half coarsely punctate. Intervals in basal half convex, impunctate, without transverse striae, with very fine, superficial, isodiametric microreticulation, moderately glossy. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, $< 1.25 \times$ as long as wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, the lateral teeth apparently rather worn. Longitudinal sulcus on upper surface barely indicated; lower surface with a row of 7–8 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of several setae on the dorsal surface; subapical spur elongate. Metatibia elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia. Unknown.

Female gonocoxites. Destroyed.

Variation. Unknown.

Distribution. North QLD, without exact locality.

Collecting circumstances. Not recorded.

Clivina pachysoma, spec. nov.

Figs 43, 73, 108

Examined types. Holotype: ♂, WA: CALM Pilbara Survey 11km ESE Marda Pool, 21°3'20.4"S, 116°16'6"E DRW07, 27.XI.2003–11.V.2004 / CALM PBS00067 (WAM). – Paratypes: 6 ♀♀ (2 defect), WA: CALM Pilbara Survey 11km ESE Marda Pool, 21°3'20.4"S, 116°16'6"E DRW07, 27.XI.2003–11.V.2004 / CALM PBS00067 (CBM, WAM); 1 ♂, WA: CALM Pilbara Survey 6km SE Marda Pool, 21°4'11.8"S, 116°12'15.5"E DRW10, 28.XI.2003–11.V.2004 / CALM PBS00068 (WAM); 1 ♂, 6 ♀♀ (2 defect), WA: CALM Pilbara Survey 11km ESE Marda Pool, 21°3'20.4"S, 116°16'6"E DRW07, 27.XI.2003–11.V.2004 / CALM PBS00067 (CBM, WAM); 2 ♀♀, WA: CALM Pilbara Survey 13km ESE Marda Pool, 21°3'42.9"S, 116°15'54.2"E DRW06, 27.XI.2003–11.V.2004 / CALM PBS00066 (WAM); 3 ♂♂, 2 ♀♀ (2 defect), WA: CALM Pilbara Survey 3.5km S Marda Pool, 21°3'55.9"S, 116°9'1"E DRW11, 28.XI.2003–11.V.2004 / CALM PBS00069 (CBM, WAM); 1 ♂, 4 ♀♀, WA: CALM Pilbara Survey 3.5km N Karratha Station, 20°51'14.1"S, 116°40'7.9"E DRW05, 28.XI.2003–11.V.2004 / CALM PBS00064 (WAM); 8 ♀♀, (3 defect), WA: CALM Pilbara Survey 13km W Wickham, 20°41'18.3"S, 117°0'24.9"E DRC11, 13.XI.2003–9.V.2004 / CALM PBS00059 (CBM, WAM); 2 ♀♀, WA:

CALM Pilbara Survey 53km NNE Whim Creek Hotel, 20°25'48.6"S, 118°3'50.3"E DRE03, 14.XI.2003–12.V.2004 / CALM PBS00060 (CBM, WAM); 6 ♀♀, W-Australia, DRE07, sw. Pt.Hedland, 20.28.54.6S 117.59.35.1E, 15.11.2003–13.5.2004, leg. Guthrie (CBM, WAM); 3 ♀♀, W-Australia, DRC08, w. Roeburne, 20.51.14.5S 117.05.40.2E, 12.11.2003–11.5.2004, leg. Guthrie (WAM); 1 ♀, W-Australia, DRW08, w. Mt.Brockman, 22.34.33.2S 116.22.13.3E, 28.11.2003–11.5.2004, leg. Guthrie (WAM); 1 ♀, W-Australia, MBW08, 11 km N Woodgina, 21°04'18"S 118°40'47"E, 23.9.2005–15.5.2006, CALM PBS01242 (WAM).

Etymology. The name refers to the stout and heavy body.

Diagnosis. Medium sized, black species with wide and shallow, quadrangular clypeal excision, multisulcate head, 7-setose labrum, black legs, very wide, trapezoidal prothorax with very oblique lateral margin, impunctate proepisternum, short and compact, oviform elytra, deep, moderately punctate elytral striae, and obtusely arrow-shaped apex of the aedeagus.

Description

Measurements. Length: 12.0–14.2 mm; width: 3.95–4.9 mm. Ratios. Length/width of pronotum: 0.86–0.90; base/apex of pronotum: 1.50–1.56; width pronotum/head: 1.52–1.59; length/width of elytra: 1.72–1.78; length/width of protibia: ♂: 3.4–3.5, ♀: 3.15–3.2; length/width of metatibia: ♂: 6.7–6.8, ♀: 5.9–6.1.

Colour (Fig. 108). Unicolourous black. Legs black.

Head (Fig. 108). Eye large, laterally well projected, orbit short, very oblique. Clypeus with wide and very shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose. Mandibles short. Clypeus divided from frons by a shallow sulcus; upper surface rather convex, with several transverse sulci, more or less sparsely punctate. Surface without microreticulation, glossy.

Pronotum (Fig. 108). Short and very wide, markedly narrow at apex, strongly narrowed apicad, dorsally rather convex. Lateral margin very oblique but only slightly convex. Apex concave. Marginal channel narrow; median line very fine, impunctate. Basal sulcus narrow. Anterior marginal seta situated behind apical fourth. Basal groove barely indicated. Disk with some fine, irregularly transverse striae in middle, barely punctate, with or without finest traces of isodiametric microreticulation, glossy.

Elytra (Fig. 108). Soldered together. Short and compact, rather wide at base, moderately oval shaped, dorsally convex but on disk slightly de-

pressed. Basal angle little produced. Striation complete, but 7th stria weak. Striae deep, apicad shallower, in basal half more or less coarsely punctate, apicad increasingly impunctate. Intervals slightly convex, impunctate, without transverse striae, without microreticulation, glossy. Epipleura narrow, basal sulcus coarsely punctate.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, c. 1.25 × as long as wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, less so in females. Longitudinal sulcus on upper surface deep; lower surface with a row of 4 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of several setae on the dorsal surface; subapical spur very elongate. Metatibia elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 43). Aedeagus wide, elongate, almost symmetrically narrowed apicad; lower surface in basal third concave, in apical part straight, towards apex curved down. Apex short, rather wide, obtusely arrow-shaped and denticulate at the lower surface, at tip obtusely rounded. Lower surface in apical half gently concave. Both parameres rather elongate, the left one considerably stouter than the right one; both with elongate, narrow, trisetose apical part; setae very short, two setae situated right at tip, one shorter seta close to tip.

Female gonocoxites (Fig. 73). Gonocoxites rather narrow and elongate, little curved, with rather acute apex; with one elongate, stout seta basally at lateral surface and a smaller seta below, three elongate setae on the ventral surface of gonocoxite 1, two setae at middle of the medio-dorsal surface, without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically with three setae.

Variation. Some variation noted in body size and degree of punctuation of the elytral striae.

Distribution. Pilbara, north-western WA.

Collecting circumstances. Almost all specimens were collected in pitfall traps.

Clivina froggatti Sloane

Fig. 109

Clivina froggatti Sloane, 1896b: 278. – Sloane 1916: 604; Csiki 1927: 505; Moore et al. 1987: 71; Lorenz 2005: 143.

Examined types. Lectotype (by present designation): ♀, *C. froggatti*, SI King's Sound / PARATYPE (blue) (ANIC).

Type locality. "Kings Sound", northwestern Australia.

Other material. No additional material available.

Diagnosis. Small, rufo-piceous species with very wide and shallow, clypeal excision, large eye, slightly sulcate head, 5-setose labrum, rufous legs, moderately depressed, apicad slightly narrowed prothorax with slightly oblique lateral margin, impunctate proepisternum, rather short, oviform elytra, deep, punctate elytral striae, and finely microreticulate pronotum but glossy elytra.

Description

Measurements. Length: 7.7 mm; width: 2.3 mm. Ratios. Length/width of pronotum: 1.06; base/apex of pronotum: 1.25; width pronotum/head: 1.37; length/width of elytra: 1.83; length/width of protibia: ♀: 2.5; length/width of metatibia: ♀: 5.7.

Colour (Fig. 109). Rufopiceous. Legs rufous.

Head (Fig. 109). Eye large, laterally well projected, orbit small, very oblique. Clypeus with very wide and shallow, in middle straight excision, though the lateral margins of the excision are very oblique. Labrum 5-setose. Mandibles short. Clypeus divided from frons by a deep sulcus; upper surface rather convex, laterally with some short sulci, anteriorly rather densely, posteriorly sparsely punctate, without perceptible microreticulation, glossy.

Pronotum (Fig. 109). Fairly elongate, wide, with apex, little narrowed apicad, dorsally moderately convex. Lateral margin slightly oblique and very slightly convex. Apex concave. Marginal channel narrow; median line deep, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical fourth. Basal groove very shallow, slightly oblong. Disk with some fine, irregularly transverse striae in middle, finely but densely punctate, with finest and extremely superficial traces of about isodiametric microreticulation, glossy.

Elytra (Fig. 109). Soldered together. Moderately short, rather wide at base, moderately oval shaped, dorsally convex but on disk slightly depressed. Basal angle little produced. Striation complete. Striae deep, apicad barely shallower, rather coarsely punctate, even apicad. Intervals convex, impunctate, without

transverse striae, without microreticulation, glossy. Epipleura narrow, basal sulcus punctate.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral striae, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, c. 1.25× as long as wide. Abdominal sterna impunctate.

Legs. Protibia rather narrow and elongate. Longitudinal sulcus on upper surface deep; lower surface with a row of 5 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of rather few setae on the dorsal surface; subapical spur very elongate. Metatibia moderately elongate, rather sparsely setose. Metatarsus moderately elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia. Unknown.

Female gonocoxites. Not dissected due to the fragility of the specimen.

Variation. Unknown.

Distribution. South-western Kimberleys, northern WA.

Collecting circumstances. Unrecorded.

hackeri subgroup

Diagnosis. Rather small to medium sized species with short and very wide, markedly conical prothorax and short and compact, short-oval elytra; elytral striae deeply impressed; clypeal excision wide and shallow; clypeus usually 7-setose; eye large, usually laterad very much protruded; apex of aedeagus arrow- or club-shaped: metathoracic wings reduced and elytra soldered together. Four species occur in northern Australia.

Clivina hackeri Sloane

Fig. 110

Clivina hackeri Sloane, 1907: 348. – Csiki 1927: 505; Moore et al. 1987: 71; Baehr 1987: 190; Lorenz 2005: 143.

Examined types. Holotype: ♀ (probable, abdomen lacking), Coen 18/1/06 / HOLOTYPE *Clivina hackeri* SI PJD (ANIC). – Paratypes: 2♀♀, Coen District Cape York Queensland H. Hacker / Nat. Mus. Victoria. French's Coll. 5.11.08. / Cotype (blue) / *Clivina hackeri* N. Queensld. CoType / PARATYPE T-16010/11 *Clivina hackeri* Sloane (blue) (NMV).

Type locality. "Coen", North Queensland.

Other material (4 ex.). **QLD:** 1 ♀, Kennedy River, 30 km W of "Fairview", Qld 15°35' 144°03' 24 Dec 1984 G. and A. Daniels / UQIC #90554 (QMB); 2 ♀♀, Coen R, Q. W. D. Dodd (SAMA 25-033672); 1 ♀, Cooktown V. d. P. / Australia. Brit. Mus. 1921–125. / *Clivina hackeri* Sl. Id. by T. g. Sloane / COLLECTIO KAREL KULT COLL.A.DOSTAL, 1999 (CDW).

Diagnosis. Rather small, very compact, black species with wide and shallow, quadrangular clypeal excision, transversely sulcate head, 5- or 7-setose labrum, black legs, remarkably trapezoidal prothorax with very oblique lateral margin, impunctate proepisternum, short, convex, very compact, oviform elytra, and very deep, rather coarsely punctate elytral striae.

Description

Measurements. Length: 8.7–10.4 mm; width: 3.15–3.7 mm. Ratios. Length/width of pronotum: 0.86–0.87; base/apex of pronotum: 1.68–1.92; width pronotum/head: 1.69–1.82; length/width of elytra: 1.53–1.57; length/width of protibia: ♀: 3.35–3.5; length/width of metatibia: ♀: 5.6–5.65.

Colour (Fig. 110). Unicolourous black. Legs black.

Head (Fig. 110). Eye large, laterally well projected, orbit rather short, oblique. Clypeus with wide and very shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose, rarely 5-setose. Mandibles short. Clypeus transversely impressed in middle, divided from frons by a shallow sulcus; upper surface rather convex, more or less densely punctate. Surface with fine but distinct, isodiametric microreticulation, rather dull.

Pronotum (Fig. 110). Short and very wide, markedly narrow at apex, strongly narrowed apicad, dorsally rather convex. Lateral margin very oblique but only slightly convex. Apex slightly concave. Marginal channel narrow; median line very fine, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical third. Basal groove absent. Disk with some fine, irregularly transverse striae in middle, impunctate, with distinct, isodiametric microreticulation, dull.

Elytra (Fig. 110). Soldered together. Short and very compact, rather narrow at base, markedly oval shaped, dorsally remarkably convex. Basal angle little produced. Striation complete, even 7th stria deeply impressed. Striae very deep, apicad little shallower, in basal half or two thirds more or less coarsely punctate, apicad increasingly impunctate. Intervals markedly convex, impunctate, without transverse striae, with distinct, isodiametric microreticulation, dull. 3rd stria commonly unilaterally

with only 3 setiferous punctures. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral striae, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum very short, as long as wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate. Longitudinal sulcus on upper surface deep; lower surface with a row of 4 stout setae along basal part of inner margin. Mesotibia short, dorsal rim markedly crenulate, with two rows of few setae on the dorsal surface; subapical spur very stout. Metatibia elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia. Unknown.

Female gonocoxites. Very similar to those of *C. demarzi* Baehr.

Variation. Considerable variation noted in shape of the pronotum, particularly in relative width of base and apex; also some variation in degree of punctation of the elytral striae, in the number of discal punctures, and the number of labral setae.

Distribution. Northern QLD from base to mid CYP.

Collecting circumstances. Not recorded.

Clivina demarzi Baehr

Figs 44, 74, 111

Clivina demarzi Baehr, 1987: 187. – Lorenz 2005: 142.

Examined types. Holotype: ♂, Austral. North T., Katherine, XII.57, leg. H. Demarz (ZSM). – Paratype: 1 ♀, Austral. North. T., Berry Springs, XII.57, leg. H. Demarz (CBM).

Type localities. “Katherine” and “Berry Springs”, both in northern part of Northern Territory.

Other material (12 ex.). NT: 2 ♂♂, 1 ♀, Australia Darwin 20.VI.1994 (CBM, CHP); 1 ♀, N.T., A. N. Andersen Kakadu Nat. Park Kapalga fire exp’t forest comp’t 8P 11.89 (ANIC); 1 ♀, N.T., A. N. Andersen Kakadu Nat. Park Kapalga fire exp’t forest comp’t 15P 12.93 (ANIC); 2 ♀♀, 12.40 S 132.54 E Jabiru NT 5–9 Jul. 1977 R. Pengilly pitfall trap (NTD); 1 ♀, AUSTRALIA: N.T. Casuarina Beach to Darwin W. D. Sumlin / William D. Sumlin III Entomological Expedition to Australia 1978–1979 (USNM); 1 ♀, 3.6.13 G. F. Hill Koolpinjah Darwin, N.T. / *Clivina hackeri* Sl. Id. by T. G. Sloane (SAMA); 1 ♀, Pt. Darwin Australia / *Clivina hackeri* Sl. Id. by T. G. Sloane / COLLECTIO KAREL KULT COLL.A.DOSTAL, 1989 (CDW); 1 ♀, Pt. Darwin F.E. Dodd / *Clivina hackeri* Sl. / H. J. Carter Coll. P. 20.4.22. (NMV COL-5327); 1 ♀, Pt. Darwin

Dodd 09 / *Clivina hackeri* Sl. Id. by T. G. Sloane / Pres by T G Sloane Esq 12-6-16 (NMV COL-5326).

Diagnosis. Rather small, very compact, black species with wide and shallow, quadrangular clypeal excision, transversely sulcate head, 7-setose labrum, black legs, remarkably trapezoidal prothorax with very oblique lateral margin, impunctate proepisternum, short, convex, very compact, oviform elytra, very deep, rather coarsely punctate elytral striae, very large, foveate discal punctures, and club-shaped apex of the aedeagus.

Description

Measurements. Length: 7.7–9.7 mm; width: 2.75–3.8 mm. Ratios. Length/width of pronotum: 0.84–0.92; base/apex of pronotum: 1.75–1.82; width pronotum/head: 1.72–1.80; length/width of elytra: 1.53–1.64; length/width of protibia: ♂: 3.2–3.25, ♀: 3.0–3.3; length/width of metatibia: ♂: 5.6–5.7, ♀: 5.6–5.7.

Colour (Fig. 111). Unicolourous black. Legs black.

Head (Fig. 111). Eye rather large, laterally well projected, orbit short, oblique. Clypeus with wide and very shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose. Mandibles short. Clypeus more or less distinctly divided from frons by a shallow sulcus; upper surface rather convex, without transverse sulci, sparsely punctate. Surface with fine but distinct, isodiametric microreticulation, dull.

Pronotum (Fig. 111). Short and very wide, markedly narrow at apex, strongly narrowed apicad, dorsally rather depressed. Lateral margin very oblique but only slightly convex. Apex slightly concave. Basal angles angulate but at tip slightly obtuse. Marginal channel narrow; median line very fine, impunctate. Basal sulcus narrow. Anterior marginal seta situated at apical third. Basal groove barely indicated. Disk with some fine, irregularly transverse striae in middle, barely punctate, with distinct, isodiametric microreticulation and dull, or with only traces of microreticulation and rather glossy.

Elytra (Fig. 111). Soldered together. Short and very compact, more or less narrow at base, rather oval shaped, dorsally remarkably convex. Basal angle little produced. Striation complete, even 7th stria deeply impressed. Striae very deep, apicad little shallower, more or less coarsely punctate, apicad increasingly impunctate. Intervals markedly convex, impunctate, without transverse striae, with distinct, isodiametric microreticulation, dull. Setiferous punctures on 3rd stria deep, foveate, rarely unilaterally with 5 punctures. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, as long as wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate. Longitudinal sulcus on upper surface deep; lower surface with a row of 4 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of few setae on the dorsal surface; subapical spur stout. Metatibia elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 44). Aedeagus wide, rather short, asymmetrically narrowed apically; lower surface even near base little concave, then almost straight, but apex suddenly turned down. Apical half of lower surface gently concave. Apex short, markedly club-shaped and denticulate at the lower surface, club short and wide, at tip convex. Both parameres short, the left one considerably stouter than the right one; both with very short, bisetose apical part; both setae situated right at apex, the upper seta being longer than the lower one.

Female gonocoxites (Fig. 74). Gonocoxites narrow and elongate, little curved, with convex apex; with one elongate, stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, two setae at middle of the medio-dorsal surface, without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically with three or four setae.

Variation. Considerable variation noted in body size, shape of prothorax and elytra, degree of microreticulation on the pronotum, punctuation of the elytral striae, and number of discal punctures. The most distinctive difference is the dull resp. quite glossy surface of the pronotum. Because in other characters states the specimens do not significantly differ and because they occur in the same area, this is believed an intraspecific variation.

Distribution. Northern part of NT, from Katherine to Kakadu NP.

Collecting circumstances. Not recorded.

Clivina crassipennis, spec. nov.

Figs 45, 112

Examined types. Holotype: ♂, AUSTRALIA: n WA Kununurra 22.XII.1991-5.I.1992 R.I. Storey / *Clivina* sp. n. near *hackeri* Sl. det. B.P. Moore 1999 (QMT234907). - Paratype: 2 ♀♀, same data (CBM, QDPIB); 1 ♀, AUSTRALIA: W.A. 25.6kmE Kununurra 11 January 1979

W. D. Sumlin / William D. Sumlin III Entomological Expedition to Australia 1978-1979 (USNM); 1 ♀, West. Austr. J. Clark (DEI); 1 ♀, Daly R. N.T. H. Wesselman (SAMA 25-033674).

Etymology. The name refers to the very stout and convex elytra.

Diagnosis. Rather small, very compact, black species with wide and shallow, quadrangular clypeal excision, multistriolate head, 5- or 7-setose labrum, black legs, remarkably trapezoidal prothorax with very oblique lateral margin, markedly striolate pronotum, impunctate proepisternum, short, convex, very compact, oviform elytra, very deep, rather coarsely punctate elytral striae, wider and more convex odd intervals, and wide, arrow-shaped apex of the aedeagus.

Description

Measurements. Length: 8.8-10.1 mm; width: 4.4-4.6 mm. Ratios. Length/width of pronotum: 0.86-0.88; base/apex of pronotum: 1.57-1.70; width pronotum/head: 1.65-1.70; length/width of elytra: 1.61-1.73; length/width of protibia: ♂: 2.75, ♀: 2.8-2.9; length/width of metatibia: ♂: 5.4, ♀: 5.1-5.2.

Colour (Fig. 112). Unicolourous black. Legs black.

Head (Fig. 112). Eye rather large, laterally well projected, orbit short, oblique. Clypeus with wide and very shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose, rarely 5-setose. Mandibles short. Clypeus divided from frons by a sulcus; upper surface rather convex, with transverse sulci and several irregular striae, more or less sparsely punctate. Surface with fine, slightly superficial, isodiametric microreticulation, moderately glossy.

Pronotum (Fig. 112). Short and very wide, markedly narrow at apex, strongly narrowed apically, dorsally rather depressed. Lateral margin very oblique but only slightly convex. Apex slightly concave. Basal angles angulate but at tip slightly obtuse. Marginal channel narrow; median line fine, impunctate. Basal sulcus narrow. Anterior marginal seta situated at or behind apical third. Basal groove barely indicated. Disk with many irregularly transverse and ramified striae, barely punctate, with very distinct, isodiametric microreticulation, markedly dull.

Elytra (Fig. 112). Soldered together. Short and very compact, moderately narrow at base, fairly oval shaped, dorsally remarkably convex, particularly in apical half. Basal angle little produced. Striation complete, even 7th stria deeply impressed. Striae very deep, apical little shallower, more or less coarsely punctate, apical increasingly impunctate. Intervals markedly convex, odd intervals wider than the even

ones, and higher, near apex markedly raised. Apical part remarkably precipitous. Intervals impunctate, with or without fine transverse strioles, with fine, slightly superficial, isodiametric microreticulation, rather glossy. Setiferous punctures on 3rd stria inconspicuous. Epipleura narrow, basal sulcus barely indicated.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral strioles; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, as long as wide. Abdominal sterna impunctate.

