

## A new larval *Abrolophus* Berlese, 1891 from Poland and Slovakia

(Acari, Trombidiformes, Erythraeidae)

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Haitlinger, R. & Šundić, M. 2021. A new larval *Abrolophus* Berlese, 1891 from Poland and Slovakia (Acari, Trombidiformes, Erythraeidae). *Spixiana* 44 (1): 39–42.

*Abrolophus poljankus* sp. nov. (Acari, Erythraeidae) is described from Slovakia and Poland. *Leptus (Leptus) molochinus* is new for the fauna of Slovakia. A list of terrestrial Parasitengona species for Slovakia is given.

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### Introduction

In this paper we describe the larvae of a new species *Abrolophus poljankus*, collected in Poland and Slovakia. This species belongs to the species group of *Abrolophus Berlese*, 1891 without comb-like setae on palptarsus, divergent tibial claw and entire parodontus. This group includes: *A. dagmarae* (Haitlinger, 2012), *A. marianopolicus* Haitlinger & Šundić, 2018, *A. norvegicus* (Thor, 1900), *A. sardiniensis* (Haitlinger, 2007), *A. silesiacus* (Haitlinger, 1986), *A. viburnicolus* Fain & Çobanoğlu, 1998 and *A. yanlingicus* Zheng, 2002 (Thor 1900, Haitlinger 1986, 2007, 2012, Fain & Çobanoğlu 1998, Zheng 2002, Haitlinger & Šundić 2018). The terrestrial Parasitengona fauna of Slovakia is very poorly known. Hitherto only 14 species were found (with new species, excluding Leeuwenhoeekiidae, Trombiculidae and Walchiidae). *Leptus (Leptus) molochinus* (C. L. Koch, 1937) is new to the fauna of Slovakia.

### Material and methods

The specimens were collected by a sweep net on herbaceous plants and preserved in 70 % ethanol. Mite specimens were cleared in Nesbitt's solution and mounted in Berlese medium. All measurements

are given in micrometers ( $\mu\text{m}$ ) and calculated using a Carl Zeiss Axioscope A1 microscope and Carl Zeiss Imager A2 with differential interference contrast and phase contrast. The terminology and abbreviations follow Haitlinger (1999, 2013).

### Results

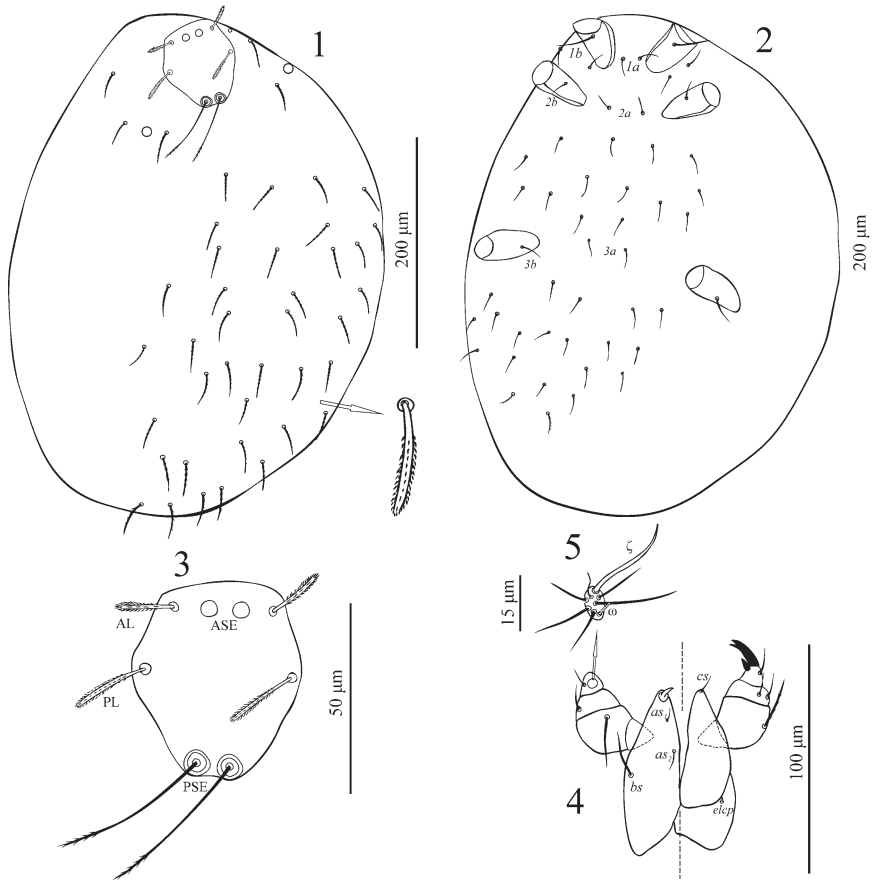
Family Erythraeidae Robineau-Desvoidy, 1828  
Subfamily Abrolophinae Witte, 1995  
Genus *Abrolophus* Berlese, 1891

*Abrolophus poljankus* sp. nov.  
Figs 1–8

**Diagnosis.** (n=4), fD 42 (40–46 in paratypes), odontus divergent, accessory claw not divergent, all palpal setae nude, Ta I 47–52, Ti III 64 71, IP 920–979.

