The Indo-Australian genus *Visiana* Swinhoe and the identity of the supraspecific taxa of *V. sordidata* (Lepidoptera, Geometridae, Larentiinae)

Olga Schmidt

Schmidt, O. (2006): The Indo-Australian genus *Visiana* Swinhoe and the identity of the supraspecific taxa of *V. sordidata* (Lepidoptera, Geometridae, Larentiinae). – Spixiana **29/3:** 214

Olga Schmidt, Zoologische Staatssammlung München, Münchhausenstr. 21, D-81247 München, Germany; e-mail: Olga.Schmidt@zsm.mwn.de

The genus *Visiana* Swinhoe belongs to the geometrid moth subfamily Larentiinae which occurs worldwide. The genus contains medium- to relatively large-sized moths of which the dark-brownish colouration resembles that of several other genera (e.g. *Disclisioprocta* Wallengren from South Africa, Madeira (Portugal) and South America, *"Horisme"* from Papua New Guinea, and *Scotocyma* Turner from the Australasian region). *Visiana* is widely distributed within the Indo-Australian region, from north-eastern Himalaya through the Indonesia and Malaysia to Papua New Guinea and eastern Australia.

According to the present knowledge, the genus *Visiana* currently comprises the following species: *V. brujata* (Guenée) from eastern Australia, *V. excentrata* (Guenée) from the south-east of Australia, *V. hyperctenista* (Prout) from Bismarck Archipelago, *V. sordidata* (Moore) from the Indo-Australian region, and *V. vinosa* (Warren) from Papua New Guinea. *Visiana sordidata* comprises the following subspecies: *V. s. inimica* (Prout), *V. s. robinsoni* (Prout), *V. s. tamborica* (Prout) (Scoble, 1999). The species of the genus are difficult to tell apart using the characters of the wing colouration and pattern. The information about genitalic characters which would help distinguishing the species was still mostly lacking. Examination of phylogenetic relationships of *Visiana* and related larentiine genera suggested *Visiana* was not monophyletic.

The current studies of the external characters and the genitalia revealed that all supraspecific taxa within the species *V. sordidata* should be regarded as distinct species, *V. robinsoni*, *V. inimica*, and *V. tamborica*. The main distinguishing characters are: the shape and length of the uncus, saccus, lateral papillae of juxta, and the aedeagus in the male genitalia and the shape of the ductus and corpus bursae, and of signum in the female genitalia. Furthermore, the specimens from Borneo (Malaysia) are to be assigned to a new species, *V. hollowayi*.
The species of the genus *Visiana* occur in the forest zone. All known specimens were attracted to light at night. All attempts to collect the Australian *Visiana* s.str. species during the day time failed which suggests that the species of the genus are nocturnal.

The present study also revealed that *Visiana* species feed on species of the plant genus *Urtica* (Urticaceae) that is very common around the globe in the Holarctic region and occurs in the Indo-Australian region and in South Africa. This is the first record of feeding on the species of the plant family Urticaceae for the Australian larentiine moths. The biology and larvae of the *Visiana* species are awaiting description.

References

Scoble, M. J. 1999. Geometrid Moths of the World: A Catalogue (Lepidoptera, Geometridae). – CSIRO Publishing, Collingwood, Victoria