Legs. Protibia fairly narrow and elongate, similar in both sexes. Longitudinal sulcus on upper surface deep; lower surface with a row of 4–5 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of few setae on the dorsal surface; subapical spur stout. Metatibia fairly elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 45). Aedeagus rather wide, fairly elongate, slightly asymmetrically narrowed apicad; lower surface in basal half gently concave, then straight, but apical part suddenly curved down. Apical half of lower surface gently concave. Apex short, arrow-shaped, arrow wide and slightly asymmetrically situated, at the lower surface denticulate, at tip convex. Both parameres elongate, the left one considerably stouter than the right one; both with moderately elongate, narrow, bisetose apical part; both setae situated at the very apex, the upper one being slightly longer.

Female gonocoxites. Ver similar to those of *C. demarzi* Baehr.

Variation. Little variation noted in the specimens from northern WA. The female specimen from Daly River has a less triangular pronotum, less distinct strioles on head and pronotum, less distinct microreticulation on the pronotum, and less differently shaped odd elytral intervals. It is tentatively attributed to the species.

Distribution. North-eastern Kimberleys, WA, north-western NT.

Collecting circumstances. Not recorded.

Clivina horaki, spec. nov.

Fig. 113

Examined types. Holotype: ♀, WEST AUSTRALIA 18km NNE of BROOME 17°46.98.1'S 122°17.16.2'E 17.-26.I.2012 J.Horák leg. (WAM).

Etymology. The name is a patronym and refers to the collector, J. Horák.

Diagnosis. Rather small, very compact, black species with wide and shallow, quadrangular clypeal excision, slightly sulcate head, 7-setose labrum, black legs, remarkably trapezoidal prothorax with very oblique lateral margin, impunctate proepisternum, short, remarkably convex, very compact, oviform elytra, and very deep, odd arranged, moderately punctate elytral striae.

Description

Measurements. Length: 8.4 mm; width: 2.9 mm. Ratios. Length/width of pronotum: 0.87; base/apex of pronotum: 1.70; width pronotum/head: 1.57; length/width of elytra: 1.67; length/width of protibia: ♀: 3.1; length/width of metatibia: ♀: 6.4.

Colour (Fig. 113). Unicolourous black. Legs black, only tarsi rufous.

Head (Fig. 113). Eye large, laterally markedly projected, orbit very short, very oblique. Clypeus with wide and very shallow, almost quadrangular excision, though the lateral margins of the excision oblique. Labrum 7-setose, but the setae median of the lateral ones very short *resp.* even absent. Mandibles short. Clypeus divided from frons by a sulcus; upper surface rather convex, laterally with some fine transverse sulci, rather sparsely punctate. Middle of frons with an oval-shaped impression. Surface with traces of isodiametric microreticulation that is more distinct on clypeus and anterior part of frons, rather glossy.

Pronotum (Fig. 113). Short and very wide, strongly narrowed apicad, dorsally very convex. Lateral margin very oblique and moderately convex. Apex concave. Marginal channel narrow; median line very fine, impunctate. Basal sulcus narrow. Anterior marginal seta situated slightly in front of apical third. Basal groove very shallow, linear, impunctate. Disk with few very fine, irregularly transverse strioles in middle, sparsely and extremely finely punctate, with fine and somewhat superficial, but distinct isodiametric microreticulation, moderately glossy.

Elytra (Fig. 113). Soldered together. Short and compact, rather narrow at base, oval shaped, dorsally remarkably convex. Basal angle little produced. Striation complete, but 7th stria weak. Striae deep, apicad not shallower, moderately coarsely punctate. Intervals very convex, impunctate, without transverse strioles, without microreticulation, glossy. Striation unique: 4th and 5th striae combined at basal two fifth, and interrupted. 6th stria oblique in apical half and apparently becoming the 4th stria. 5th and 6th striae again appearing in apical third, but united at their anterior and posterior ends. 3rd and 7th intervals

towards apex more convex than the other intervals, the 7th interval enclosing all others at the very apex. Epipleura narrow, basal sulcus coarsely punctate.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, about as long as wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate. Longitudinal sulcus on upper surface fairly deep; lower surface with a row of 4 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of few setae on the dorsal surface; subapical spur stout. Metatibia elongate, rather sparsely setose. Metatarsus elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia. Unknown.

Female gonocoxites. Very similar to those of *C. demarzi* Baehr.

Variation. Unknown.

Distribution. South-western Kimberley Division, northern WA.

Collecting circumstances. Not recorded.

darwini subgroup

Diagnosis. Small species with short, rather conical prothorax and moderately elongate, oval-shaped elytra; clypeal excision wide and shallow; clypeus 5-setose; eye laterad little protruded; apex of aedeagus claw-shaped; metathoracic wings reduced and elytra soldered together. The three species occur in northern NT.

Clivina darwini Sloane

Figs 46, 75, 114

Clivina darwini Sloane, 1916: 604. – Csiki 1927: 501; Moore et al. 1987: 69; Lorenz 2005: 142.

Examined types. Holotype: fragment (not sexed, only hind body left), Pt. Darwin pond. (?) '08 / *Clivina darwini*. Sl. Type / HOLOTYPE *Clivina darwini* Sl PJD (ANIC).

Type locality. "Port Darwin", Northern Territory.

Other material (9 ex.). **NT:** 1 ♂, 1 ♀, 12.40S 132.00E NT Wildman R. Cashew Farm 21 Dec. 1989 W.Houston ex light intercept trap (CBM, ANIC); 1 ♂, N.T., A.N. Andersen Kakadu Nat. Park Kapalga-A2 (11) 6-2-87 pitfall (ANIC); 1 ♀, N.T.O. Price Douglas Daly N.T. PWCNT Study Feb 1999 (ANIC); 2 ♂♂ (1 defect), Pt. Darwin W.Dodd 09 (ANIC); 1 ♀, Pt. Darwin W.Dodd 09 / *Clivina darwini*

Sl. Id. by T. G. Sloane / Australia. Brit. Mus. 1921-125. (NHM); 1 ♂, 1 ♀, AUSTRALIA / *Darwini* Sl. det. K. Kult / COLLECTIO KAREL KULT COLL.A.DOSTAL, 1999 (CDW).

Diagnosis. Small, rufo-piceous species with very wide and shallow, clypeal excision, rather small eye, barely sulcate head, 5-setose labrum, rufous legs, depressed, apical little narrowed prothorax with slightly oblique lateral margin, impunctate proepisternum, fairly elongate, oviform elytra, deep, punctate elytral striae, glossy surface, and claw-shaped apex of the aedeagus.

Description

Measurements. Length: 5.7-6.5 mm; width: 1.65-1.85 mm. Ratios. Length/width of pronotum: 1.05-1.09; base/apex of pronotum: 1.27-1.29; width pronotum/head: 1.37-1.45; length/width of elytra: 1.86-1.94; length/width of protibia: ♂: 3.1-3.2, ♀: 2.9-3.0; length/width of metatibia: ♂: 5.5-5.6, ♀: 5.25-5.3.

Colour (Fig. 114). Rufo-piceous. Legs rufous.

Head (Fig. 114). Eye comparatively small, laterally well projected, but orbit elongate, c. 2/5 of length of eye, oblique. Clypeus with very wide and shallow, in middle straight excision, though the lateral margins of the excision are very oblique. Labrum 5-setose. Mandibles short. Clypeus divided from frons by a deep sulcus; upper surface rather convex, almost esulcate, sparsely punctate, without or with fine traces of isodiametric microreticulation, glossy.

Pronotum (Fig. 114). Fairly elongate, wide, wide at apex, slightly narrowed apical, dorsally rather depressed. Lateral margin slightly oblique and very slightly convex. Apex concave. Marginal channel narrow; median line fine but distinct, impunctate. Basal sulcus narrow. Anterior marginal seta situated at or behind apical fourth, according to length of prothorax. Basal groove barely indicated. Disk with some fine, irregularly transverse striae in middle, sparsely and finely punctate, without microreticulation, glossy.

Elytra (Fig. 114). Soldered together. Moderately short, rather wide at base, moderately oval shaped, dorsally convex but on disk slightly depressed. Basal angle little produced. Striation complete. Striae deep, apical barely shallower, moderately punctate, even apical. Intervals convex, impunctate, without transverse striae, without microreticulation, glossy. Epipleura narrow, basal sulcus barely perceptible.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral striae, with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, c. 1.25× as long as wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, slightly less so in females. Longitudinal sulcus on upper surface deep; lower surface with a row of 4–5 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim crenulate, with two rows of few setae on the dorsal surface; subapical spur very elongate. Metatibia moderately elongate, rather sparsely setose. Metatarsus moderately elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 46). Aedeagus very wide, fairly elongate, very asymmetrically narrowed apically; lower surface in basal third gently concave, then almost straight, near apex suddenly angulate. Apical half of lower surface gently concave. Apical part very narrow, remarkably deeply concave at the left side; apex elongate, directed left, at tip claw-shaped. Both parameres very short and stout, the left one considerably stouter than the right one; both with very short, acute, bisetose apical part; setae situated at the very apex, the upper seta being longer than the lower one. Both parameres longitudinally striped.

Female gonocoxites (Fig. 75). Gonocoxites narrow and elongate, little curved, with fairly acute apex; with one elongate, stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1 and one seta in the middle of gonocoxite 2, four setae at middle of the medio-dorsal surface, without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically with one seta.

Variation. Some variation noted in length of pronotum and elytra.

Distribution. Northern part of NT.

Collecting circumstances. Largely unrecorded, but two specimens were collected in light intercept trap, one in pitfall trap.

Clivina macleayi Sloane
Figs 47, 115

Clivina macleayi Sloane, 1896a: 236. – Sloane 1896a: 227; 1896b: 279; Csiki 1927: 507; Moore et al. 1987: 72; Lorenz 2005: 143.

Examined types. Lectotype (by present designation): ♂, Roper Riv. / 33 / *Clivina macleayi*, Sl. / PARATYPE (blue) (ANIC).

Type locality. “Roper River”, Northern Territory.

Other material (5 ex.). NT: 2 ♀♀ (1 defect); E Alligator Riv. NT 9.XII.82. Walford-Huggins / WALFORD-HUGGINS COLLECTION Carnegie Museum Accession 35338 / *Clivina macleayi* Sloane (Series det. by A. Walford-Huggins) (CMP); 1 ♀, E Alligator Riv. NT 9.XII.82. Walford-Huggins / *Clivina macleayi* Sl. det.

B. P. Moore '86 (ANIC); 1 ♂, Burnside Stn. Brocks Creek N.T. 23/5/32 T- Campbell (ANIC); 1 ♀, *Clivina macleayi* Sl. N. Territory (ANIC-MMS).

Diagnosis. Small, black species with very wide and shallow, clypeal excision, strongly sulcate head, 5-setose labrum, black legs, short, moderately convex, apicad little narrowed prothorax with slightly oblique lateral margin, impunctate proepisternum, rather short, slightly oviform elytra, deep, impunctate elytral striae, glossy surface, and claw-shaped apex of the aedeagus.

Description

Measurements. Length: 7.8–8.8 mm; width: 2.25–2.65 mm. Ratios. Length/width of pronotum: 0.97–0.98; base/apex of pronotum: 1.25–1.33; width pronotum/head: 1.44–1.48; length/width of elytra: 1.82–1.90; length/width of protibia: ♂: 3.25–3.3, ♀: 2.75–2.9; length/width of metatibia: ♂: 5.2, ♀: 5.0–5.1.

Colour (Fig. 115). Black. Legs dark piceous to black.

Head (Fig. 115). Short and wide. Eye comparatively small, laterally well projected, but orbit elongate, c. $\frac{2}{5}$ of length of eye, oblique. Clypeus with wide and very shallow, in middle straight excision, though the lateral margins of the excision are very oblique. Labrum 5-setose. Mandibles short. Clypeus divided from frons by a deep sulcus; upper surface rather convex, with markedly raised temporal ridge and a deep sulcus inside, and a mediad and posteriad incurved sulcus on either side, which meets in the middle in a longitudinal sulcus. Surface sparsely punctate, without or with finest traces of isodiametric microreticulation, glossy.

Pronotum (Fig. 115). Rather short, wide, wide at apex, slightly narrowed apicad, dorsally gently convex. Lateral margin slightly oblique and very slightly convex. Apex concave. Marginal channel narrow; median line rather deep, impunctate. Basal sulcus narrow. Anterior marginal seta situated at or slightly in front of apical third. Basal groove barely indicated. Disk with some fine, irregularly transverse striae in middle, very sparsely, finely punctate, with more or less distinct, finest and superficial traces of isodiametric microreticulation, glossy.

Elytra (Fig. 115). Soldered together. Moderately short, rather wide at base, moderately oval shaped, dorsally convex but on disk slightly depressed. Basal angle little produced. Striation complete. Striae deep, apicad barely shallower, impunctate. Intervals convex, impunctate, without transverse striae, without or with very fine, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus barely perceptible.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum short, slightly $<1.25\times$ as long as wide. Abdominal sterna impunctate.

Legs. Protibia narrow and elongate, slightly less so in females. Longitudinal sulcus on upper surface deep; lower surface with a row of 5–6 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim strongly crenulate, with two rows of few setae on the dorsal surface; subapical spur very elongate. Metatibia moderately elongate, rather sparsely setose. Metatarsus moderately elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 47). Aedeagus moderately wide, rather elongate, slightly asymmetrically narrowed apicad; lower surface near base concave, then straight, near apex suddenly angulate. Apical half of lower surface gently concave. Apical part narrow, almost regularly triangular; apex elongate, narrow, straight, but apicad directed left, at tip claw-shaped, tip acute. Both parameres moderately elongate, the left one considerably stouter than the right one; both with very short, acute, bisetose apical part; setae remarkably elongate; the longer seta situated at the very apex, the shorter one at the lower surface near the apex.

Female gonocoxites. Very similar to those of *C. horneri*, spec. nov.

Variation. Some variation noted in shape of pronotum, length of elytra, and degree of microreticulation on pronotum and elytra.

Distribution. Northern part of NT.

Collecting circumstances. Not recorded.

Clivina horneri, spec. nov.

Figs 48, 76, 116

Examined types. Holotype: ♂, N.T. Murgella 11.28S 132.51E 2–6 Feb. 1987 pitfall trap P. Horner / burnt *Eucalyptus tetradonta* forest (NTD). – Paratypes: 3 ♂♂, 5 ♀♀, same data (CBM, NTD); 3 ♀♀, Murgella 11.34S 132.52E 3–7 Feb. 1987 pitfall trap P. Horner / burnt *Eucalyptus tetradonta* forest (NTD); 2 ♀♀, Murgella 11.34S 132.52E 30 Jan.–3 Feb. 1987 pitfall trap P. Horner / unburnt *Eucalyptus tetradonta* forest (NTD); 1 ♀, 11.09S 132.09 E Black Point Coburg Pen. N.T. 15–23. Feb 1977 T.A. Weir (ANIC); 1 ♂ (defect), 1 ♀, N.T., A. N. Kakadu Nat. Park Kapalea-B1 (10) 7-1-86 Pitfall (ANIC).

Etymology. The name is a patronym and refers to the collector, P. Horner.

Diagnosis. Small, black species with very wide and shallow, clypeal excision, not sulcate head, 5-setose labrum, black legs, moderately elongate, rather depressed, apicad rather narrowed prothorax with oblique lateral margin, impunctate proepisternum, rather short, slightly oviform elytra, deep, impunctate elytral striae, glossy surface, and claw-shaped apex of the aedeagus.

Description

Measurements. Length: 7.7–9.1 mm; width: 2.2–2.6 mm. Ratios. Length/width of pronotum: 1.02–1.07; base/apex of pronotum: 1.32–1.40; width pronotum/head: 1.49–1.63; length/width of elytra: 1.89–1.91; length/width of protibia: ♂: 3.25–3.4, ♀: 2.7–3.05; length/width of metatibia: ♂: 5.35–5.5, ♀: 5.2–5.3.

Colour (Fig. 116). Black. Legs dark piceous to black.

Head (Fig. 116). Short and wide. Eye comparatively small, laterally well projected, but orbit elongate, c. $\frac{2}{5}$ of length of eye, oblique. Clypeus with wide and very shallow, in middle straight excision, though the lateral margins of the excision are very oblique. Labrum 5-setose. Mandibles short. Clypeus only laterally divided from frons by a shallow impression; upper surface rather convex, with moderately raised temporal ridge, barely sulcate. Surface sparsely punctate, without or with finest traces of isodiametric microreticulation, glossy.

Pronotum (Fig. 116). Fairly elongate, wide, narrow at apex, considerably narrowed apicad, dorsally gently convex. Lateral margin oblique, straight. Apex concave. Marginal channel narrow; median line rather deep, impunctate. Basal sulcus narrow. Anterior marginal seta situated at or slightly in front of apical third. Basal groove barely indicated. Disk with some fine, irregularly transverse striae in middle, very sparsely, finely punctate, without or with finest and very superficial traces of isodiametric microreticulation, glossy.

Elytra (Fig. 116). Soldered together. Moderately short, rather wide at base, moderately oval shaped, dorsally convex but disk slightly depressed. Basal angle little produced. Striation complete. Striae deep, apicad barely shallower, impunctate. Intervals convex, impunctate, without transverse striae, without or with very fine, superficial, isodiametric microreticulation, glossy. Epipleura narrow, basal sulcus barely perceptible.

Metathoracic wings. Reduced.

Lower surface. Proepisternum impunctate, with some fine dorso-ventral striae; with faint isodiametric microreticulation. The whole lower surface with fine, isodiametric microreticulation. Metepisternum

short, slightly $<1.25\times$ as long as wide. Abdominal sterna impunctate.

Legs. Protibia rather narrow and elongate, slightly less so in females. Longitudinal sulcus on upper surface rather shallow; lower surface with a row of 5–6 stout setae along basal part of inner margin. Mesotibia rather short, dorsal rim strongly crenulate, with two rows of few setae on the dorsal surface; subapical spur very elongate. Metatibia moderately elongate, rather sparsely setose. Metatarsus moderately elongate, metatarsomere 1 slightly shorter than the following three tarsomeres.

Male genitalia (Fig. 48). Aedeagus wide, rather elongate, very asymmetrically narrowed apicad; lower surface gently concave, near apex suddenly angulate. Apical half of lower surface slightly concave. Apical part very narrow, remarkably deeply concave at the left side; apex elongate, triangular, markedly directed left, at tip claw-shaped, tip acute. Both parameres very short and stout, the left one considerably stouter than the right one; both with extremely short, acute, bisetose apical part; the longer seta situated at the very apex, the shorter one at the lower surface near the apex.

Female gonocoxites (Fig. 76). Gonocoxites wide and short, little curved, with obtuse apex; with one elongate, stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface of gonocoxite 1, three setae at middle of the medio-dorsal surface, without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically with one seta.

Variation. Some variation noted in body size, length of prothorax, and degree of microreticulation of the surface.

Distribution. Kakadu NP and Cobourg Peninsula, northernmost NT.

Collecting circumstances. Most specimens were collected in “pitfall trap / burnt *Eucalyptus tetradonta* forest”.

New species from groups mentioned in parts 1 and 2 of the revision

Some new species belonging to species groups mentioned in parts 1 and 2 of the revision, which could not be included in those parts, are subsequently described. For these species the respective parts of the key in part 2 are repeated and expanded.

sulcaticeps group

Clivina vixsulcata, spec. nov.

Figs 77, 133

Examined types. Holotype: ♀, AUS15, QLD32, Morehead R. c. 100 km nw. Laura, 45m, 15°01'33.4"S, 143°40'01.1"E, 4.5.2015, M.Baehr (QMT234908).

Diagnosis. Distinguished from the other species of the *sulcaticeps* group by combination of large body size, short and wide prothorax, and lesser number of frontal sulci (c. 10).

Etymology. The name refers to the comparatively low number of frontal sulci.

Description

Measurements. Length: 11.4 mm; width: 3.65 mm. Ratios. Length/width of pronotum: 1.18; base/apex of pronotum: 1.36; width pronotum/head: 1.37; length/width of elytra: 2.42; length/width of protibia: 2.0; length/width of metatibia: 5.4.

Colour (Fig. 133). Black, labrum -piceous, palpi and antenna rufous, lower surface almost black, anterior leg black, median and posterior legs rufous.

Head (Fig. 133). Moderately narrow. Frons convex, upper surface of head behind clypeus with c. 10 moderately coarse, somewhat irregular, longitudinal ridges and sulci. Paraorbital ridge elongate and coarse, at posterior end even slightly raised, anteriorly united with the sharp ridge on the supraantennal plate, but with shallow interruption. Paraorbital sulcus inside of paraorbital ridge elongate, deep, linear. Eye moderately large, laterad fairly produced, orbit short, oblique. Clypeus gently concave, no interruption between central part and wing of clypeus visible, wing obtusely quadrangular but slightly oblique, faintly projected, laterally slightly oblique; with a slight incision between wing and supraantennal plate. Supraantennal plate laterally gently convex, with a conspicuous, sharp, elongate ridge. Crescent-shaped ridge on base of clypeus very distinct, wide, almost transverse, with a deep sulcus behind. Laterally of ridge with a deep, semicircular furrow that separates the lateral plate behind from clypeus and anterior part of frons. Labrum straight, 5-setose. Mandible elongate, acute, markedly curved, right mandible not carinate in middle. Mentum with elongate, triangular, acute tooth. Base of mentum 6-setose, setae on mentum very elongate. Antenna short, median antennomeres slightly wider than long. Upper surface impunctate, without visible microreticulation, surface moderately glossy.

Pronotum (Fig. 133). Elongate, dorsally very convex, markedly narrowed apicad, decidedly

conical, but the very apex barely incurved. Lateral margin barely incised at apical third. Basal angle completely rounded, without any interruption or boss at angle. Apical angle distinctly projected, acute, apex gently concave, somewhat v-shaped, not margined. Lateral margin distinct, lateral sulcus anteriorly well developed, deep, becoming shallower towards base. Anterior transverse sulcus and median line both deeply impressed, anterior sulcus slightly removed from apex. Basal sulcus narrow and rather shallow. Anterior marginal seta situated about at apical fifth, posterior marginal seta situated slightly inside behind the basal angle. Basal groove oblong, shallow but posteriorly deeper, slightly oblique. Dorsal surface with finest traces only of extremely shallow transverse furrows, without perceptible microreticulation, but with extremely, almost invisible, sparse punctures. Proepisternum not visible behind basal angle.

Elytra. Elongate and parallel-sided, dorsally convex, very gently oblique to the not produced basal angle. 4th stria meeting 5th stria by a short transverse ridge. Striae complete, deep, punctate-crenulate. Intervals convex, very glossy, without any microreticulation, with extremely fine, almost invisible, very sparse punctures. 7th interval gently carinate behind humerus. 3rd stria 4-setose. Epipleura narrow, basally with an elongate sulcus consisting of several coarse punctures.

Lower surface. Proepisternum densely and coarsely punctate, also with some irregular, short transverse striae, with distinct isodiametric microreticulation. Prosternum with dense though slightly finer microreticulation, in particular laterally behind base rather rugose, in basal part also coarsely punctate. Prosternal process wide, not bordered, intercoxal part fairly wide. Metepisternum very elongate, >3× as long as wide, in anterior half sparsely but coarsely punctate. Abdominal sterna with fine microreticulation but laterally coarsely punctate.