**Description** (n=4) (based on holotype and three paratypes, larvae).

Dorsal surface with 42 (40–46 in paratypes) barbed setae; eyes posterolateral to scutum, circular, not on platelets, 14 (13 in paratypes) in diameter (Fig. 1). Scutum with two pairs of scutalae (AL, PL) with distinct setules and two pairs of sensillae (ASE, PSE both barbed on distal  $\frac{1}{4}$ ) (Fig. 3). Ventral side



**Figs 1-5.** *Abrolophus poljankus* sp. nov., larva: 1. idiosoma, dorsal view; 2. idiosoma, ventral view; 3. scutum; 4. gnathosoma; 5. palptarsus.

of idiosoma with setae *1a*, *2a* and *3a*, all nude. Six setae between coxae I-II and 14 setae between coxae II III, all nude; 20 setae behind coxae III (20-22 in paratypes), all nude, except two setae in posterior row of idiosoma. Coxalae *1b*, *2b* and *3b* nude (Fig. 2).

Gnathosoma dorsally with adoral nude setae *cs*. Ventrally a pair of short and nude setae *as*<sub>1</sub> and a pair of nude setae *as*<sub>2</sub> and a pair of longer, nude setae *bs*. Palpfemur with two setae, both nude. Palp genu with three nude setae ad palptibia with two nude setae and entire accessory claw (paradontus) (Fig. 4). Palptarsus with *1ω*, *1ζ*, *6N* (Fig. 5). Supracoxal seta peg-like (3-5).

Leg setal formula:

Leg I: Ta-*1ω*, *2ζ*, *1Cp*, *1ε*; *19*; Ti-*2φ*, *1κ*, *11*; Ge-*1σ*, *1κ*, *10*; Tf-*8*; Bf-*4*; Tr-*2*; Cx-*1* (Fig. 6).

Leg II: Ta-*1ω*, *2ζ*, *16*; Ti-*2φ*, *1κ*, *13*; Ge-*1σ*, *10*; Tf-*5*; Bf-*4*; Tr-*2*; Cx-*1* (Fig. 7).

Leg III: *1ζ*, *16*; Ti-*1φ*, *12*; Ge-*1σ*, *10*; Tf-*5*; Bf-*4*; Tr-*12* Cx-*1* (Fig. 8).

Measurements for the holotype and paratypes are given in Table 1.

**Etymology.** The name is derived from the name of the village Nižná Poljanka in Slovakia, where the species was collected.

**Type material.** Holotype larva, from herbaceous plants in Nižná Poljanka n. Bardejov (Slovakia), 25 June 2014; one paratype the same data; one paratype from Stefanków n. Szydłowiec, 11 July 1991 and one paratype from Wrocław-Swojczyce, 21 June 1983, both from Poland; leg. R. Haitlinger. The holotype and one paratype are deposited in the Museum of Natural History, Wrocław University, Poland; two paratypes in collection of senior author.

**Remarks.** This species belongs to the larval species of the genus *Abrolophus* with divergent tibial claw, entire paradontus and lacking comb-like seta on palptarsus. This group includes: *A. dagmarae*, *A. gracilentus*, *A. marianopoliticus*, *A. norvegicus*, *A. sar-*



**Table 1.** Metric data of *Abrolophus poljankus* sp. nov.

Character	Holotype	Paratypes			
IL	453	469	333	475	
IW	376	314	220	317	
L	59	61	63	65	
W	56	53	61	59	
AW	32	29	31	34	
PW	48	47	51	46	
AA	11	11	12	11	
SB	14	13	13	12	
AP	18	21	19	24	
AL	19	21	21	20	
PL	25	31	29	26	
ASE	–	–	28	25	
PSE	46	–	47	50	
ISD	46	49	45	47	
GL	75	74	84	83	
DS	20–27	22–35	24–45	22–32	
1a	19	22	20	23	
2a	19	29	22	22	
3a	18	26	22	–	
1b	40	38	34	39	
2b	18	25	24	–	
3b	20	21	22	–	
PsFd	29	28	29	26	
PsFv	28	25	33	26	
PaFe (L)	28	36	31	28	
PaFe (W)	24	24	34	30	
PaGe (L)	15	12	15	18	
PaGe (W)	20	21	26	26	
cs	18	14	21	14	
bs	26	26	30	24	
as <sub>1</sub>	7	6	6	–	
as <sub>2</sub>	11	12	–	–	
OD	11	12	14	14	
1	22	24	22	21	
Ta I	49	47	52	52	
Ti I	–	56	59	54	
Ge I	52	53	59	55	
Tf I	26	29	29	26	
Bf I	37	35	40	38	
Tr I	34	30	33	26	
Cx I	40	44	48	46	
Ta II	42	41	48	46	
Ti II	54	50	55	54	
Ge II	51	52	52	51	
Tf II	25	26	27	22	
Bf II	33	32	35	33	
Tr II	35	37	33	34	
Cx II	55	61	55	56	
Ta III	47	44	50	52	
Ti III	70	67	71	64	
Ge III	56	58	59	58	
Tf III	30	33	36	30	
Bf III	35	40	41	45	
Tr III	38	33	36	37	
Cx III	57	52	61	61	
Leg I	–	294	320	297	
Leg II	295	299	305	296	
Leg III	333	327	354	347	
IP	–	920	979	940	

**Trombidiidae Leach, 1815**

11. *Trombidium holosericeum* (Linnaeus, 1758)

**Podothrombiidae Thor, 1935**

12. *Podothrombium verae* Haitlinger, 1995

**Johnstonianidae Thor, 1935**

13. *Diplothrombium carpaticum* (Šorkan, 1938)

14. *D. longipalpa* (Berlese, 1887)

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