Legs. Profemur elongate, upper margin little convex, lower surface depressed, posteriorly slightly carinate; posterior surface with two elongate ridges and deep elongate sulci between. Protibia short and very wide; irregularly 4-dentate though the upper tooth only boss-like; teeth elongate in comparison to tibia though clumsy; longitudinal sulcus on upper surface elongate but shallow; lower surface depressed, smooth, but with isodiametric microreticulation, with a longitudinal ridge basally near inner margin, and a very stout transverse ridge also near inner margin in middle, and with a row of 6 stout setae along basal part of inner margin. Mesotibia

stout, dorsal rim strongly crenulate, with a row of 4–5 very stout setae in apical part, a series of setae along median surface, with elongate and very stout subapical spur, apex posteriorly slightly produced. Metatibia fairly elongate, rather sparsely setose, with a row of c. 5 setae in apical half of lateral surface, without or with a single seta on median surface, and with markedly elongate apical spur. Metatarsomere 1 about as long as the following two tarsomeres.

Male genitalia. Unknown.

Female gonocoxites (Fig. 77). Gonocoxites narrow and elongate, little curved, with rather acute apex; with one very elongate, fairly stout seta basally at lateral surface and a smaller seta below, two elongate setae on the ventral surface, two elongate setae at middle of medio-dorsal surface, but without a nematiform seta near apex. Lateral plate basally with one elongate seta, apically with four shorter setae.

Variation. Unknown.

Distribution. Lower Cape York Peninsula, north-eastern QLD. Known only from type locality.

Collecting circumstances. Holotype collected at light near the bank of Morehead River.

Revised key to the species of the *sulciceps* group of the genus *Clivina*

2. Body size smaller, <9.5 mm; eye very depressed, laterad little produced. 3a.
- Body size larger, >11.4 mm; eye less depressed, laterad distinctly produced (Fig. 133). 3.
3. Head with c. 10 sulci; pronotum with wider base, ratio width base/apex 1.36 (Fig. 133); n.QLD: CYP. *vixsulcata*, spec. nov.
- Head with c. 14 sulci; pronotum with narrower base, ratio width base/apex 1.10. ne.NT.
..... *weanyanae* Baehr, 2015
- 3a. Head and anterior half of pronotum not microreticulate, surface glossy; elytra without traces of microreticulation; size generally smaller, body length 6.5–8.4 mm; head with 8–12 sulci. n.NT.
..... *sulciceps* Sloane, 1923
- Head and anterior half of pronotum finely, distinctly microreticulate, surface dull; elytra with traces of microreticulation; size larger, body length 9.5 mm; head with c. 14 sulci. ne.QLD.
..... *densesulcata* Baehr, 2008

emarginata group

semirubra subgroup

Diagnosis. Distinguished from other subgroups of the *emarginata* group by combination of lobate but not dentate posterior margin of profemur, narrow basal sulcus of pronotum, short, dorsally convex prothorax, and punctate head; and from the most similar *lobipes* subgroup by wide head, 5-setose labrum, very parallel-sided prothorax, shorter metatibia, and spatulate, laterally dentate apex of the aedeagus.

Distribution. The single species *C. semirubra*, spec. nov. from north-western Queensland.

Clivina semirubra, spec. nov.

Figs 49, 117

Examined types. Holotype: ♂, AUS15, QLD13, Flinders R. 37 km wsw. Normanton, 12 m, 17°52'35.4"S, 140°47'06.2"E, 18.4.2015, M.Baehr (QMT234909). – Paratypes: 3 ♂♂, 3 ♀♀, same data (CBM, CBP, CDW).

Diagnosis. Fairly large, elongate and parallel-sided, dorsally moderately convex species, with black head and pronotum but rufous elytra, 5-setose labrum, and spatulate, laterally dentate apex of the aedeagus.

Etymology. The name refers to the colouration: dark head and pronotum, rufous elytra.

Description

Measurements. Length: 6.9–7.7 mm; width: 1.75–2.0 mm. Ratios. Length/width of pronotum: 1.05–1.07; base/apex of pronotum: 1.10–1.13; width pronotum/head: 1.15–1.19; length/width of elytra: 2.14–2.19; length/width of protibia: 2.45–2.6; length/width of metatibia: 5.2–5.4.

Colour (Fig. 117). Head and pronotum black, elytra more or less dark rufous. Palpi and antenna more or less pale rufous, anterior leg dark piceous, median and posterior legs rufous, but tibiae slightly darker than femora.

Head (Fig. 117). Wide, dorsally gently convex, quite even. Frontal sulcus deep, sinuate, punctate. Eye large, laterally well projected, orbit very short, forming an almost right angle with neck. Labrum 5-setose. Clypeus in middle gently concave, coarsely margined, with distinct though obtuse lateral tooth. Wing of clypeus distinctly separated from centre, moderately protruded, obtusely quadrangular, not surpassing the clypeal tooth, bearing a shallow incision between wing and supraantennal plate. Crescent-shaped ridge on clypeus shallow. Antenna short, median antennomeres slightly wider than long. Clypeus more or less distinctly divided from

frons, frons with a distinct, circular to slightly longitudinal median fovea, also with a lateral, slightly incurved sulcus. Surface of frons gently raised and almost even. Clypeal suture, median fovea and lateral sulcus coarsely punctate, posterior part of frons more sparsely punctate. Microreticulation absent, surface glossy.

Pronotum (Fig. 117). Moderately elongate, wide, laterally parallel, dorsally convex, not narrowed apicad. Lateral margin straight, usually slightly incised at apical third. Basal angle with a very slight incision and a faint protuberance. Apical angle not produced, apex almost straight, not margined. Anterior transverse sulcus and median line deeply impressed, impunctate. Basal sulcus narrow. Anterior marginal seta situated at very close to apex. Basal groove short, rather shallow, somewhat irregular, coarsely punctate. Disk on either side coarsely punctate in a longitudinal stripe; without microreticulation except near base, glossy.

Elytra (Fig. 117). Elongate, parallel-sided, barely widened apicad, convex but dorsally somewhat depressed, basal angle not produced. Striae deep, barely weaker laterally and towards apex, coarsely punctate-crenulate. Intervals convex and with fine transverse wrinkles, impunctate, without microreticulation, glossy. Epipleura narrow, basally with few punctures or a shallow sulcus.

Lower surface. Proepisternum impunctate, with many coarse transverse striae, with distinct, rugose, isodiametric microreticulation, dull. Prosternum microreticulate but almost impunctate, in anterior part rugose. Metasternum with more or less dense transverse striae. Metepisternum elongate, >2.5× as long as wide, with a shallow, longitudinal, punctate furrow and some transverse striae. Abdominal sterna impunctate, with isodiametric microreticulation which is more superficial at apex.

Legs. Profemur stout, moderately wide, upper margin convex, lower surface depressed, with angulate anterior margin; posterior margin well produced and evenly convex in middle. Protibia wide, 4-dentate but 4th tooth small, other teeth elongate; longitudinal sulcus on upper surface distinct. Metatibia moderately elongate. 1st tarsomere of metatarsus shorter than the following three tarsomeres.

Male genitalia (Fig. 49). Aedeagus rather wide, moderately elongate, asymmetrically narrowed apicad; lower surface concave throughout. Apex rather wide, spatulate and obtusely arrow-shaped, laterally and at its lower surface dentate, tip obtusely rounded. Internal sac in apical third with three large, denticulate and rather sclerotized folds. Both parameres large and stout, the left one considerably stouter than the right one; both with short but acute, aetose apex.

Female gonocoxites. Very similar to those of *C. punctaticeps* Putzeys, see fig. 157 in Baehr (2015).

Variation. Little variation noted, apart from some variation of density of punctuation of head and pronotum.

Distribution. North-western QLD. Known only from type locality.

Collecting circumstances. Collected at light at the bank of Flinders River.

Recognition

According to shape of profemur and narrow basal sulcus of the pronotum couplet 55. in the key in Baehr (2015) is reached, which has to be changed as below:

55. Labrum 5-setose; body size large, length >6.9 mm **and** elytra elongate, ratio l/w >2.14 **and** elytra without dark spot **and** aedeagus with spatulate, laterally dentate apex (Fig. 49). nw.QLD.
..... *semirubra*, spec. nov.

– Labrum 7-setose, not all other character states present together. 55a.

55a. = 55. in Baehr (2015).

heterogena group

oodnadattae subgroup

Clivina infans, spec. nov.

Figs 50, 118

Examined types. Holotype: ♂, AUS15, QLD13, Flinders R. 37 km wsw. Normanton, 12 m, 17°52'35.4"S, 140°47'06.2"E, 18.4.2015, M.Baehr (QMT234910). – Paratype: 1 ♂, same data (CBM).

Diagnosis. Small, rufous species with dark median elytral spot, large, protruded eye and short orbit, short, faintly microreticulate pronotum and elytra, and very narrow apical part of the aedeagus and small, hook-shaped apex. Distinguished from other species of the group by small size and structure of the aedeagus. Distinguished from *C. communis* Baehr, 2015 which has a quite similar aedeagus, by lesser size and presence of microreticulation.

Etymology. The name refers to the small size of the species as compared with its nearest relatives.

Description

Measurements. Length: 4.2–4.3 mm; width: 1.2–1.25 mm. Ratios. Length/width of pronotum: 1.0;

base/apex of pronotum: 1.24; width pronotum/head: 1.23–1.27; length/width of elytra: 1.98–2.0; length/width of protibia: 2.6–2.7; length/width of metatibia: 5.4–5.5.

Colour (Fig. 118). Upper surface rufous, posterior part of head in the holotype slightly darker; elytra with a sutural spot which covers three median intervals. Palpi and antenna pale red, legs yellow, the anterior leg slightly darker. Under surface dirty yellow to red.

Head (Fig. 118). Rather short and wide, dorsally gently convex, slightly uneven. Frontal sulcus rather deep, sinuate, barely punctate. Eye large, laterally well projected, orbit short, almost perpendicular. Clypeus in middle almost straight, coarsely margined, with rather short, obtuse lateral tooth that barely surpasses the wing. Wing of clypeus well separated from centre, rounded, bearing a distinct incision between wing and supraantennal plate. Crescent-shaped ridge on clypeus barely indicated. Antenna short, median antennomeres globular, slightly wider than long. Clypeus barely divided from frons, frons with an about circular, fairly deep median fovea, surface of frons gently raised, even. Surface sparsely punctate in and around the frontal fovea, punctures moderately coarse, microreticulation absent, surface glossy.

Pronotum (Fig. 118). Short and wide, slightly narrowed apicad, lateral margins straight but faintly oblique, barely incised at apical third, dorsal surface rather convex. Basal angle with distinct protuberance and incision. Apical angle little produced, apex almost straight, not margined. Anterior transverse sulcus well impressed, situated close to apex, impunctate. Median line fairly deep, barely crenulate. Basal sulcus narrow. Anterior marginal seta situated at apical fourth. Basal groove very shallow, short. Dorsal surface in middle with several fine, irregular, transverse striae, impunctate, with fine, rather superficial, isodiametric microreticulation, moderately glossy.

Elytra (Fig. 118). Rather short, barely widened apicad, convex but dorsally depressed, slightly incurved to the not produced basal angle. Lateral margin in basal fourth barely concave. Striae deep, barely weaker laterally and towards apex, rather coarsely punctate. Intervals convex, with sparse, fine transverse wrinkles, impunctate, with fine, superficial, isodiametric microreticulation, rather glossy. Epipleura basally with some coarse punctures.

Lower surface. Proepisternum impunctate, with rather fine transverse striae, with distinct isodiametric microreticulation, dull. Prosternum finely microreticulate but almost impunctate, in anterior part slightly rugose. Metasternum with fine transverse striae. Metepisternum elongate, c. 2× as long as

wide, with a slightly punctate furrow. Abdominal sterna impunctate, with isodiametric microreticulation which is more superficial at apex.

Legs. Profemur fairly stout, moderately wide, upper margin convex, lower surface depressed, with angulate anterior margin. Protibia moderately elongate; 4-dentate but 4th tooth small, other teeth elongate; longitudinal sulcus on upper surface shallow. Metatibia fairly elongate. 1st tarsomere of metatarsus shorter than the following three tarsomeres.

Male genitalia (Fig. 50). Aedeagus rather narrow, fairly elongate, strongly narrowed apicad; lower surface gently but evenly concave. Apical part almost symmetric; apex straight, elongate, very narrow, slightly widened near tip, shortly hooked. Internal sac in apical third with three large, denticulate and rather sclerotized folds. Both parameres short and very stout, the left one considerably stouter than the narrower right one; both with extremely short, at tip acute acute, asetose apical part.

Female gonocoxites. Unknown.

Variation. Apart from some variation of colour which partly may be due to age of specimens, little variation noted.

Distribution. North-western QLD. Known only from type locality.

Collecting circumstances. Collected at light at the bank of Flinders River.

Recognition

According to body size, length of elytra, presence of microreticulation on pronotum and elytra, and shape of aedeagus couplet 120 in the key in Baehr (2015) is reached which has to be changed as below:

- 120. Comparatively small species, body length usually <4.5 mm, when larger, either eye laterad little protruded and orbit distinct and oblique, or pronotum and elytra microreticulate and apex of aedeagus unarmed (when doubtful, try both couplets); elytra commonly rather depressed. 121.
- Usually larger, less depressed species, body length usually >5 mm; eye laterad protruded and orbit very short, perpendicular, or if orbit more or less oblique, body size large, >5.3 mm; apex of aedeagus almost always lancet-shaped or denticulate. 164.
- 121. Body size usually >3.7 mm, if slightly less (3.5 mm), either eye depressed and orbit distinct or apex of aedeagus triangular. 122.

- Body size <3.35 mm; apex of aedeagus, when known, not triangular. 156.
- 122. Eye depressed with distinct, oblique orbit (**B15** fig. 295); pronotum and elytra usually not microreticulate; if pronotum indistinctly microreticulate, elytra strongly microreticulate (*C. mareebae* Baehr, 2015); if elytra slightly microreticulate, elytra <2× as long as wide (*C. baloghi* Baehr, 2015) (questionable species under both couplets). 123.
- Eye laterad markedly protruded, orbit short, perpendicular or almost so (Fig. 118); microreticulation of pronotum and elytra various. 137.
- 137. Prothorax short, ratio l/w <1.0. 138.
- Pronotum longer, ratio l/w always >1.0; if ratio but slightly >1.0 head barely punctate and/or pronotum microreticulate; aedeagus various. not in c.WA. 139.
- 138. Prothorax apicad distinctly narrowed; head in and around frontal fovea coarsely punctate, eye large, but orbit distinct and slightly oblique (**B15** fig. 367); pronotum and elytra not microreticulate; apex of aedeagus short, convex, laterally distinctly denticulate (**B15** fig. 65). c.WA. *trapezicollis* Baehr, 2015
- Prothorax apicad barely narrowed; head only in front of frontal fovea with some coarse punctures, eye large with short orbit (Fig. 118); pronotum and elytra microreticulate; aedeagus with very narrow apical part, and narrow and hook-shaped apex (Fig. 50), or aedeagus unknown. 138a.
- 138a. Pronotum coarsely punctate; aedeagus unknown. ne.QLD: Atherton Tableland. *quadraticollis* Baehr, 2015
- Pronotum impunctate; aedeagus with very narrow apical part and narrow and hook-shaped apex (Fig. 50). nw.QLD. *infans*, spec. nov.

australiana subgroup

Clivina gerstmeieri planior, subspec. nov.

Examined types. Holotype: ♀, AUS15, QLD11, Norman R. 20 km sse. Normanton, 17m, 17°51'17.4"S, 141°08'12.5"E, 16.4.2015, M.Baehr (QMT234911).

Diagnosis. Distinguished from all other subspecies of *C. gerstmeieri* Baehr by combination of absolutely glabrous and at the same time rather intersected elytral intervals, and depressed pronotum and elytra.

Etymology. The name refers to the pronotum and elytra which are more depressed than in all other subspecies of *C. gerstmeieri*.

Description

Measurements. Length: 4.7 mm; width: 1.15 mm. Ratios. Length/width of pronotum: 1.16; base/apex of pronotum: 1.15; width pronotum/head: 1.25; length/width of elytra: 2.25; length/width of protibia: 2.7; length/width of metatibia: 5.15.

Colour. Uniformly rufo-piceous.

Head. Much as in the nominate subspecies, but eye comparatively well produced laterad. Median frontal fovea rather deep, punctate.

Pronotum. Much as in the nominate subspecies, but comparatively elongate and more depressed.

Elytra. Much as in the nominate subspecies, but dorsally less convex and slightly longer and narrower. Intervals without any traces of microreticulation, rather intersected, very glossy.

Lower surface. As in the nominate subspecies.

Legs. Much as in the nominate subspecies. Metatibia comparatively short.

Male genitalia. Unknown.

Female gonocoxites. As in other subspecies, see fig. 211 in Baehr (2015).

Variation. Unknown.

Distribution. North-western QLD. Known only from type locality.

Collecting circumstances. Holotype collected at light at the bank of Normanton River.

Recognition

Revised key to the subspecies of *C. gerstmeieri*:

106. Elytra with distinct microreticulation, intervals not much intersected, at the average slightly shorter, ratio l/w 2.09–2.17. wc.NT, c.WA, in the north to the Pilbara
..... *gerstmeieri gerstmeieri* Baehr, 1989
- Elytra without or with indistinct microreticulation, intervals either much intersected, or glabrous, at the average slightly longer, ratio l/w 2.15–2.31. interior of SA, sc.NT, ne.WA: KID, sw.WA, nw.QLD. 107.
107. Elytral intervals without any traces of microreticulation. Interior of SA, s.NSW, sc.NT, sw.QLD, nw.QLD. 107a.
- Elytral intervals usually with fine traces of microreticulation, rather intersected. ne.WA: KID, sw.WA. 108.

107a. Pronotum and elytra dorsally convex; elytral intervals barely intersected. Interior of SA, s.NSW, sc.NT, sw.QLD.
..... *gerstmeieri laevior* Baehr, 2015

– Pronotum and elytra dorsally rather depressed; elytral intervals rather intersected. nw.QLD.
..... *gerstmeieri planior*, subspec. nov.

108. Pronotum slightly more depressed; colour dark piceous; eye slightly smaller and laterad less protruded, ratio width of pronotum/head >1.23; frontal fovea large and deep, corrugated, laterally of fovea with a deep sulcus on either side. sw.WA
..... *gerstmeieri newnhamensis* Baehr, 2015

– Pronotum slightly more convex; colour black; eye slightly larger and laterad more protruded, ratio width of pronotum/head <1.23; frontal fovea usually shallow, not corrugated, without or with less deep lateral sulcus. ne.WA: KID
..... *gerstmeieri septemtrionalis* Baehr, 2015

atrirdorsis subgroup

Clivina moretona, spec. nov.

Examined types. Holotype: ♀, AUS15, QLD35, Wenlock R. at Moreton Tel. Stn., 156m, 12°27'36.0"S, 142°38'37.2"E, 9.5.2015, M. Baehr (QMT234912). – Paratypes: 2 ♀♀, same data (CBM).

Diagnosis. Small, rufous species, characterized by rather elongate, parallel-sided prothorax, rather elongate elytra, and glossy, not microreticulate surface.

Etymology. The name refers to the type locality, Moreton Telephone Station at Wenlock River.

Description

Measurements. Length: 3.5–3.6 mm; width: 0.95–1.0 mm. Ratios. Length/width of pronotum: 1.10–1.13; base/apex of pronotum: 1.18–1.21; width pronotum/head: 1.28–1.32; length/width of elytra: 2.08–2.12; length/width of protibia: 2.45–2.65; length/width of metatibia: 5.5–5.7.

Colour. Head and pronotum uniformly rufous, elytra very slightly paler. Palpi, antenna, and legs pale red, the anterior leg usually very slightly darker. Under surface rufous.

Head. Of average size, dorsally gently convex. Frontal sulcus deep, sinuate, impunctate. Eye large, laterally well projected, orbit short, slightly oblique. Clypeus in middle gently concave, coarsely margined, with extremely short, obtuse lateral tooth. Wing of clypeus shallowly separated from centre, moderately protruded, rounded, bearing a

shallow incision between wing and supraantennal plate. Crescent-shaped ridge on clypeus indistinct. Antenna short, median antennomeres globular, slightly wider than long. Clypeus not divided from frons. Frons with a more or less distinct, slightly oblong median fovea, surface of frons almost even. Posterior part of clypeus, and frons around the fovea with sparse, mixed fine and coarser punctures, microreticulation absent, surface glossy.

Pronotum. Rather elongate, barely narrowed apicad, almost parallel-sided, lateral margin straight, barely incised at apical third, dorsal surface convex. Basal angle not perceptibly incised, without protuberance. Apical angle little produced, apex almost straight, not margined. Anterior transverse sulcus well impressed, situated close to apex, barely crenulate. Median line deep. Basal sulcus narrow. Anterior marginal seta situated about at apical fifth. Basal groove shallow, linear, sparsely punctate. Dorsal surface with very few inconspicuous, transverse striae, with sparse to fairly dense, fine punctures, without microreticulation except at the very base, very glossy.

Elytra. Rather elongate, parallel, barely widened apicad, convex but dorsally depressed, basal angle not produced. Lateral margin in basal fourth barely concave. Striae well impressed, barely weaker laterally and towards apex, fairly coarsely punctate-crenulate. Intervals slightly convex, with few transverse wrinkles, impunctate, without microreticulation, glossy. Epipleura narrow, basally with few punctures.

Lower surface. Proepisternum impunctate, with rather coarse transverse striae, with distinct isodiametric microreticulation, dull. Prosternum finely microreticulate, in anterior part more or less rugose. Metasternum with more or less distinct transverse striae. Metepisternum elongate, slightly $<2.25 \times$ as long as wide, with a more or less distinct, longitudinal, punctate furrow. Abdominal sterna impunctate, with isodiametric microreticulation which is more superficial at apex.

Legs. Profemur fairly stout, moderately wide, upper margin convex, lower surface depressed, with angulate anterior margin. Protibia rather short and wide; 4-dentate but 4th tooth small, other teeth elongate; longitudinal sulcus on upper surface distinct. Metatibia elongate. 1st tarsomere of metatarsus slightly shorter than the following three tarsomeres.

Male genitalia. Unknown.

Female gonocoxites. Very similar to those of *C. tuberculiformis* Blackburn, see fig. 219 in Baehr (2015).

Variation. Little variation noted only in density of punctures on the pronotum.

Distribution. North QLD, north Cape York Peninsula. Known only from type locality.

Collecting circumstances. Collected at light at the bank of Wenlock River.

Recognition

According to shape of clypeus and to body size, couplet 184 in the key in Baehr (2015) is reached which has to be changed as below:

- 184. Body size very small, <3.6 mm. 185.
 - Body size larger, >4.0 mm, commonly larger. 191.
- 185. Prothorax longer and dorsally convex, ratio $l/w > 1.07$; aedeagus without many extremely elongate spines (**B15** figs 121, 143), or with elongate spines only at apex (**B15** fig. 142). ... 186.
 - Prothorax shorter, markedly depressed, ratio $l/w < 1.05$; aedeagus with many extremely elongate spines (**B15** figs 144, 145). 188.
- 186. Prothorax longer, ratio $lw > 1.10$, and more parallel-sided, ratio width base/apex < 1.21 ; elytra longer, ratio $l/w > 2.08$; aedeagus at apex with many rather elongate spines (**B15** fig. 142), or eadeagus unknown. 186a.
 - Prothorax shorter, ratio $lw < 1.09$, and less parallel-sided, ratio width base/apex > 1.29 ; elytra shorter, ratio $l/w < 2.06$; aedeagus without elongate spines (**B15** figs 121, 143). 187.
- 186a. Body size smaller, length 3.0 mm; elytra longer, ratio $l/w 2.14$; aedeagus at apex with many rather elongate spines (**B15** fig. 142). n.NT. *multispinosa* Baehr, 2015
 - Body size larger, length > 3.5 mm; elytra shorter, ratio $l/w < 2.12$; aedeagus unknown. ne.QLD. n.CYP. *moretona*, spec. nov.
- 187. Elytra apicad widened and dorsally rather depressed; prothorax slightly longer, ratio $l/w 1.11$; aedeagus with laterally distinctly dentate apex (**B15** fig. 143). nc. NT. *hovorkai* Baehr, 2015
 - Elytra rather parallel-sided and dorsally convex; prothorax slightly shorter, ratio $l/w < 1.09$; aedeagus with laterally obtuse apex (Fig. 121). n.QLD, n.NT, n.WA. *tuberculifrons* Blackburn, 1890

Clivina laevigata, spec. nov.

Figs 51, 119

Examined types. Holotype: ♂, AUS15, QLD44, Morehead R. c. 100 km nw. Laura, 45m, 15°01'33.4"S, 143°40'01.1"E, 14.5.2015, M.Baehr (QMT234913). – Paratypes: 3 ♂♂, 5 ♀♀, same data (ANIC, CBM, CBP); 2 ♂♂, 6 ♀♀, AUS15, QLD39, Wenlock R., 13 km ene. T/0 →Iron Range, 13°05'40.6"S, 142°56'45.3"E, 126m, 11.5.2015, M.Baehr (CBM, CDW); 1 ♂, 1 ♀, AUS15, QLD4, Walsh R., 1 km e. Mutchilba, 462m, 17°08'21.5"S, 145°13'58.4"E, 12.4.2015, M.Baehr (CBM); 1 ♀, AUS15, QLD31, Kennedy R., 14 km nw. Fairview, 105m, 15°25'19.9"S, 144°11'16.9"E, 3.+6.5.2015, M. Baehr (CBM); 1 ♀, AUS15, QLD41, Myall Ck., 49 km e. Weipa, 21m, 12°39'16.7"S, 142°16'31.5"E, 12.5.2015, M. Baehr (CBM).

Diagnosis. Rather small to medium sized, unicolourous rufous species, characterized by fairly elongate prothorax, glossy, not microreticulate head and pronotum, and large, at tip obtuse, at the lower surface strongly hook-shaped apex of the aedeagus.

Etymology. The name refers to the glabrous head and pronotum.

Description

Measurements. Length: 4.6–5.3 mm; width: 1.3–1.45 mm. Ratios. Length/width of pronotum: 1.08–1.12; base/apex of pronotum: 1.29–1.34; width pronotum/head: 1.32–1.34; length/width of elytra: 2.0–2.05; length/width of protibia: 1.08–1.12; length/width of metatibia: 5.5–5.7.

Colour (Fig. 119). More or less pale rufous, elytra unicolourous. Palpi, antenna, and legs pale red, the anterior leg usually very slightly darker. Under surface rufous.

Head (Fig. 119). Of average size, dorsally gently convex, slightly uneven. Frontal sulcus deep, sinuate, impunctate. Eye large, laterally well projected, orbit short, slightly oblique. Clypeus in middle gently concave, coarsely margined, with extremely short, obtuse lateral tooth. Wing of clypeus shallowly separated from centre, moderately protruded, rounded, bearing a shallow incision between wing and supraantennal plate. Crescent-shaped ridge on clypeus fairly distinct. Antenna short, median antennomeres globular, slightly wider than long. Clypeus indistinctly divided from frons by a shallow, in middle usually interrupted sulcus; frons with a distinct, about circular to slightly oblong median fovea, surface of frons almost even. Posterior part of clypeus, clypeal suture, and frons around the fovea sparsely to moderately densely, fairly coarsely punctate, rest of surface with sparse and fine punctures, microreticulation absent, surface glossy.

Pronotum (Fig. 119). Moderately elongate,

slightly narrowed apicad, lateral margin straight but slightly oblique, slightly incised at apical third, dorsal surface moderately convex. Basal angle with a slight incision and a faint protuberance. Apical angle not or very little produced, apex almost straight, not margined. Anterior transverse sulcus well impressed, situated close to apex, barely crenulate. Median line deep. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal groove very shallow, linear, impunctate. Dorsal surface with a few shallow, irregularly transverse striae, with very sparse, fine punctures, without microreticulation except in basal third, glossy.

Elytra (Fig. 119). Moderately elongate, parallel, barely widened apicad, convex but dorsally depressed, basal angle not produced. Lateral margin in basal fourth barely concave. Striae well impressed, barely weaker laterally and towards apex, fairly coarsely punctate-crenulate. Intervals slightly convex and with some transverse wrinkles, impunctate, with very faint and superficial, about isodiametric microreticulation, rather glossy. Epipleura narrow, basally with some punctures.

Lower surface. Proepisternum impunctate, with rather fine transverse striae, with distinct isodiametric microreticulation, dull. Prosternum finely microreticulate, in anterior part more or less rugose. Metasternum with more or less distinct transverse striae. Metepisternum elongate, slightly $<2.25 \times$ as long as wide, with a more or less distinct, longitudinal, punctate furrow. Abdominal sterna impunctate, with isodiametric microreticulation which is more superficial at apex.

Legs. Profemur fairly stout, moderately wide, upper margin convex, lower surface depressed, with angulate anterior margin. Protibia rather short and wide; 4-dentate but 4th tooth small, other teeth elongate; longitudinal sulcus on upper surface distinct. Metatibia elongate. 1st tarsomere of metatarsus almost as long as the following three tarsomeres.

Male genitalia (Fig. 51). Aedeagus rather narrow, moderately elongate, almost symmetrically narrowed apicad; lower surface straight over most of its length, only near apex curved down. Apex rather elongate and wide, spatulate, at its lower surface strongly dentate, tip rounded. Internal sac in apical third with three large, denticulate and rather sclerotized folds. Both parameres large and stout, the left one considerably stouter than the right one; both with very short but acute, asetose apex.

Female gonocoxites. Very similar to those of *C. tuberculiformis* Blackburn, see fig. 219 in Baehr (2015).

Variation. Little variation noted in body size, length of prothorax, and degree of microreticulation in basal part of the pronotum.

Distribution. North QLD, from Atherton Tableland to mid Cape York Peninsula.

Collecting circumstances. All specimens collected at light, at or near the banks of rivers.

Clivina uncinata, spec. nov.

Figs 52, 120

Examined types. Holotype: ♂, AUS15, QLD44, Morehead R. c. 100 km nw. Laura, 45m, 15°01'33.4"S, 143°40'01.1"E, 14.5.2015, M.Baehr (QMT234914). – Paratypes: 1 ♂, 2 ♀♀, same data (CBM, CBP, CDW); 1 ♂, AUS15, QLD39, Wenlock R., 13 km ene. T/0 →Iron Range, 13°05'40.6"S, 142°56'45.3"E, 126m, 11.5.2015, M.Baehr (CBM); 1 ♂, 1 ♀, AUS15, QLD31, Kennedy R., 14 km nw. Fairview, 105m, 15°25'19.9"S, 144°11'16.9"E, 3.+6.5.2015, M. Baehr (CBM); 2 ♀♀, AUS15, QLD41, Myall Ck., 49 km e. Weipa, 21m, 12°39'16.7"S, 142°16'31.5"E, 12.5.2015, M. Baehr (CBM); 1 ♂, AUS15, QLD36, c.25 km ene. Bramwell Jct. Rdh., 115m, 11°56'21.9"S, 142°38'07.2"E, 10.5.2015, M.Baehr (CBM); 1 ♀, AUS15, QLD42, Coen R., 2 km n. Coen, 213m, 13°55'30.9"S, 143°11'48.6"E, 13.5.2015, M. Baehr (CBM).

Diagnosis. Rather small, unicolourous rufous species, characterized by moderately elongate prothorax, microreticulate head and pronotum, strongly microreticulate elytra, and rather small but strongly hook-shaped apex of the aedeagus.

Etymology. The name refers to the strongly hook-shaped apex of the aedeagus.

Description

Measurements. Length: 4.4–4.7 mm; width: 1.25–1.35 mm. Ratios. Length/width of pronotum: 1.06–1.08; base/apex of pronotum: 1.19–1.23; width pronotum/head: 1.28–1.32; length/width of elytra: 0.98–2.03; length/width of protibia: 1.06–1.08; length/width of metatibia: 5.2–5.4.

Colour (Fig. 120). More or less pale rufous, elytra unicolourous. Palpi, antenna, and legs pale red, the anterior leg usually very slightly darker. Under surface rufous.

Head (Fig. 120). Of average size, frons in middle depressed. Frontal sulcus deep, sinuate, impunctate. Eye large, laterally well projected, orbit short, slightly oblique. Clypeus in middle gently concave, coarsely margined, with extremely short, obtuse lateral tooth. Wing of clypeus shallowly separated from centre, moderately protruded, rounded, bearing a shallow incision between wing and supraantennal plate. Crescent-shaped ridge on clypeus fairly distinct. Antenna short, median antennomeres globular, slightly wider than long. Clypeus indistinctly divided from frons by a shallow, in middle usually interrupted

sulcus; frons with a distinct, about circular to slightly oblong median fovea, surface of frons almost even. Posterior part of clypeus, clypeal suture, and frons around the fovea rather densely, very coarsely punctate, rest of surface with sparse and fine punctures, microreticulation distinct though slightly superficial, isodiametric, surface moderately glossy.

Pronotum (Fig. 120). Moderately elongate, slightly narrowed apicad, lateral margin straight but slightly oblique, slightly incised at apical third, dorsal surface moderately convex. Basal angle with a slight incision and a faint protuberance. Apical angle not or very little produced, apex almost straight, not margined. Anterior transverse sulcus well impressed, situated close to apex, barely crenulate. Median line deep. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal groove very shallow, linear, impunctate. Dorsal surface with several shallow, irregularly transverse striae, with very sparse, fine punctures, with distinct, isodiametric microreticulation, rather dull.

Elytra (Fig. 120). Rather short, almost parallel, slightly widened apicad, convex but dorsally depressed, basal angle not produced. Lateral margin in basal fourth barely concave. Striae well impressed, barely weaker laterally and towards apex, moderately coarsely punctate-crenulate. Intervals slightly convex and with some transverse wrinkles, impunctate, with rather distinct but slightly superficial, about isodiametric microreticulation, moderately glossy. Epipleura narrow, basally with some punctures.

Lower surface. Proepisternum impunctate, with rather fine transverse striae, with distinct isodiametric microreticulation, dull. Prosternum finely microreticulate, in anterior slightly more rugose. Metasternum without distinct transverse striae. Metepisternum elongate, slightly >2× as long as wide, with a more or less distinct, longitudinal, punctate furrow. Abdominal sterna impunctate, with isodiametric microreticulation which is more superficial at apex.

Legs. Profemur fairly stout, moderately wide, upper margin convex, lower surface depressed, with angulate anterior margin. Protibia rather short and wide; 4-dentate but 4th tooth small, other teeth elongate; longitudinal sulcus on upper surface distinct. Metatibia rather elongate. 1st tarsomere of metatarsus almost as long as the following three tarsomeres.

Male genitalia (Fig. 52). Aedeagus rather narrow, moderately elongate, slightly asymmetrically narrowed apicad; lower surface gently concave over most of its length, apical third slightly curved down and deeply concave. Apex small and short, at its lower surface strongly dentate, tip triangularly rounded. Internal sac in apical third with three large,

denticulate and rather sclerotized folds. Both parameres short but very stout, the left one considerably stouter than the right one; both with very short but acute, asetose apex.

Female gonocoxites. Very similar to those of *C. tuberculiformis* Blackburn, see fig. 219 in Baehr (2015).

Variation. Very little variation noted.

Distribution. North QLD, Cape York Peninsula.

Collecting circumstances. All specimens collected at light, at or near the banks of rivers.

Clivina foveifrons, spec. nov.

Fig. 134

Examined types. Holotype: ♀, AUS15, QLD34, Stewart R. c. 30 km sse. Coen, 123m, 14°08'20.6"S, 143°16'21.3"E, 8.5.2015, M.Baehr (QMT234915).

Diagnosis. Medium sized, pale red species, characterized by moderately elongate prothorax, glossy surface, impunctate head and barely punctate pronotum, and a very large and deep median frontal fovea.

Etymology. The name refers to the deep median fovea on the frons.

Description

Measurements. Length: 4.9 mm; width: 1.3 mm. Ratios. Length/width of pronotum: 1.06; base/apex of pronotum: 1.36; width pronotum/head: 1.41; length/width of elytra: 2.01; length/width of protibia: 2.45; length/width of metatibia: 5.2.

Colour (Fig. 134). Head and pronotum pale red, elytra slightly paler, unicolourous. Palpi, antenna, and anterior leg pale red, median and posterior legs dark yellow. Under surface pale red.

Head (Fig. 134). Of average size, dorsally gently convex. Frontal sulcus deep, sinuate, impunctate. Eye large, laterally well projected, orbit short, slightly oblique. Clypeus in middle gently concave, coarsely margined, with extremely short, obtuse lateral tooth. Wing of clypeus shallowly separated from centre, moderately protruded, rounded, bearing a shallow incision between wing and supraantennal plate. Crescent-shaped ridge on clypeus well raised, slightly triangular. Antenna short, median antennomeres globular, slightly wider than long. Clypeus divided from frons by a fairly deep sulcus. Frons with a large and deep, slightly oblong median fovea, surface of frons almost even. Surface impunctate and without microreticulation, very glossy.

Pronotum (Fig. 134). Moderately elongate, slightly narrowed apicad, lateral margin slightly oblique and faintly convex, slightly incised at apical third, dorsal surface moderately convex. Basal angle with a very faint incision and protuberance. Apical angle very little produced, apex almost straight, not margined. Anterior transverse sulcus well impressed, situated close to apex, barely crenulate. Median line deep. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal groove only indicated by a few rather coarse, longitudinal arranged punctures. Dorsal surface with a few faint, irregularly transverse striae, with very sparse, fine punctures, without microreticulation, very glossy.

Elytra. Rather short, parallel, barely widened apicad, convex but dorsally depressed, basal angle not produced. Lateral margin in basal fourth barely concave. Striae well impressed, barely weaker laterally and towards apex, rather coarsely punctate. Intervals slightly convex, without transverse wrinkles, impunctate, without microreticulation, very glossy. Epipleura narrow, basally with a few shallow impressions.

Lower surface. Proepisternum impunctate, with rather fine transverse striae, with distinct isodiametric microreticulation, dull. Prosternum finely microreticulate, in anterior slightly more rugose. Metasternum without distinct transverse striae. Metepisternum elongate, slightly $>2\times$ as long as wide, with a shallow, longitudinal, punctate furrow. Abdominal sterna impunctate, with isodiametric microreticulation which is more superficial at apex.

Legs. Profemur fairly stout, moderately wide, upper margin convex, lower surface depressed, with angulate anterior margin. Protibia rather short and wide; 4-dentate but 4th tooth small, other teeth elongate; longitudinal sulcus on upper surface distinct. Metatibia moderately elongate. 1st tarsomere of metatarsus only as long as the following two tarsomeres.

Male genitalia. Unknown.

Female gonocoxites. Very similar to those of *C. tuberculiformis* Blackburn, see fig. 219 in Baehr (2015).

Variation. Unknown.

Distribution. North QLD, central Cape York Peninsula. Known only from type locality.

Collecting circumstances. Collected at light at the bank of Stewart River.

Clivina normanbyensis, spec. nov.

Figs 53, 121

Examined types. Holotype: ♂, AUS15, QLD29, East Normanby R., c. 60 km wsw. Cooktown, 159m, 15°45'31.4"S, 145°00'56.1"E, 30.4.-1.5.2015, M. Baehr (QMT234916).

Diagnosis. Medium sized, pale red species, characterized by moderately elongate prothorax, rather coarsely punctate, microreticulate head, glossy pronotum but microreticulate elytra, and small, obtusely arrow-shaped apex of the aedeagus.

Etymology. The name refers to the type locality, East Normanby River, north Queensland.

Description

Measurements. Length: 4.95 mm; width: 1.4 mm. Ratios. Length/width of pronotum: 1.05; base/apex of pronotum: 1.26; width pronotum/head: 1.36; length/width of elytra: 1.97; length/width of protibia: 2.75; length/width of metatibia: 5.5.

Colour (Fig. 121). Head and pronotum pale red, elytra slightly paler, unicolourous. Palpi, antenna, and anterior leg pale red, median and posterior legs dark yellow. Under surface pale red.

Head (Fig. 121). Of average size, dorsally gently convex. Frontal sulcus deep, sinuate, impunctate. Eye large, laterally well projected, orbit rather short, slightly oblique. Clypeus in middle gently concave, coarsely margined, with extremely short, obtuse lateral tooth. Wing of clypeus shallowly separated from centre, moderately protruded, rounded, bearing a shallow incision between wing and supraantennal plate. Crescent-shaped ridge on clypeus barely indicated. Antenna short, median antennomeres globular, slightly wider than long. Clypeus not divided from frons. Frons with a small, shallow, circular median fovea, surface of frons almost even. Surface rather sparsely, but coarsely punctate and with superficial, isodiametric microreticulation, glossy.

Pronotum (Fig. 121). Moderately elongate, slightly narrowed apicad, lateral margin straight but slightly oblique, slightly incised at apical third, dorsal surface moderately convex. Basal angle with a very faint incision and protuberance. Apical angle very little produced, apex almost straight, not margined. Anterior transverse sulcus well impressed, situated close to apex, barely crenulate. Median line deep. Basal sulcus narrow. Anterior marginal seta situated about at apical fourth. Basal groove shallow, linear, consisting of a row of longitudinal arranged punctures. Dorsal surface with a few faint, irregularly transverse striae, in apical half with sparse, rather fine punctures and without microreticulation, in basal third with fine, rather superficial, isodiametric microreticulation, glossy.

Elytra (Fig. 121). Rather short, almost parallel, little widened apicad, convex but dorsally depressed, basal angle not produced. Lateral margin in basal fourth barely concave. Striae well impressed, barely weaker laterally and towards apex, moderately coarsely punctate. Intervals slightly convex, with several short, transverse wrinkles, impunctate, with fine and somewhat superficial, isodiametric microreticulation, moderately glossy. Epipleura narrow, basally with a few shallow impressions.

Lower surface. Proepisternum impunctate, with rather fine transverse striae, with distinct isodiametric microreticulation, dull. Prosternum finely microreticulate, in anterior slightly more rugose. Metasternum without distinct transverse striae. Metepisternum elongate, slightly $>2\times$ as long as wide, with a shallow, longitudinal, punctate furrow. Abdominal sterna impunctate, with isodiametric microreticulation which is more superficial at apex.

Legs. Profemur fairly stout, moderately wide, upper margin convex, lower surface depressed, with angulate anterior margin. Protibia rather short and wide; 4-dentate but 4th tooth small, other teeth elongate; longitudinal sulcus on upper surface distinct. Metatibia moderately elongate. 1st tarsomere of metatarsus slightly longer than the following two tarsomeres.

Male genitalia (Fig. 53). Aedeagus moderately wide, rather 5 elongate, almost symmetrically narrowed apicad; lower surface gently concave throughout. Apex short, rather narrow, rounded arrow-shaped, at its lower surface dentate, tip obtuse. Internal sac in apical third with three large, denticulate and rather sclerotized folds. Both parameres large and stout, the left one considerably stouter than the right one; both with short but acute, aetose apex.

Female gonocoxites. Unknown.

Variation. Unknown.

Distribution. North QLD, at the base of Cape York Peninsula. Known only from type locality.

Collecting circumstances. Collected at light at the bank of East Normanby River.

Recognition

According to shape of clypeus, body size, and unicolourous elytra couplet 202. in the key in Baehr (2015) is reached which has to be followed on as below:

202. Body length >5.0 mm (variable or doubtful species under both couplets). 203.
- Body length <4.95 mm; if >4.8 mm, either eye depressed **or** frons with a large and deep median fovea **or** elytra distinctly microreticulate. 212.

203. Prothorax and elytra elongate, ratio l/w of prothorax 1.14, ratio l/w of elytra 2.12; eye rather depressed, orbit large, oblique (**B15** fig. 374); aedeagus rather wide, with slightly asymmetrical, arrow-shaped apex (**B15** fig. 131). n.NT. *laevicollis* Baehr, 2015
- Prothorax and elytra shorter, ratio l/w of prothorax <1.12, usually less, ratio l/w of elytra <2.08, usually less; eye laterad protruded, orbit short, slightly oblique to perpendicular; aedeagus differently shaped (Fig. 51; **B15** figs 122, 126, 127, 132–135). 204.
204. Elytra short, ratio l/w 1.93–1.97; pronotum impunctate; elytra not microreticulate; protibia narrow and elongate, ratio l/w >2.9; aedeagus with very narrow apical part, apex hook-shaped (**B15** fig. 122). n. and c.QLD, n.NT, n.WA. *atrirdorsis* Sloane, 1905
- Elytra longer, ratio l/w >1.98, usually more; pronotum usually punctate, if impunctate, elytra distinctly microreticulate; protibia shorter and wider, ratio l/w usually <2.5; aedeagus different (Fig. 51; **B15** figs 126, 127, 132–135). 205.
205. Head completely and coarsely punctate; elytra coarsely microreticulate; apical part of aedeagus odd-shaped, apex strongly hook-shaped (**B15** fig. 127). n.NT. *paucidentata* Baehr, 2015
- Head only partly and less coarsely punctate; microreticulation of elytra various, if coarse, apex of aedeagus somewhat arrow-shaped (**B15** fig. 126); aedeagus different (Fig. 51; **B15** figs 126, 132–135). 206.
206. Pronotum and elytra perceptibly microreticulate; apex of aedeagus symmetrically spatulate (**B15** figs 132, 134). 207.
- Pronotum not microreticulate, elytra microreticulate or not; apex of aedeagus arrow-shaped or asymmetrically spatulate (Fig. 51; **B15** figs 126, 133, 135), or unknown. 208.
207. Microreticulation on pronotum and elytra distinct and fairly coarse; lower surface of aedeagus regularly concave, apex not markedly turned down, less spatulate (**B15** fig. 132). n.WA. *discrepans* Baehr, 2015
- Microreticulation on pronotum and elytra superficial and difficult to see; lower surface of aedeagus in middle straight, apex markedly turned down, spatulate (**B15** fig. 134). n.NT. *spatulata* Baehr, 2015
208. Prothorax ratio l/w <1.09 **and** eye large and orbit almost perpendicular **and** aedeagus with short, arrow-shaped apex, both parameres with narrow and elongate apex (**B15** fig. 126), or aedeagus unknown. 209.
- Prothorax ratio l/w various **and** eye slightly smaller and orbit slightly oblique **and** aedeagus either with longer, arrow-shaped apex or with spatulate apex, both parameres with very short apex (Fig. 51; **B15** figs 133, 135), or aedeagus unknown, if latter, ratio l/w of prothorax >1.11. 210.
209. Head with moderately dense and coarse punctures; pronotum dorsally moderately convex; elytra without microreticulation, usually with a dark median spot; aedeagus with short, arrow-shaped apex, both parameres with narrow and elongate apex (**B15** fig. 126). nw.QLD, n.NT, n.WA. *toledanoi* Baehr, 2015
- Head with dense and coarse punctures; pronotum dorsally markedly convex; elytra with fine microreticulation, without dark median spot; aedeagus unknown. n.WA. *convexior* Baehr, 2015
210. Elytra finely microreticulate; aedeagus with spatulate apex (Fig. 51; **B15** fig.135), or unknown. 211.
- Elytra not microreticulate; eye much produced, orbit very short, only slightly oblique; aedeagus with triangular arrow-shaped apex (**B15** fig. 133). n.WA. *marlgu* Baehr, 2015
211. Body size larger, 5.8 mm; head finely punctate; prothorax decidedly narrowed apicad (**B15** fig. 345); elytra short, ratio l/w 1.93; apex of aedeagus markedly curved down, asymmetrically spatulate apex (**B15** fig. 135). n.NT: near Mataranka. *finitima* Baehr, 2015
- Body size smaller, <5.3 mm; head coarsely punctate; prothorax barely narrowed apicad (**B15** fig. 375); elytra longer, ratio l/w >2.0; apex of aedeagus either far less curved down (Fig. 51), or aedeagus unknown. 211a.
- 211a. Eye smaller, laterad less produced, orbit larger, distinctly oblique; head with coarser punctation; pronotum longer, more parallel-sided, ratio width base/apex 1.21 (**B15** fig. 375); aedeagus unknown. n.NT: Kakadu NP. *gubarae* Baehr, 2015
- Eye larger, laterad more produced, orbit smaller, far less oblique; head with less coarse punctation; pronotum shorter, less parallel-sided, ratio width base/apex >1.29 (Fig. 119);

- apex of aedeagus moderately curved down, asymmetrically spatulate (Fig. 51). ne.QLD. ...
..... *laevigata*, spec. nov.
212. Elytra coarsely microreticulate; pronotum distinctly microreticulate. 213.
- Elytra less coarsely or not microreticulate; pronotum not or superficially microreticulate; if microreticulation on elytra fairly distinct, pronotum not microreticulate and elytral intervals very convex. 215.
213. Prothorax and elytra shorter, ratio l/w of prothorax <1.08, ratio l/w of elytra <2.05.
..... 213a.
- Prothorax and elytra longer, ratio l/w of prothorax >1.10, ratio l/w of elytra >2.10; aedeagus unknown. 214.
- 213a. Body size larger, >4.9 mm; prothorax shorter, ratio l/w <1.05; aedeagus with somewhat spatulate apex (B15 fig. 132). n.WA.
..... *discrepans* Baehr, 2015
- Body size smaller, <4.7 mm; prothorax slightly longer, ratio l/w >1.06; aedeagus with small, but on lower side remarkably hook-shaped apex (Fig. 52). ne.QLD.
..... *uncinata*, spec. nov.
214. Prothorax impunctate, narrower in relation to head, ratio width pronotum/head 1.22; elytra on disk distinctly depressed, microreticulation on elytra slightly less coarse. ne.QLD.
..... *languida* Baehr, 2015
- Prothorax sparsely though coarsely punctate, wider in relation to head, ratio width pronotum/head 1.27 (B15 fig. 346); elytra on disk convex, microreticulation on elytra coarser. nw.QLD. *scabra* Baehr, 2015
215. Frons with large and very deep median fovea (Fig. 134), aedeagus unknown. 215a.
- Frons at most with shallow frontal fovea; aedeagus variously shaped. 216.
- 215a. Prothorax and elytra slightly longer, ratios l/w prothorax 1.08, l/w elytra 2.03; eye laterad more protruded, therefore prothorax narrower as compared with head, ratio width prothorax/ head 1.32. nw.NT.
..... *fossulata* Baehr, 2015
- Prothorax and elytra slightly shorter, ratios l/w prothorax 1.06, l/w elytra 2.01; eye laterad less protruded, therefore prothorax wider as compared with head, ratio width prothorax/ head 1.41. ne.QLD, c.CYP.
..... *foveifrons*, spec. nov.
216. Eye moderately large and laterad moderately produced, orbit distinctly oblique (B15 fig. 376). 217.
- Eye large and laterad almost semicircularly protruded, orbit almost perpendicular (B15 fig. 377). 222.
222. Head short and wide, deeply imbedded into prothorax, coarsely punctate; eye laterad markedly protruded (B15 fig. 377); pronotum and elytra not microreticulate; aedeagus with short and wide, arrow-shaped apex that bears remarkably distinct lateral teeth (B15 fig. 141). n.WA: KID. *breviceps* Baehr, 2015
- Head not as deeply imbedded into prothorax; head usually not as distinctly punctate; eye size and microreticulation of pronotum and elytra various; aedeagus different (Figs 51, 53; B15 figs 121, 122, 139). 223.
223. Either pronotum or elytra perceptibly microreticulate; aedeagus not with symmetric, knob-shaped apex (Figs 51, 53; B15 figs 122, 139). ..
..... 224.
- Pronotum and elytra not at all microreticulate; aedeagus with symmetric, knob-shaped apex (B15 fig. 121), or unknown. 226.
224. Pronotum impunctate, finely microreticulate or not; elytra not microreticulate; aedeagus with very narrow apical part, apex slightly hooked (B15 fig. 122). ce. and n.QLD, n.NT, n.WA. *atr dorsis* Sloane, 1905
- Pronotum punctate, not microreticulate; elytra finely microreticulate; aedeagus differently shaped. 225.
225. Pronotum coarsely punctate; elytra shorter, ratio l/w <1.95; aedeagus with asymmetric, obtusely rounded apex (B15 fig. 139). n.QLD, n.NT. *nourlangie* Baehr, 2015
- Pronotum finely punctate; elytra longer, ratio l/w >1.97; aedeagus with spatulate or small, obtusely arrow-shaped apex (Figs 51, 53). n.QLD. 225a.
- 225a. Pronotum and elytra longer, ratio l/w of pronotum >1.08, l/w of elytra >2.0; aedeagus with large, spatulate apex (Fig. 51). *laevigata*, spec. nov.
- Pronotum and elytra shorter, ratio l/w of pronotum 1.05, l/w of elytra 1.97; aedeagus with small, obtusely arrow-shaped apex (Fig. 53). *normanbyensis*, spec. nov.

Appendix

Summary of measurements and ratios of the species of the genus *Clivina* mentioned in present paper. N = number of specimens measured; L = length in mm; l/w pr = ratio length/width of pronotum; b/a pr = ratio width of base/width of apex of pronotum; pr/h = ratio width of pronotum/width of head; l/w el = ratio length/width of elytra; l/w pt = ratio length/width of protibia; l/w mt = ratio length/width of metatibia. *, measurements included in measurements of males.

Especially measurements of the protibia can rather vary according to the age of the specimen and the degree of abrasion of the lateral teeth.

		$\delta/\text{♀}$					δ		♀		
		N	L	l/w pr	b/a pr	pr/h	l/w el	l/w pt	l/w mt	l/w pt	l/w mt
<i>procera</i>	$\delta/\text{♀}$	6	12.2-16.7	1.02-1.05	1.26-1.33	1.33-1.40	2.01-2.06	4.0-4.15	5.6-5.8	3.3-3.35	5.5-5.8
<i>obscuripes</i>	$\delta/\text{♀}$	6	10.0-13.5	1.02-1.03	1.27-1.33	1.30-1.33	2.0-2.6	3.5-3.65	6.0-6.1	3.0-3.25	5.5-5.7
<i>subrufipes</i>	$\delta/\text{♀}$	6	10.6-13.5	0.99-1.02	1.22-1.26	1.25-1.33	2.04-2.08	3.7-3.8	5.6-6.1	3.0-3.15	5.6-6.0
<i>cooinda</i>	$\delta/\text{♀}$	6	9.3-12.7	1.01-1.04	1.26-1.30	1.27-1.32	1.99-2.07	3.65-3.8	6.2-6.25	3.25-3.35	6.0
<i>sinuicola</i>	$\delta/\text{♀}$	6	10.1-15.9	0.99-1.01	1.22-1.33	1.28-1.35	1.98-2.07	3.4-3.8	6.25-6.6	3.4-3.5	5.4-5.8
<i>thoracica</i>	δ	1	14.5	1.11	1.27	1.32	2.07	4.35	6.7		
<i>g. gemina</i>	$\delta/\text{♀}$	6	11.3-13.5	1.02-1.05	1.23-1.27	1.26-1.34	2.05-2.10	3.5-3.8	6.3-6.8	2.75-2.85	5.8-6.1
<i>g. nigripes</i>	$\delta/\text{♀}$	6	11.7-13.9	1.01-1.03	1.29-1.35	1.34-1.48	2.03-2.09	3.35-3.6	6.5-6.7	2.7-2.8	6.1-6.2
<i>carnabyi</i>	$\delta/\text{♀}$	6	15.2-16.6	1.02-1.04	1.32-1.36	1.39-1.44	2.09-2.15	3.3-3.5	6.35-6.5	3.0-3.1	5.9-6.0
<i>windjanae</i>	$\delta/\text{♀}$	6	12.0-13.4	0.97-1.03	1.32-1.36	1.30-1.38	2.03-2.07	3.4-3.5	6.2-6.25	2.8-3.0	6.1-6.2
<i>mahoni</i>	$\delta/\text{♀}$	2	15.5-16.4	1.03-1.08	1.33-1.36	1.36-1.39	2.09-2.11	4.5	5.7	3.4	5.6
<i>montisbelli</i>	♀	1	12.1	1.06	1.20	1.22	2.22			2.8	7.3
<i>victoriae</i>	$\delta/\text{♀}$	5	12.3-13.3	0.99-1.01	1.21-1.25	1.28-1.32	2.00-2.05	2.85-3.25	5.7-5.9	2.75	5.55
<i>ryaceki</i>	$\delta/\text{♀}$	6	15.2-18.9	1.00-1.03	1.25-1.30	1.34-1.38	2.06-2.12	4.15-4.2	5.8-6.1	3.3-3.5	5.7-5.9
<i>heros</i>	$\delta/\text{♀}$	6	18.2-23.9	0.98-1.05	1.30-1.34	1.36-1.44	2.13-2.18	3.9-4.05	6.2-6.5	2.95-3.15	6.4-6.6
<i>goldingi</i>	δ	1	16.5	1.04	1.35	1.39	c. 2.08	3.3	5.8		
<i>newcastleana</i>	$\delta/\text{♀}$	6	11.2-14.4	0.96-1.00	1.25-1.28	1.33-1.39	2.00-2.05	3.8-4.0	6.2-6.4	2.9-3.2	5.8-6.2
<i>glabripennis</i>	$\delta/\text{♀}$	6	13.7-17.0	0.98-1.01	1.29-1.31	1.37-1.41	2.02-2.06	3.35	6.7	2.85-3.1	6.1-6.3
<i>micans</i>	$\delta/\text{♀}$	4	12.9-15.6	1.04-1.06	1.16-1.24	1.42-1.50	2.0-2.03	3.25-3.4	6.0-6.1	2.5	5.1
<i>rugosifrons</i>	$\delta/\text{♀}$	6	14.1-15.9	1.01-1.06	1.26-1.33	1.32-1.38	2.02-2.08	3.15-3.25	6.1-6.2	2.9-3.05	5.7-6.1
<i>monilicornis</i>	$\delta/\text{♀}$	6	9.1-13.0	1.06-1.09	1.35-1.37	1.49-1.52	1.93-2.02	3.1-3.2	5.1-5.2	2.8-2.85	4.9-5.0
<i>conicollis</i>	$\delta/\text{♀}$	6	10.6-14.5	1.10-1.13	1.40-1.51	1.47-1.52	2.06-2.12	3.35-3.5	5.25-5.5	2.9-3.1	5.2-5.3
<i>dubia</i>	δ	1	12.8	1.05	1.25	1.35	2.0	3.3	5.25		
<i>regularis</i>	$\delta/\text{♀}$	6	9.3-11.9	1.05-1.11	1.22-1.27	1.31-1.40	1.93-2.02	2.7-2.85	5.7-5.8	2.35-2.45	5.7-5.8
<i>elegans</i>	$\delta/\text{♀}$	6	12.8-17.5	1.09-1.16	1.36-1.42	1.44-1.52	2.02-2.08	3.7-3.8	7.2-7.4	3.4-3.5	6.5-6.8
<i>interposita</i>	$\delta/\text{♀}$	5	11.7-13.2	1.03-1.08	1.43-1.45	1.44-1.54	1.94-2.02	3.7-3.8	7.1-7.5	3.3-3.5	6.4-6.7
<i>kershawi</i>	$\delta/\text{♀}$	5	12.2-14.1	1.06-1.13	1.51-1.56	1.40-1.47	2.03-2.11	3.7-3.8	7.3-7.5	3.3-3.4	6.5-6.6
<i>variseta</i>	$\delta/\text{♀}$	2	17.0-17.8	0.99-1.01	1.55-1.58	1.55-1.57	1.83-1.90	5.0	7.3	3.9	6.7
<i>triseriata</i>	♀	1	15.7	0.98	1.65	1.62	1.90			3.8	6.6
<i>inopinata</i>	δ	1	13.4	1.0	1.62	1.54	1.88	5.0	7.3		
<i>profundestriolata</i>	♀	2	12.9-13.8	0.92-0.94	1.62-1.66	1.65-1.67	1.75-1.80			3.8	7.65-7.7
<i>g. gracilipes</i>	$\delta/\text{♀}$	6	9.5-13.4	0.94-0.96	1.51-1.61	1.42-1.59	1.76-1.80	4.7-4.9	8.0-8.3	3.5-3.7	7.5-7.6
<i>g. longior</i>	♀	4	11.4-12.9	0.92-0.96	1.47-1.54	1.43-1.53	1.88-1.91			3.5-3.6	7.5-7.6
<i>marginata</i>	$\delta/\text{♀}$	6	10.2-14.5	0.89-0.97	1.48-1.58	1.43-1.47	1.82-1.88	5.3-5.6	8.8-9.0	4.1-4.3	7.4-7.7
<i>oblonga</i>	$\delta/\text{♀}$	6	10.7-14.1	0.99-1.01	1.31-1.35	1.40-1.45	1.91-1.96	3.1-3.3	6.0-6.1	3.1-3.2	5.6-5.8
<i>robusta</i>	$\delta/\text{♀}$	6	12.5-17.2	1.02-1.08	1.27-1.32	1.36-1.42	1.86-2.00	4.0-4.4	6.5-6.7	3.2-3.3	5.5-5.7
<i>obliquicollis</i>	δ	4	11.4-12.5	1.00-1.02	1.28-1.34	1.39-1.45	1.95-1.97	3.9-4.1	7.4-7.5		
<i>bankae</i>	$\delta/\text{♀}$	6	11.6-14.9	0.93-1.00	1.37-1.43	1.40-1.50	2.06-2.13	3.0-3.1	6.8-6.9	2.9-3.0	6.5-6.9
<i>incurvicollis</i>	$\delta/\text{♀}$	6	11.1-14.5	0.93-0.99	1.40-1.46	1.42-1.51	1.93-2.02	3.1-3.8	6.3-8.1	3.3-3.45	6.6-7.2
<i>platynota</i>	δ	2	13.0-13.2	1.01-1.04	1.33-1.34	1.34-1.37	2.11	3.4-3.5	7.4-7.5		
<i>rectipennis</i>	♀	2	11.8-14.1	0.96-0.97	1.37-1.40	1.39-1.43	2.10-2.13			3.0-3.2	6.9-7.2
<i>brevisterna</i>	$\delta/\text{♀}$	6	11.3-12.8	0.97-1.02	1.42-1.45	1.52-1.53	1.82-1.86	3.5-3.8	6.4-6.5	3.25-3.4	6.35-6.5

		δ/φ					δ		φ		
		N	L	l/w pr	b/a pr	pr/h	l/w el	l/w pt	l/w mt	l/w pt	l/w mt
<i>major</i>	δ/φ	6	14.2-16.8	1.00-1.01	1.51-1.58	1.51-1.56	1.91-1.98	4.3-5.0	7.3-7.7	3.7-4.0	7.5-7.6
<i>mastersi</i>	δ/φ	6	15.4-21.1	0.98-1.05	1.50-1.55	1.50-1.57	1.96-2.07	4.6-4.8	7.5-7.8	3.9-4.0	6.7-6.8
<i>cobourgiana</i>	δ	3	17.8-18.9	1.00-1.01	1.51-1.54	1.51-1.54	1.93-1.98	4.5-4.65	6.9-7.2		
<i>nyctosyloides</i>	δ/φ	6	9.6-13.0	0.90-0.97	1.56-1.67	1.56-1.66	1.80-1.85	3.75-3.85	6.3-6.4	3.4-3.5	5.5-5.7
<i>ovalior</i>	φ	1	13.1	0.96	1.46	1.53	1.81			3.8	6.9
<i>nitescens</i>	δ/φ	3	10.3-11.7	0.92-0.95	1.54-1.60	1.56-1.61	1.84-1.92	3.45-3.5	6.3-6.35	3.25	6.2
<i>ovalipennis</i>	φ	1	c. 12.6	1.0	1.48	-	1.85			c. 3.4	c. 6.5
<i>pachysoma</i>	δ/φ	6	12.0-14.2	0.86-0.90	1.50-1.56	1.52-1.59	1.72-1.78	3.4-3.5	6.7-6.8	3.15-3.2	5.9-6.1
<i>froggatti</i>	φ	1	7.7	1.06	1.25	1.37	1.83			2.5	5.7
<i>hackeri</i>	φ	4	8.7-10.4	0.86-0.87	1.68-1.92	1.69-1.82	1.53-1.57			3.35-3.5	5.6-5.65
<i>demarzi</i>	δ/φ	6	7.7-9.7	0.84-0.92	1.75-1.82	1.72-1.80	1.53-1.64	3.2-3.25	5.6-5.7	3.0-3.3	5.6-5.7
<i>crassipennis</i>	δ/φ	6	8.8-10.1	0.86-0.88	1.57-1.70	1.65-1.70	1.61-1.73	2.75	5.4	2.8-2.9	5.1-5.2
<i>horaki</i>	φ	1	8.4	0.87	1.70	1.57	1.67			3.1	6.4
<i>darwini</i>	δ/φ	6	5.7-6.5	1.05-1.09	1.27-1.29	1.37-1.52	1.86-1.94	3.1-3.2	5.5-5.6	2.9-3.0	5.25-5.3
<i>macleayi</i>	δ/φ	5	7.8-8.8	0.87-0.98	1.25-1.33	1.44-1.48	1.82-1.90	3.25-3.3	5.2	3.75-2.9	5.0-5.1
<i>horneri</i>	δ/φ	6	7.7-9.1	1.02-1.07	1.32-1.40	1.49-1.63	1.89-1.91	3.25-3.4	5.35-5.5	2.7-3.05	5.2-5.3
<i>vixsulcata</i>	φ	1	11.4	1.18	1.36	1.37	2.32			2.0	5.4
<i>semirubra</i>	δ/φ	6	6.9-7.7	1.05-1.07	1.10-1.13	1.15-1.19	2.14-2.19	2.45-2.6	5.2-5.4	*	*
<i>infans</i>	δ	2	4.2-4.3	1.0	1.24	1.23-1.27	1.98-2.0	2.6-2.7	5.4-5.5		
<i>g. planior</i>	φ	1	4.7	1.16	1.15	1.25	2.25			2.7	5.15
<i>laevigata</i>	δ/φ	6	4.6-5.3	1.08-1.12	1.29-1.34	1.32-1.34	2.0-2.05	2.35-2.55	5.5-5.7	*	*
<i>moretona</i>	φ	3	3.5-3.6	1.10-1.13	1.18-1.21	1.28-1.32	2.08-2.12			2.45-2.65	5.5-5.7
<i>uncinata</i>	δ/φ	6	4.4-4.7	1.06-1.08	1.19-1.23	1.28-1.32	0.98-2.03	2.55-2.75	5.2-5.4	*	*
<i>foveifrons</i>	φ	1	4.9	1.06	1.36	1.41	2.01			2.45	5.2
<i>normanbyensis</i>	δ	1	4.95	1.05	1.26	1.36	1.97	2.75	5.5		

Homonymy of *Clivina burlirshi* Baehr, 2015

Clivina bulirshi Baehr, 2015 was described in the 2nd part of the revision of the Australian Clivinina (Baehr 2015). Dostal (2015) also described a *Clivina (Physo-clivina) bulirshi* Dostal, 2015 from West Africa. Because this latter species was printed a month earlier than the Australian species, this is a junior homonym and is herewith renamed *C. bulirschiana*, spec. nov.

Remarks

As already mentioned in part 2 of the revision, the Australian *Clivina* fauna differs from those of all other continents in the extreme differences in body size and perhaps also in the very large number of species, at least in relation to the small size of the continent, as compared with other continents. Moreover, this large number of mainly hygrophilous species is surprising for a largely dry continent. Indeed, semiarid and arid regions in Australia cover relatively more space than in any other continent.

The very large differences in body size may be a consequence of the presence of but very few large, hygrophilous scaritine species in Australia (only half

a dozen species of the genus *Geoscapus* (Macleay, 1863)), as well as the presence of but very few small hygrophilous species (only the genus *Setodyschirius* Fedorenko, 1996 with about a dozen species). In other continents the niche of very small hygrophilous scaritine species is occupied by usually many species of the genus *Dyschirius* s.l. Bonelli, 1813 and a number of related genera, and the niche of large hygrophilous species is occupied by many species of the large genus *Scarites* s.l. Fabricius, 1775 and a great number of related genera. Thus, it seems that in Australia both niches are mainly occupied by species of the genus *Clivina*, and indeed, the Australian *Clivina* fauna includes some of the smallest species of this genus, as well as the largest.

Explication of the very large number of species in a prevailing dry continent seems to be more difficult. However, the oscillations of climate during Pleistocene and late Tertiary in Northern and Western Australia repeatedly united fairly humid areas and dissected these again by dry corridors, which might have caused repeated invasions of species and subsequent dissection of their ranges. This probably produced quite rapid separation of species and thus, it may be one, or even the most important, reason for the very high species number and diversity.

References

- Baehr, M. 1987. *Clivina demarzi* sp. n., a new flightless *Clivina* from the Northern Territory of Australia (Insecta, Coleoptera, Carabidae, Scaritinae). *Spixiana* 10: 187-190.
- 2008. The Australian Clivinini 1. The genera *Ancus* Putzeys, *Aspidoglossa* Putzeys, *Clivinarchus* Sloane, *Platysphyrus* Sloane, *Pseudoclivina* Kult, *Rhysocara* Sloane, *Syleter* Andrewes, the subgenera *Paraclivina* Kult, *Semiclivina* Kult, and the *atrata*-, *biplagiata*-, *brevicornis*-, *coronata*-, *coryzoides*-, *cribrosa*-, *debilis*-, *denticollis*-, *grandiceps*-, *incerta*-, *lobata*-, *obliquata*-, *obsoleta*-, *orbitalis*-, *planiceps*-, *sulcaticeps*-, *tranquebaria*-, and *wurargae*-groups of the genus *Clivina* Latreille. With a note on a record of the genus *Parathlibops* Basilewsky (Scapterini) (Carabidae, Scaritinae). *Coleoptera* 12: 1-220.
- 2015. Revision of the Australian Clivinini 2. The *ambigua*-, *bataviae*-, *bullata*-, *cava*-, *emarginata*-, *heterogena*-, *impressiceps*-, and *sloanei*-groups of the genus *Clivina* Latreille, the new genus *Rubidiclivina*, and additions to the 1st part (Coleoptera, Carabidae, Scaritinae). *Entomologische Blätter und Coleoptera* 111: 59-446.
- Blackburn, T. 1890. Notes on Australian Coleoptera, with descriptions of new species. Part V. Proceedings of the Linnean Society of New South Wales (2)4: 1247-1276.
- Csiki, E. 1927. Carabidae: Carabinae II. In: Schenkling, S. (ed.). *Coleopterorum Catalogus* I, part 92, pp. 315-622, Berlin (W. Junk).
- Dostal, A. 2015. Two new species of *Clivina* Latreille, 1802 (Coleoptera: Carabidae: Scaritinae) from Africa. *Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen* 67: 27-37.
- Lorenz, W. 2005. Systematic list of extant ground beetles of the world (Insecta Coleoptera "Geadephaga": Trachypachidae and Carabidae incl. Paussinae, Cicindelinae. Rhysodidae). 530 pp., 2. ed., Tutzing (printed by the author).
- Macleay, W. J. 1863. On the Scaritidae of New Holland. *Transactions of the Entomological Society of New South Wales* 1: 55-74.
- Moore, B. P., Weir, T. A. & Pyke, J. E. 1987. Rhysodidae and Carabidae. Pp. 17-320 in: *Zoological Catalogue of Australia* 4, Canberra (Australian Government Publishing Service).
- Putzeys, J. 1846. Monographie des *Clivina* et genres voisins précédée d'un tableau synoptique des genres de la tribu des Scaritides. *Mémoires de la Société des Sciences de Liège* 2: 521-663.
- 1862. Postscriptum ad Clivindarum monographiam atque de quibusdam aliis. *Mémoires de la Société des Sciences de Liège* 18: 1-78.
- 1866. Révision des Clivinides d'Australie. *Stettiner Entomologische Zeitschrift* 27: 33-42.
- 1867. Révision générale des Clivinides. *Annales de la Société Entomologique de Belgique* 10: 1-242.
- 1868. Supplément à la révision générale des Clivinides. *Annales de la Société Entomologique de Belgique* 11: 7-22.
- 1873. Deuxième supplément à la révision générale des Clivinides. *Annales de la Société Entomologique de Belgique* 16: 10-18.
- Sloane, T. G. 1896a. On the Australian Clivinides (Fam. Carabidae). Revision of the Australian species of the genus *Clivina* with the description of a new genus *Clivinarchus*. *Proceedings of the Linnean Society of New South Wales* 21: 143-257.
- 1896b. Appendix to the Australian Clivinides (Fam. Carabidae). The Clivinides of King's Sound and its vicinity. *Proceedings of the Linnean Society of New South Wales* 21: 275-280.
- 1905. Revisional notes on Australian Carabidae. Part I. *Proceedings of the Linnean Society of New South Wales* 29: 699-733.
- 1907. Studies in Australian Entomology. No. XV. New genera and species of Carabidae, with some notes of synonymy (Clivinini, Scaritini, Cuneipectini, Trigonotomini and Llebini). *Proceedings of the Linnean Society of New South Wales* 32: 346-381.
- 1916. New Australian species of Carabidae belonging to the tribe Scaritini (Coleoptera). *Proceedings of the Linnean Society of New South Wales* 41: 597-630.
- 1917. Carabidae from tropical Australia (New genera and species, notes and synonymy, and synoptic tables. Tribes Scaritini, Harpalini, Odacanthini, Lebiini, and Helluonini). *Proceedings of the Linnean Society of New South Wales* 42: 406-438.

**Systematic list of the species
mentioned in present paper with information about their distribution**

sulcaticeps group

vixsulcata, spec. nov. n.QLD: CYP

heterogena group

lobipes subgroup

semirubra, spec. nov. nw.QLD

oodnadattae subgroup

infans, spec. nov. nw.QLD

australica subgroup

gerstmeieri planior, subspec. nov.
nw.QLD

tuberculifrons subgroup

laevigata, spec. nov. n.QLD: CYP
uncinata, spec. nov. n.QLD: CYP
moretona, spec. nov. n.QLD: n.CYP
foveifrons, spec. nov. n.QLD: CYP
normanbyensis, spec. nov. n.QLD

procera group

procera Putzeys, 1866 e.SA, VIC, NSW, e.QLD
= *prominens* Putzeys, 1866 (**syn. nov.**)
obscuripes (Blackburn, 1890) n. + nw.NT
subrufipes, spec. nov. n.NT: Kakadu NP
cooinda, spec. nov. n.NT, ne.QLD
sinuicola, spec. nov. nw.QLD, ne.NT
thoracica, spec. nov. nw.QLD
gemina gemina, spec. nov. nw.NT, ne.WA: ne.KID
gemina nigripes, subspec. nov. n.WA: s. + w.KID

carnabyi, spec. nov. n.WA: s. + w.KID
windjanae, spec. nov. n.WA: sw.KID
mahoni, spec. nov. nw.NT
montisbelli, spec. nov. n.WA: w.KID
victoriae, spec. nov. nw.NT
ryaceki, spec. nov. n. + nw.NT, ne.WA: ne.KID
heros, spec. nov. n.WA: KID
goldingi, spec. nov. n.NT
newcastleana, spec. nov. nc.NT
glabripennis, spec. nov. sw.QLD, ne.SA
micans, spec. nov. w.QLD, ce.NT
rugosifrons, spec. nov. n.QLD, ne.NT
monilicornis Sloane, 1896 n.QLD, n.NT
conicollis, spec. nov. n.QLD: CYP, n.NT
dubia, spec. nov. AUS
regularis Sloane, 1896 ne.NSW, se.QLD

elegans group

elegans subgroup

elegans Putzeys, 1862 n.QLD: tip of CYP, Torres Strait Is.
interposita, spec. nov. n.QLD: n.CYP
kershawi Sloane, 1916 n.QLD: ce.CYP
variseta, spec. nov. n.QLD: CYP
triseriata, spec. nov. n.NT
inopinata, spec. nov. n.QLD
profundestriolata, spec. nov. c. + sw.QLD

gracilipes subgroup

gracilipes gracilipes Sloane, 1896 nw.QLD, n.NT, n.WA: KID
gracilipes longior, subspec. nov. n.QLD: CYP
marginata (Putzeys, 1868) n.QLD, n.NT, n.WA

oblonga subgroup

oblonga (Putzeys, 1873) e.NSW, se.QLD
= *abbreviata* (Putzeys, 1873)
robusta Sloane, 1905 e.NSW
= *macleayana* (**nom. nov.**)
= *foveiceps* (Macleay, 1863)

obliquicollis subgroup

obliquicollis Sloane, 1905 nw.WA: KID
bankae, spec. nov. nc.NT
incurvicollis, spec. nov. nw.WA: Pilbara + sw.KID
platynota, spec. nov. nw.WA: Pilbara
rectipennis, spec. nov. sc.NT, ce.WA

brevisterna subgroup

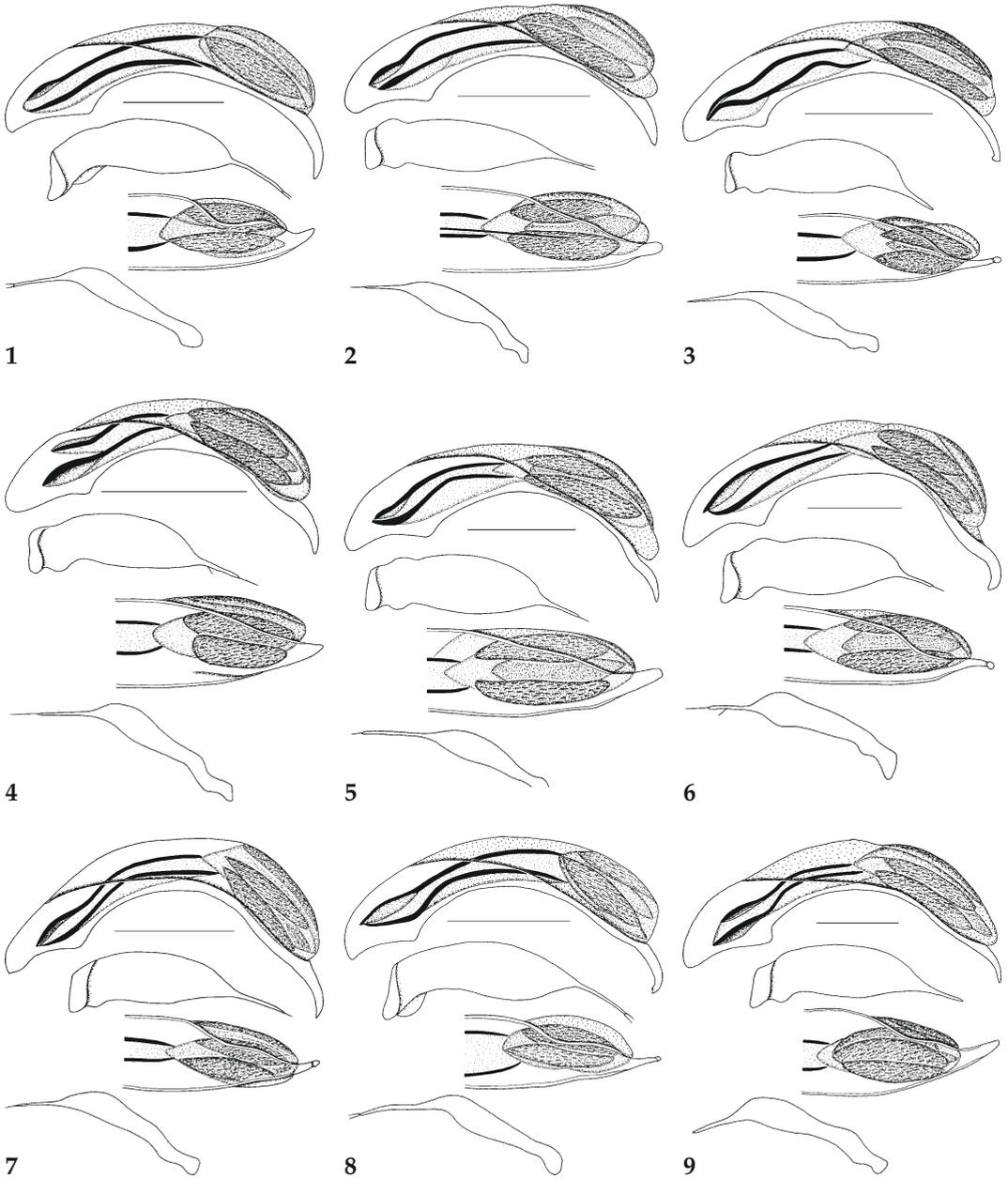
brevisterna Sloane, 1916 n.NT
major Sloane, 1917 (**stat. nov.**) n.NT
mastersi Sloane, 1896 n.NT
cobourgiana, spec. nov. n.NT: Cobourg Pen.
nyctosyloides Putzeys, 1868 ne.QLD
= *propinqua* (**nom. nov.**)
= *interstitialis* Sloane, 1896
ovalior, spec. nov. ne.QLD
nitescens, spec. nov. n.NT, ? n.WA
ovalipennis Sloane, 1905 n.QLD
(= *ovipennis* Sloane, 1896)
pachysoma, spec. nov. nw.WA: Pilbara
froggatti Sloane, 1896 n.WA: w.KID

hackeri subgroup

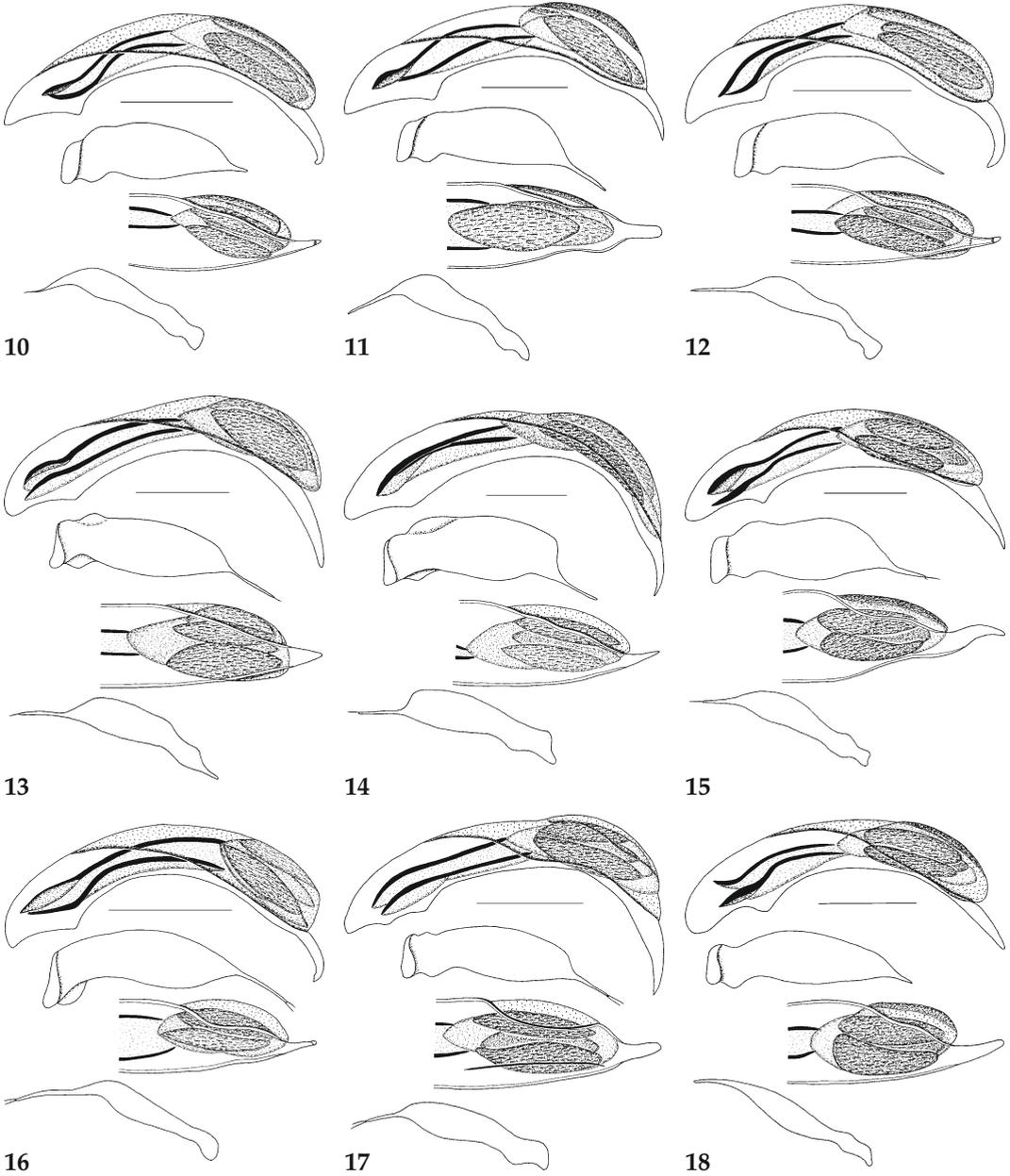
hackeri Sloane, 1907 n.QLD
demarzi Baehr, 1987 n.NT
crassipennis, spec. nov. n.NT, n.WA: ne.KID
horaki, spec. nov. n.WA: sw.KID

darwini subgroup

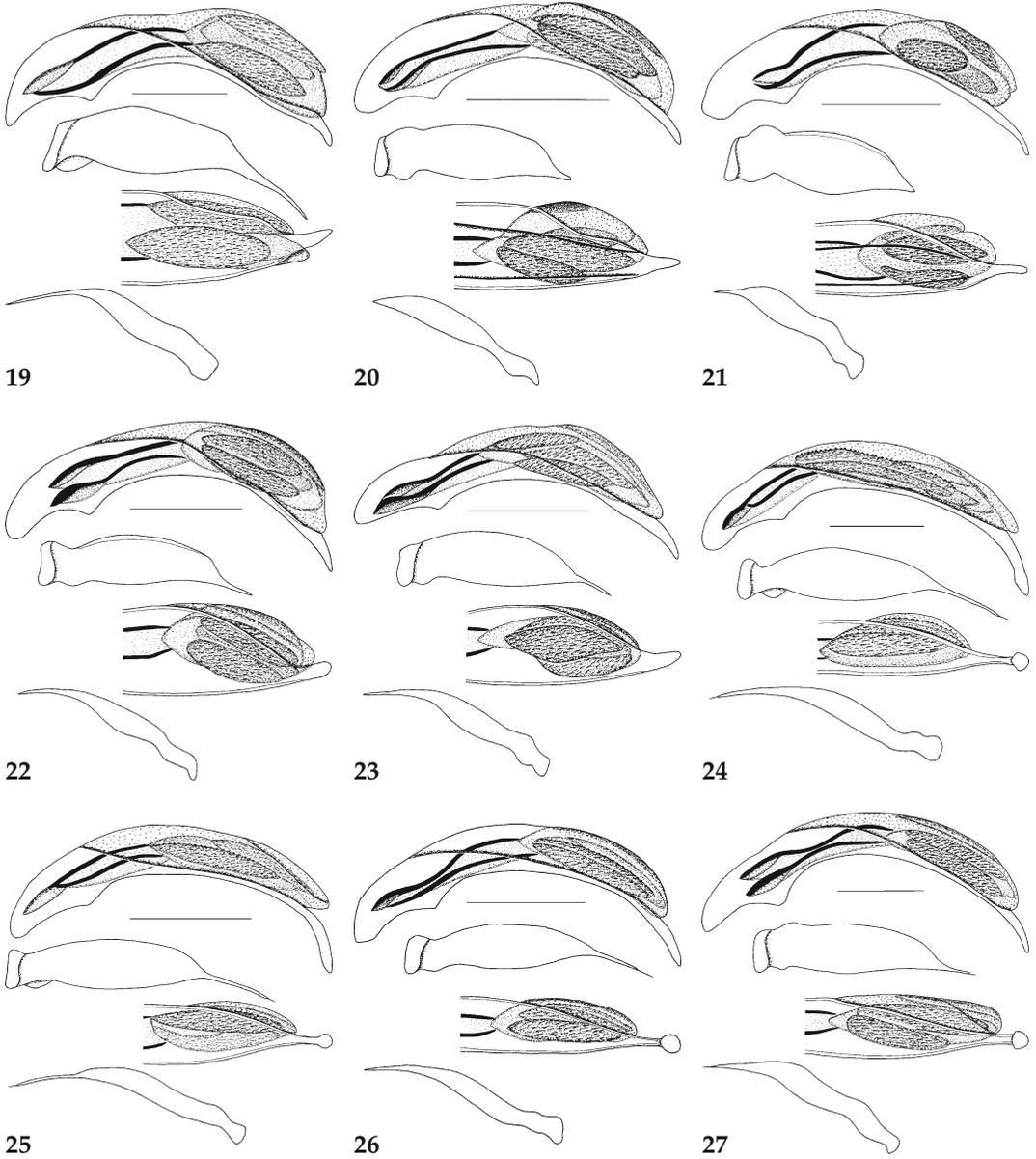
darwini Sloane, 1916 n.NT
macleayi Sloane, 1896 n.NT
horneri, spec. nov. n.NT



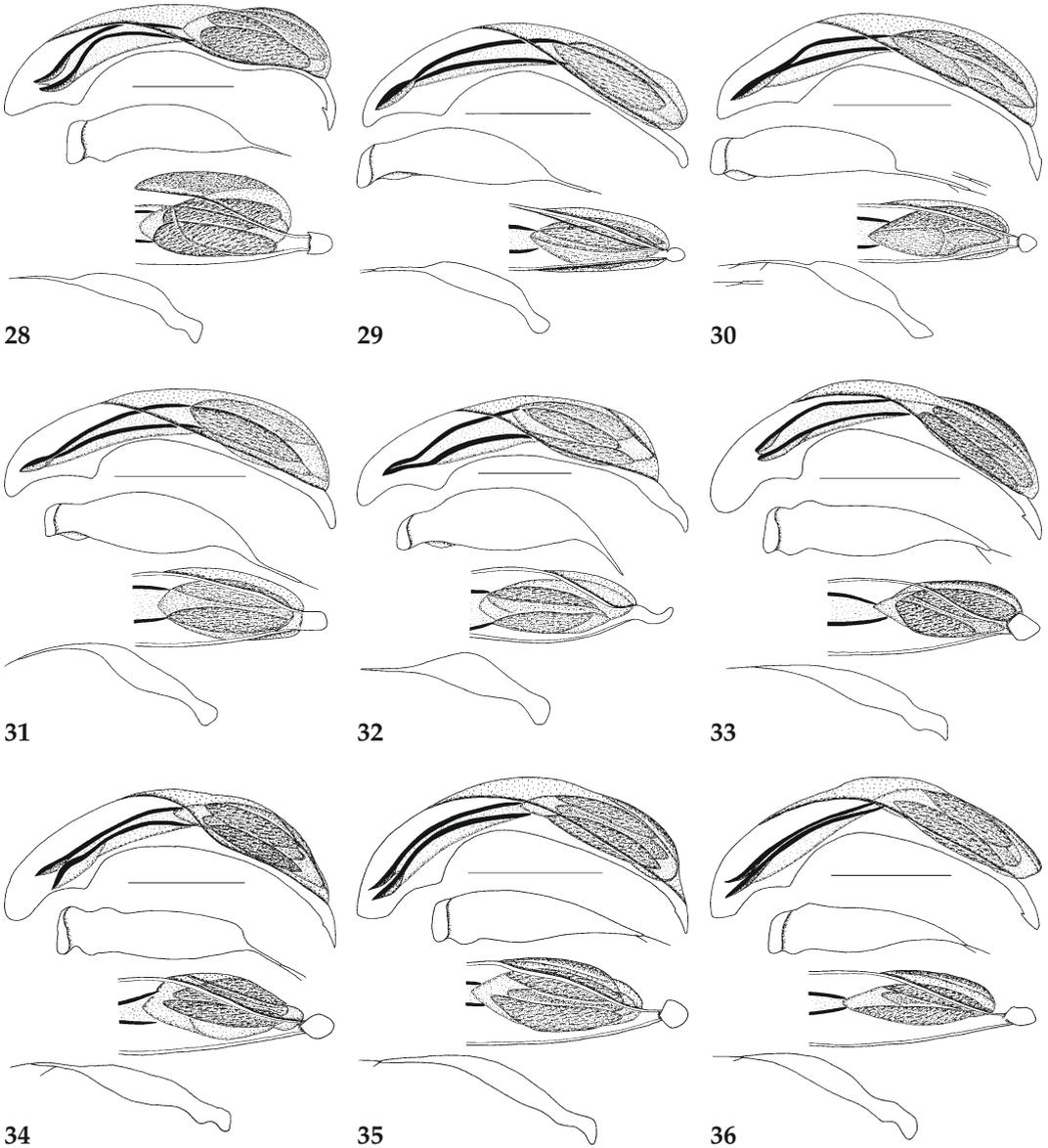
Figs 1–9. Aedeagus (left side and apex from below), parameres. Scale bars: 1 mm. **1.** *Clivina procera* Putzeys, 1866. **2.** *C. obscuripes* (Blackburn, 1890). **3.** *C. subrufipes*, spec. nov. **4.** *C. cooinda*, spec. nov. **5.** *C. sinuicola*, spec. nov. **6.** *C. thoracica*, spec. nov. **7.** *C. gemina gemina*, spec. nov. **8.** *C. gemina nigripes*, subspec. nov. **9.** *C. carnabyi*, spec. nov.



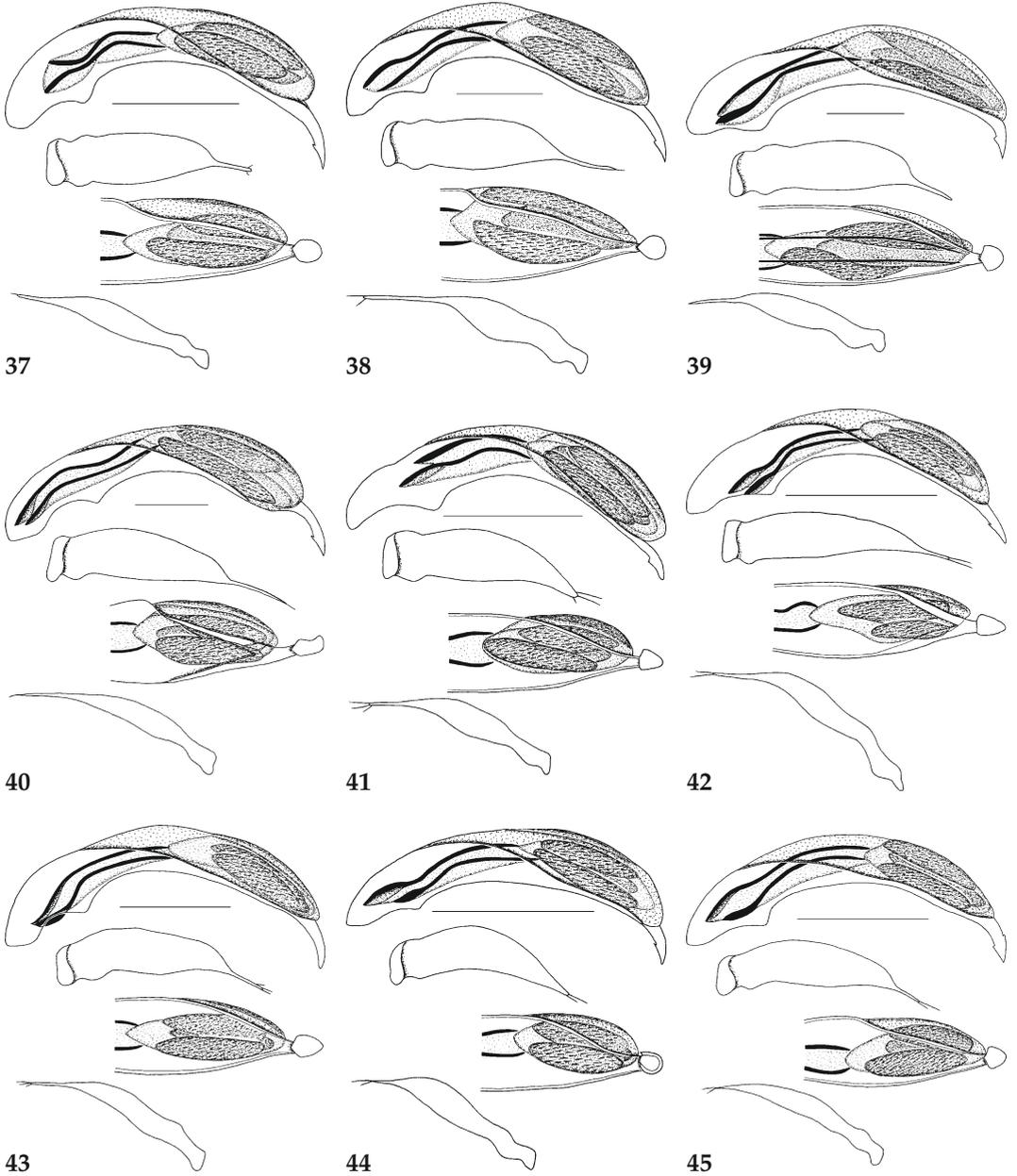
Figs 10–18. Aedeagus (left side and apex from below), parameres. Scale bars: 1 mm. **10.** *C. windjanae*, spec. nov. **11.** *C. mahoni*, spec. nov. **12.** *C. victoriae*, spec. nov. **13.** *C. ryaceki*, spec. nov. **14.** *C. heros*, spec. nov. **15.** *C. goldingi*, spec. nov. **16.** *C. newcastleana*, spec. nov. **17.** *C. glabripennis*, spec. nov. **18.** *C. micans*, spec. nov.



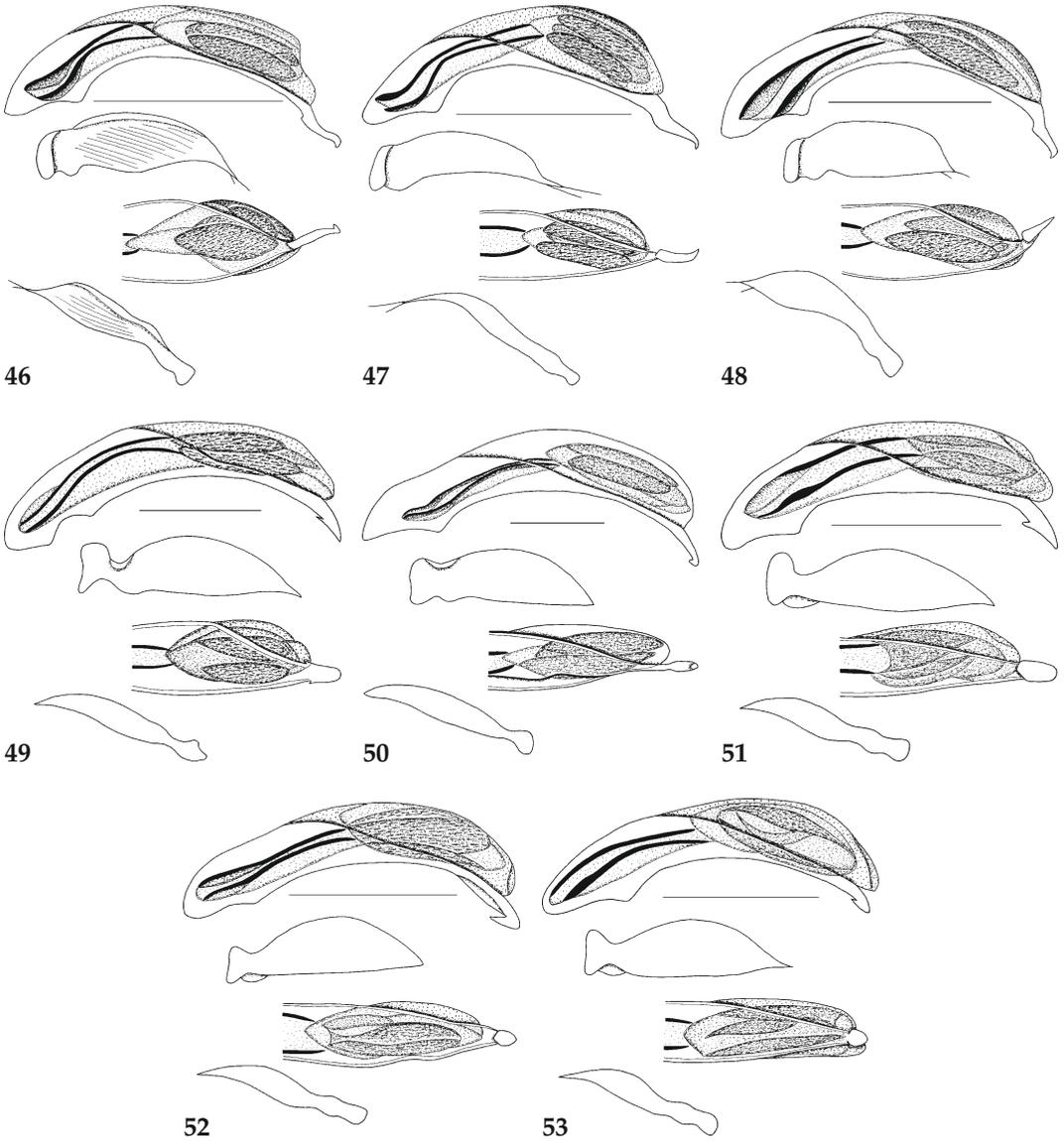
Figs 19-27. Aedeagus (left side and apex from below), parameres. Scale bars: 1 mm. 19. *C. rugosifrons*, spec. nov. 20. *C. monilicornis* Sloane, 1896. 21. *C. conicollis*, spec. nov. 22. *C. dubia*, spec. nov. 23. *C. regularis* Sloane, 1896. 24. *C. elegans* Putzeys, 1862. 25. *C. interposita*, spec. nov. 26. *C. kershawi* Sloane, 1916. 27. *C. variseta*, spec. nov.



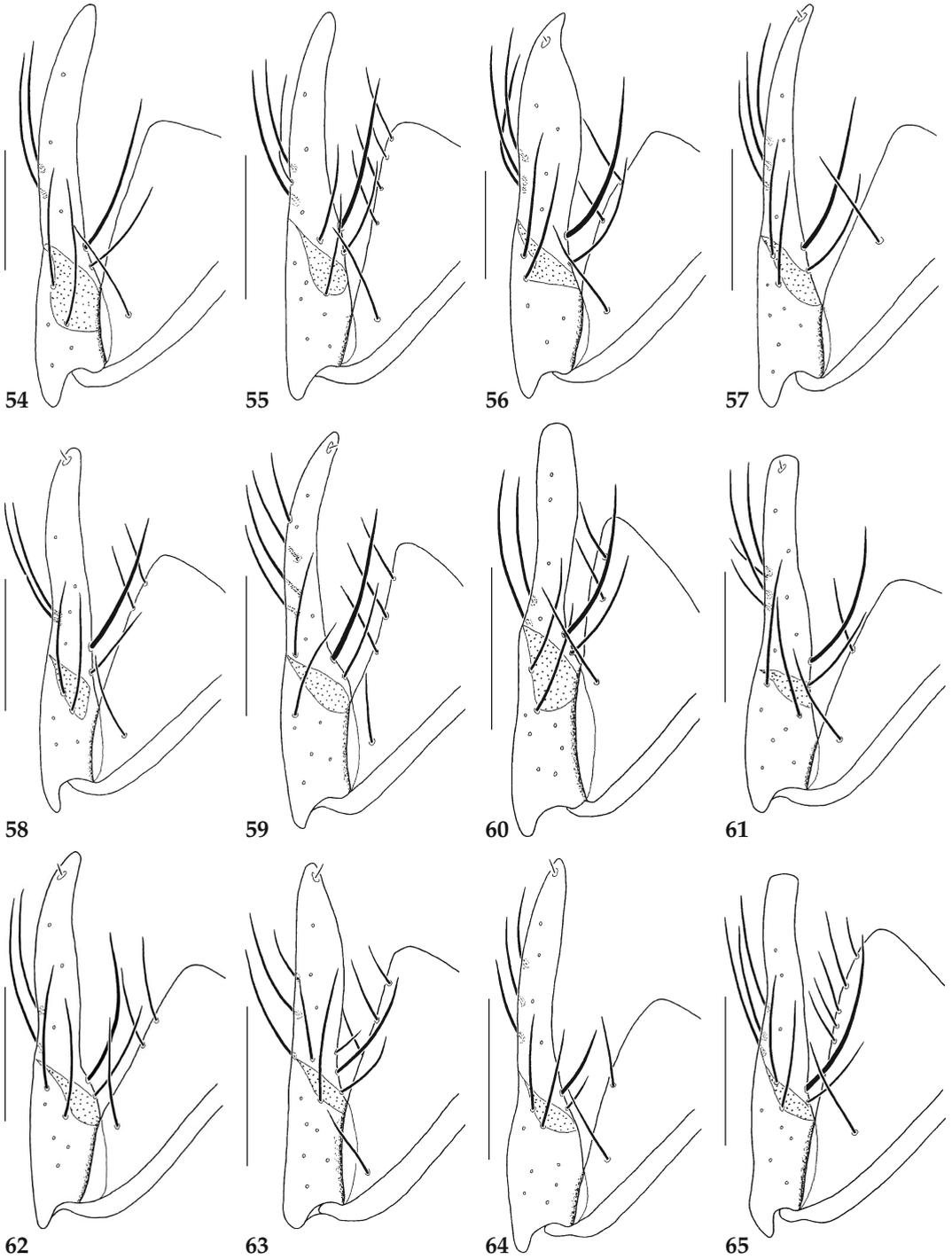
Figs 28–36. Aedeagus (left side and apex from below), parameres. Scale bars: 1 mm. 28. *C. inopinata*, spec. nov. 29. *C. gracilipes gracilipes* Sloane, 1896. 30. *C. marginata* (Putzeys, 1868). 31. *C. oblonga* (Putzeys, 1873). 32. *C. robusta* Sloane, 1905. 33. *C. obliquicollis* Sloane, 1905. 34. *C. bankae*, spec. nov. 35. *C. incurvicollis*, spec. nov. 36. *C. platynota*, spec. nov.



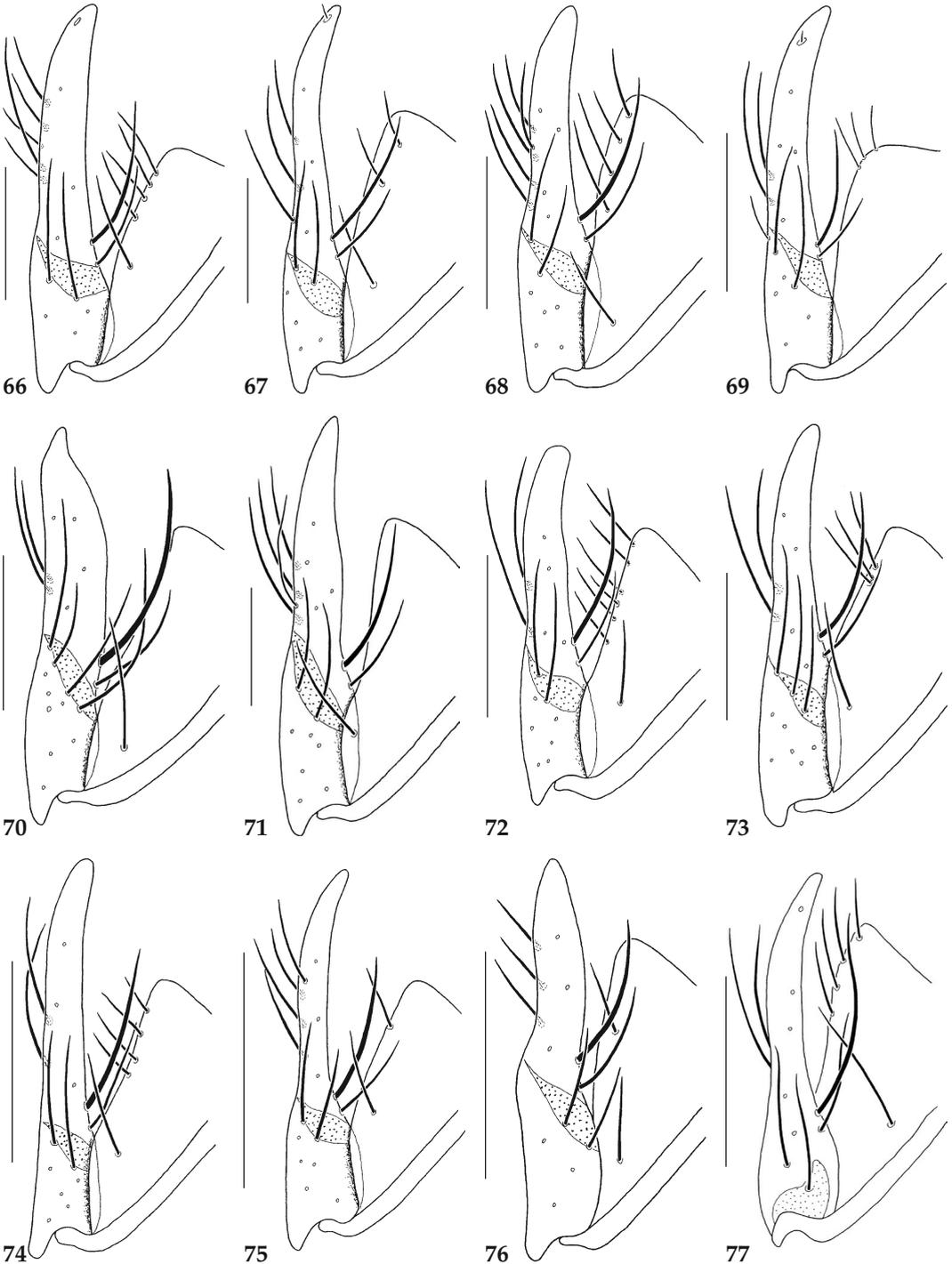
Figs 37-45. Aedeagus (left side and apex from below), parameres. Scale bars: 1 mm. 37. *C. brevisterna* Sloane, 1916. 38. *C. major* Sloane, 1917. 39. *C. mastersi* Sloane, 1896. 40. *C. cobourgiana*, spec. nov. 41. *C. nyctosyloides* Putzeys, 1868. 42. *C. nitescens*, spec. nov. 43. *C. pachysoma*, spec. nov. 44. *C. demarzi* Baehr, 1987. 45. *C. crassipennis*, spec. nov.



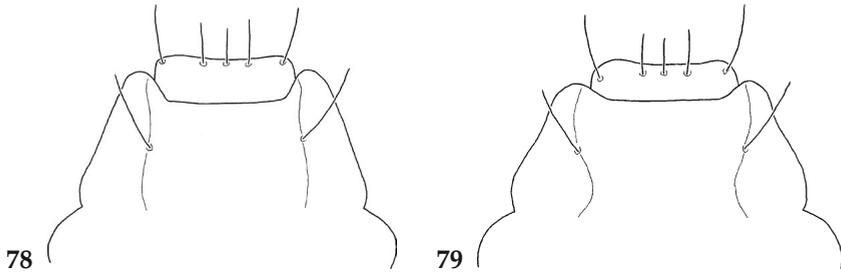
Figs 46–53. Aedeagus (left side and apex from below), parameres. Scale bars: 1 mm. **46.** *C. darwini* Sloane, 1916. **47.** *C. macleayi* Sloane, 1896. **48.** *C. horneri*, spec. nov. **49.** *C. semirubra*, spec. nov. **50.** *C. infans*, spec. nov. **51.** *C. laevigata*, spec. nov. **52.** *C. uncinata*, spec. nov. **53.** *C. normanbyensis*, spec. nov.



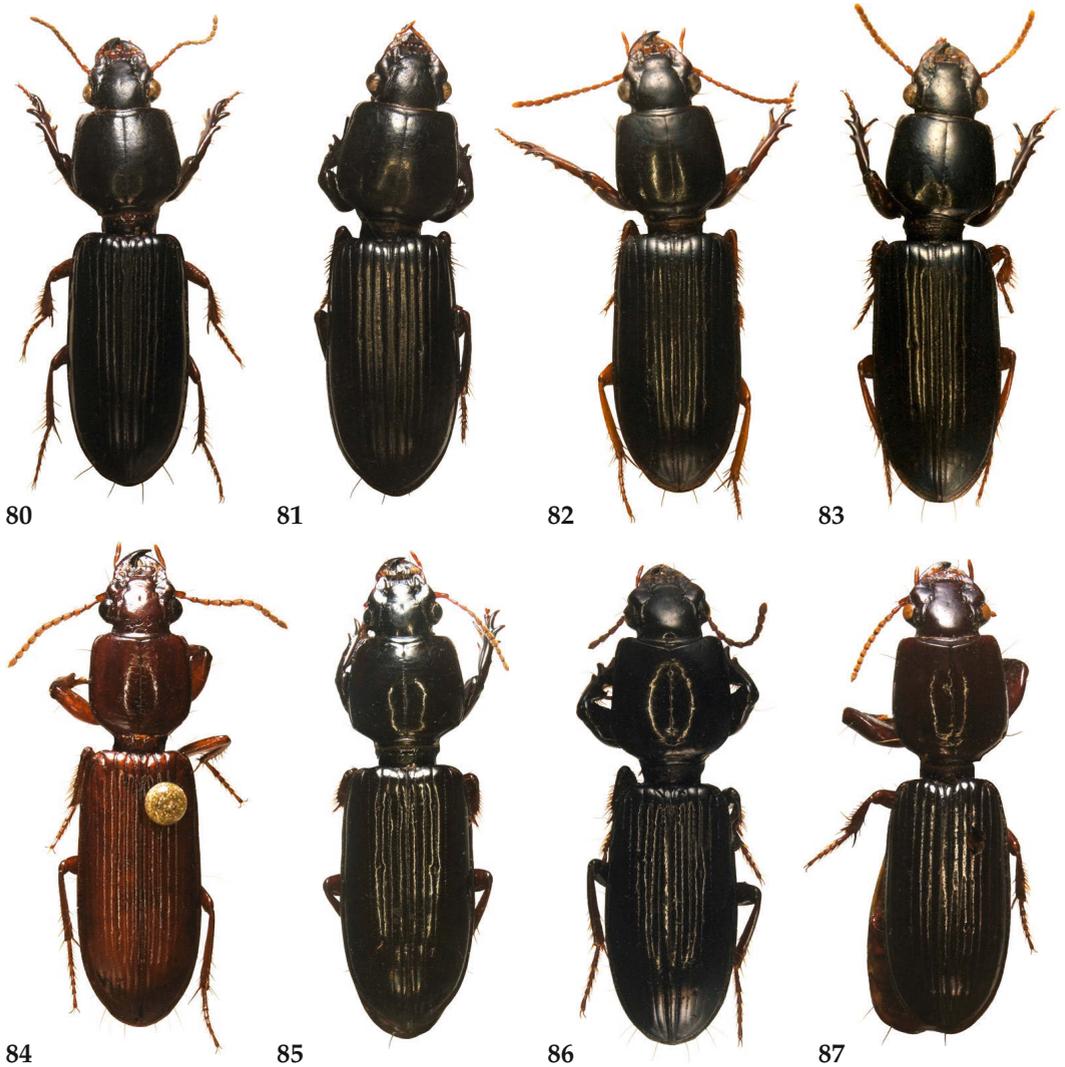
Figs 54–65. Right gonocoxites (ventral view). Scale bars: 0.5 mm. 54. *Clivina procera* Putzeys, 1866. 55. *C. windjanae*, spec. nov. 56. *C. heros*, spec. nov. 57. *C. newcastleana*, spec. nov. 58. *C. rugosifrons*, spec. nov. 59. *C. conicollis*, spec. nov. 60. *C. regularis* Sloane, 1896. 61. *C. elegans* Putzeys, 1862. 62. *C. profundestriolata*, spec. nov. 63. *C. gracilipes gracilipes* Sloane, 1896. 64. *C. marginata* (Putzeys, 1868). 65. *C. oblonga* (Putzeys, 1873).



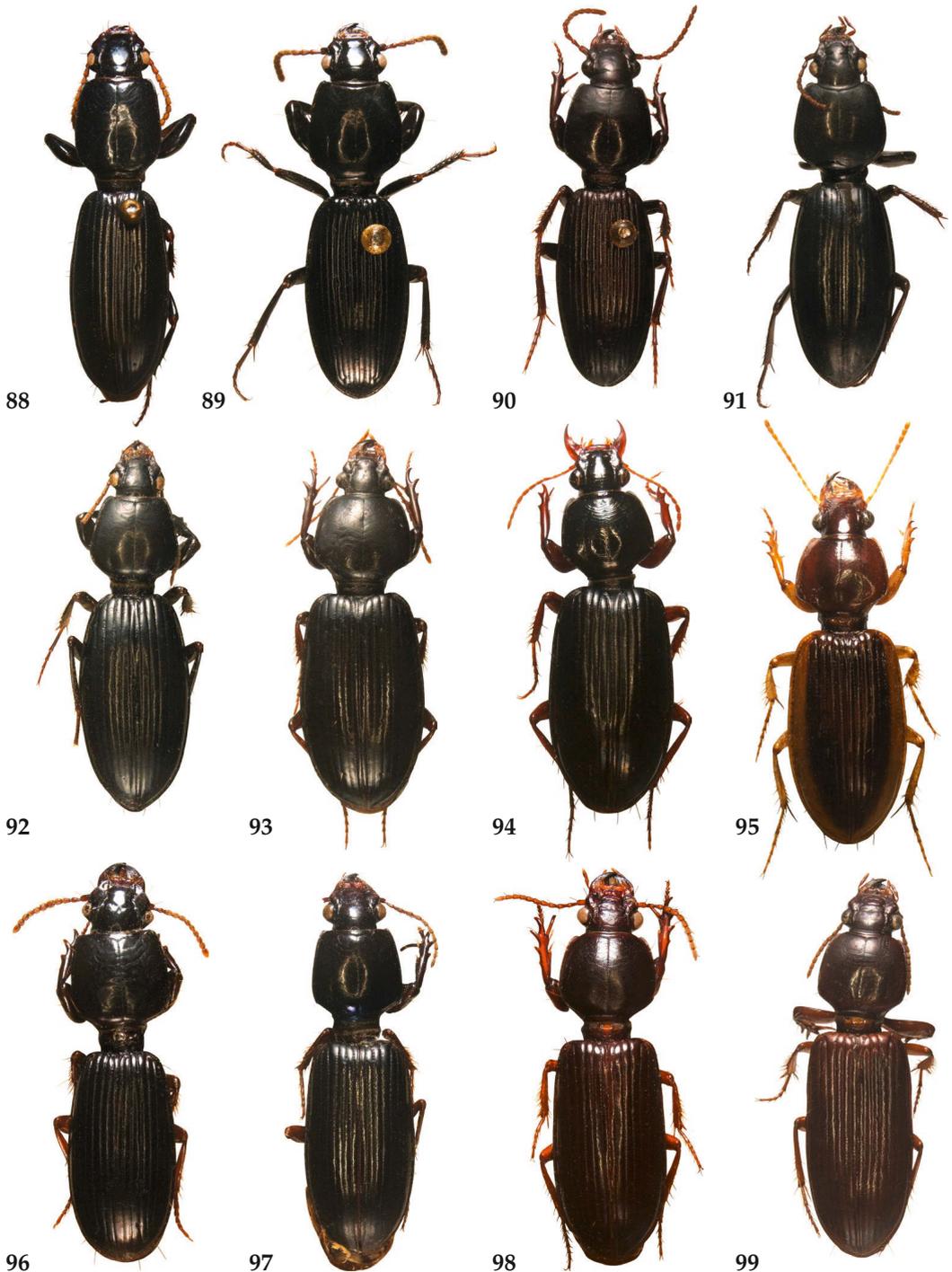
Figs 66-77. Right gonocoxites (ventral view). Scale bars: 0.5 mm. 66. *C. robusta* Sloane, 1905. 67. *C. bankae*, spec. nov. 68. *C. incurvicollis*, spec. nov. 69. *C. rectipennis*, spec. nov. 70. *C. major* Sloane, 1917. 71. *C. mastersi* Sloane, 1896. 72. *C. nyctosyloides* Putzeys, 1868. 73. *C. pachysoma*, spec. nov. 74. *C. demarzi* Baehr, 1987. 75. *C. darwini* Sloane, 1916. 76. *C. horneri*, spec. nov. 77. *C. vixsulcata*, spec. nov.



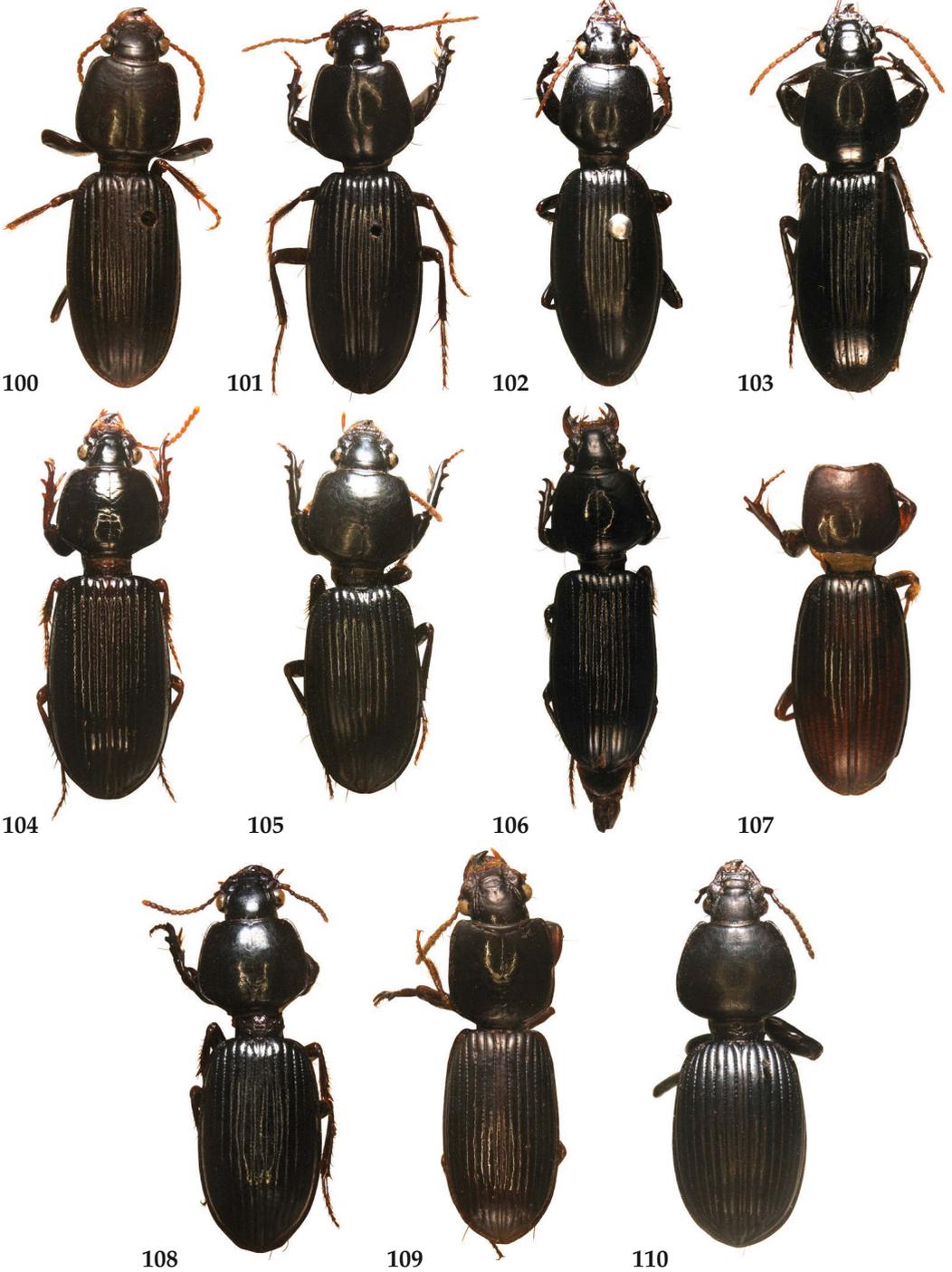
Figs 78–79. Clypeus excision. *Clivina procera* Putzeys, 1866. 79. *C. elegans* Putzeys, 1862.



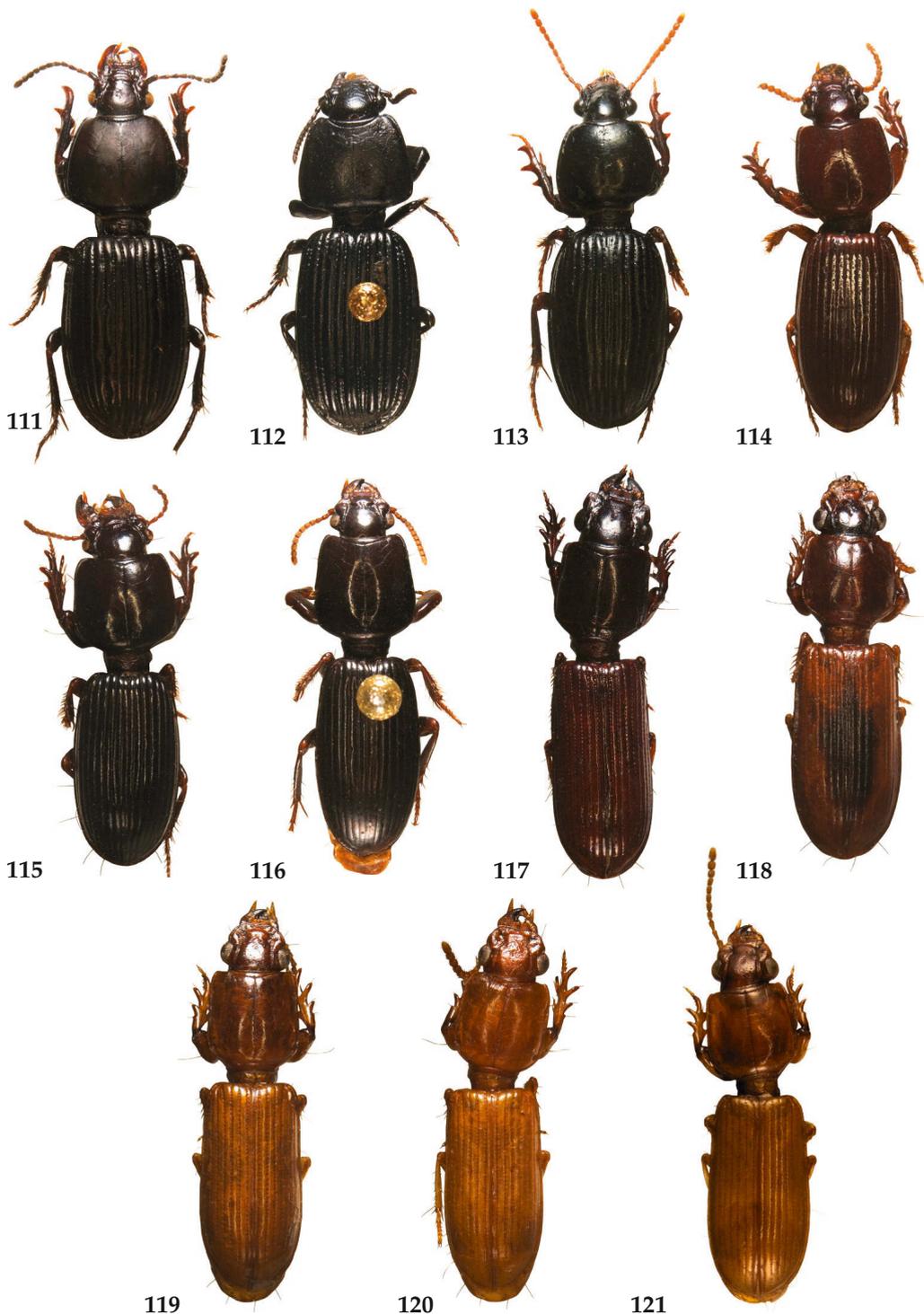
Figs 80–87. Habitus. Body lengths in brackets. 80. *Clivina procera* Putzeys, 1866 (14.5 mm). 81. *C. obscuripes* (Blackburn, 1890) (11.8 mm). 82. *C. cooinda*, spec. nov. (11.5 mm). 83. *C. gemina gemina*, spec. nov. (12.8 mm). 84. *C. montisbelli*, spec. nov. (12.1 mm). 85. *C. glabripennis*, spec. nov. (15.7 mm). 86. *C. micans*, spec. nov. (15.6 mm). 87. *C. regularis* Sloane, 1896 (10.8 mm).



Figs 88–99. Habitus. Body lengths in brackets. 88. *C. elegans* Putzeys, 1862 (15.5 mm). 89. *C. interposita*, spec. nov. (12.8 mm). 90. *C. kershawi* Sloane, 1916 (13.5 mm). 91. *C. variseta*, spec. nov. (17.0 mm). 92. *C. triseriata*, spec. nov. (15.7 mm). 93. *C. profundestriolata*, spec. nov. (13.8 mm). 94. *C. gracilipes gracilipes* Sloane, 1896 (12.5 mm). 95. *C. marginata* (Putzeys, 1868) (13.5 mm). 96. *C. oblonga* (Putzeys, 1873) (12.2 mm). 97. *C. obliquicollis* Sloane, 1905 (12.0 mm). 98. *C. incurvicollis*, spec. nov. (13.1 mm). 99. *C. rectipennis*, spec. nov. (11.8 mm).



Figs 100–110. Habitus. Body lengths in brackets. 100. *C. brevisterna* Sloane, 1916 (12.2 mm). 101. *C. major* Sloane, 1917 (15.5 mm). 102. *C. mastersi* Sloane, 1896 (17.8 mm). 103. *C. cobourgiana*, spec. nov. (18.9 mm). 104. *C. nyctosylloides* Putzeys, 1868 (12.2 mm). 105. *C. ovalior*, spec. nov. (13.1 mm). 106. *C. nitescens*, spec. nov. (11.7 mm). 107. *C. ovalipennis* Sloane, 1905 (c. 12.6 mm). 108. *C. pachysoma*, spec. nov. (13.2 mm). 109. *C. froggatti* Sloane, 1896 (7.7 mm). 110. *C. hackeri* Sloane, 1907 (9.3 mm).



Figs 111–121. Habitus. Body lengths in brackets. 111. *C. demarzi* Baehr, 1987 (9.0 mm). 112. *C. crassipennis*, spec. nov. (9.6 mm). 113. *C. horaki*, spec. nov. (8.4 mm). 114. *C. darwini* Sloane, 1916 (6.2 mm). 115. *C. macleayi* Sloane, 1896 (8.3 mm). 116. *C. horneri*, spec. nov. (8.5 mm). 117. *C. semirubra*, spec. nov. (7.2 mm). 118. *C. infans*, spec. nov. (4.2 mm). 119. *C. laevigata*, spec. nov. (5.0 mm). 120. *C. uncinata*, spec. nov. (4.5 mm). 121. *C. normanbyensis*, spec. nov. (4.95 mm).



122



123



124



125



126



127



128



129



130

Figs 122–130. Head and pronotum. 122. *Clivina thoracica*, spec. nov. 123. *C. ryaceki*, spec. nov. 124. *C. heros*, spec. nov. 125. *C. newcastleana*, spec. nov. 126. *C. rugosifrons*, spec. nov. 127. *C. conicollis*, spec. nov. 128. *C. dubia*, spec. nov. 129. *C. inopinata*, spec. nov. 130. *C. robusta* Sloane, 1905.



131



132



133



134

Figs 131–134. Head and pronotum. 131. *C. bankae*, spec. nov. 132. *C. platynota*, spec. nov. 133. *C. vixsulcata*, spec. nov. 134. *C. foveifrons*, spec. nov.



135

Fig. 135. *Clivina triseriata*, spec. nov. Base of elytra.

Alphabetical checklist of the species mentioned in present paper

Genus *Clivina* Latreille

Subgenus *Clivina* Latreille

<i>bankae</i> , spec. nov.	p. 251	<i>monilicornis</i> Sloane, 1896	p. 230
<i>brevisterna</i> Sloane, 1916	p. 256	<i>monisbelli</i> , spec. nov.	p. 221
<i>carnabyi</i> , spec. nov.	p. 218	<i>moretona</i> , spec. nov.	p. 278
<i>cobourgiana</i> , spec. nov.	p. 259	<i>newcastleana</i> , spec. nov.	p. 226
<i>conicollis</i> , spec. nov.	p. 231	<i>nitescens</i> , spec. nov.	p. 262
<i>cooinda</i> , spec. nov.	p. 213	<i>normanbyensis</i> , spec. nov.	p. 283
<i>crassipennis</i> , spec. nov.	p. 268	<i>nyctosyloides</i> Putzeys, 1868	p. 260
<i>darwini</i> Sloane, 1916	p. 270	= <i>propinqua</i> (nom. nov.)	
<i>demarzi</i> Baehr, 1987	p. 267	= <i>interstitialis</i> Sloane, 1896	
<i>dubia</i> , spec. nov.	p. 233	<i>obliquicollis</i> Sloane, 1905	p. 250
<i>elegans</i> Putzeys, 1862	p. 235	<i>oblonga</i> (Putzeys, 1873)	p. 246
<i>foveifrons</i> , spec. nov.	p. 282	= <i>abbreviata</i> (Putzeys, 1873)	
<i>froggatti</i> Sloane, 1896	p. 265	<i>obscuripes</i> (Blackburn, 1890)	p. 210
<i>gemina gemina</i> , spec. nov.	p. 216	<i>ovalior</i> , spec. nov.	p. 261
<i>gemina nigripes</i> , subspec. nov.	p. 218	<i>ovalipennis</i> Sloane, 1905	
<i>gerstmeieri planior</i> , subspec. nov.	p. 277	(= <i>ovipennis</i> Sloane, 1896)	p. 263
<i>glabripennis</i> , spec. nov.	p. 228	<i>pachysoma</i> , spec. nov.	p. 264
<i>goldingi</i> , spec. nov.	p. 225	<i>platynota</i> , spec. nov.	p. 254
<i>gracilipes gracilipes</i> Sloane, 1896	p. 242	<i>procera</i> Putzeys, 1866	p. 207
<i>gracilipes longior</i> , subspec. nov.	p. 244	= <i>prominens</i> Putzeys, 1866 (syn. nov.)	
<i>hackeri</i> Sloane, 1907	p. 266	<i>profundestriolata</i> , spec. nov.	p. 241
<i>heros</i> , spec. nov.	p. 224	<i>rectipennis</i> , spec. nov.	p. 255
<i>horaki</i> , spec. nov.	p. 269	<i>regularis</i> Sloane, 1896	p. 233
<i>horneri</i> , spec. nov.	p. 272	<i>robusta</i> Sloane, 1905	p. 248
<i>incurvicollis</i> , spec. nov.	p. 252	= <i>macleayana</i> (nom. nov.)	
<i>infans</i> , spec. nov.	p. 276	= <i>foveiceps</i> (Macleay, 1863)	
<i>inopinata</i> , spec. nov.	p. 240	<i>rugosifrons</i> , spec. nov.	p. 229
<i>interposita</i> , spec. nov.	p. 236	<i>ryaceki</i> , spec. nov.	p. 223
<i>kershawii</i> Sloane, 1916	p. 238	<i>semirubra</i> , spec. nov.	p. 275
<i>laevigata</i> , spec. nov.	p. 280	<i>sinuicola</i> , spec. nov.	p. 215
<i>macleayi</i> Sloane, 1896	p. 271	<i>subrufipes</i> , spec. nov.	p. 212
<i>mahoni</i> , spec. nov.	p. 220	<i>thoracica</i> , spec. nov.	p. 216
<i>major</i> Sloane, 1917 (stat. nov.)	p. 257	<i>triseriata</i> , spec. nov.	p. 240
<i>marginata</i> (Putzeys, 1868)	p. 245	<i>uncinata</i> , spec. nov.	p. 281
<i>mastersi</i> Sloane, 1896	p. 258	<i>variseta</i> , spec. nov.	p. 239
<i>micans</i> , spec. nov.	p. 228	<i>victoriae</i> , spec. nov.	p. 222
		<i>vixsulcata</i> , spec. nov.	p. 273
		<i>windjanae</i> , spec. nov.	p. 219