

A new water mite species of the genus *Neolimnochores* Lundblad from Ecuador (Acariformes: Limnocharidae)

P.V. Tuzovskij

Tuzovskij, P.V. 2008. A new water mite species of the genus *Neolimnochores* Lundblad from Ecuador (Acariformes: Limnocharidae). *Zoosystematica Rossica*, **17**(1): 11-14.

Male of the water mite *Neolimnochores lanceseta* sp. n. from a stream in Ecuador is described.

P.V. Tuzovskij, Institute for Biology of Inland Waters, Russian Academy Sciences, Borok 152742, Yaroslavl Province, Russia. E-mail: tuz@ibiw.yaroslavl.ru

The idiosoma setae on ocular plate are named according to Tuzovskij (1987): *Fch* – frontales chelicerae, *Fp* – frontales pedipalporum, *Vi* – verticales internae. The following abbreviations are used: *P1-5*, pedipalp segments (trochanter, femur, genu, tibia and tarsus); *s* – solenidion.

***Neolimnochores* (*Neolimnochores*) *lanceseta* sp. n.** (Figs 1-13)

Holotype: ♂, **Ecuador**, Esmeraldas, El Dorado, Rio Carolina, 500 m, stream near railway bridge, 27.12.1994, leg. R. Gerecke, slide ECU 26b deposited in the collection of R. Gerecke (Tübingen, Germany).

Description. Male. Integument with rounded papillae (Fig. 1). Dorsum with ocular plate and two pairs plates: anterior plates (Fig. 2) longer and narrower than posterior ones (Fig. 3); anterior plates located near ocular plate, posterior plates located caudally. Ocular plate (Fig. 4) elongate (ratio length/width = 3.7), lenses of lateral eyes closely together on each side. Anterior portion of ocular plate with rounded anterior margin and parallel lateral sides, median eye not developed. Bases of setae *Fch* and *Fp* located anterior to eye capsules, setae *Vi* and *Oi* closely together and located behind to posterior margin of eye capsules. Setae *Fch*, *Fp*, *Vi* and *Oi* lance-oblong in shape, other idiosomal setae simple (setiferous). Posterior part of ocular plate relatively long and tapering to distally, its lateral margins with numerous tubercles.

Coxae I (Fig. 5) trapezoidal, theirs anterior margins wide and straight but shorter than posterior ones; medial margins slightly convex and longer than lateral ones. Anteromedial angles of coxae I closely together, but not fused to each other. Coxae II trapezoidal with slightly developed medial

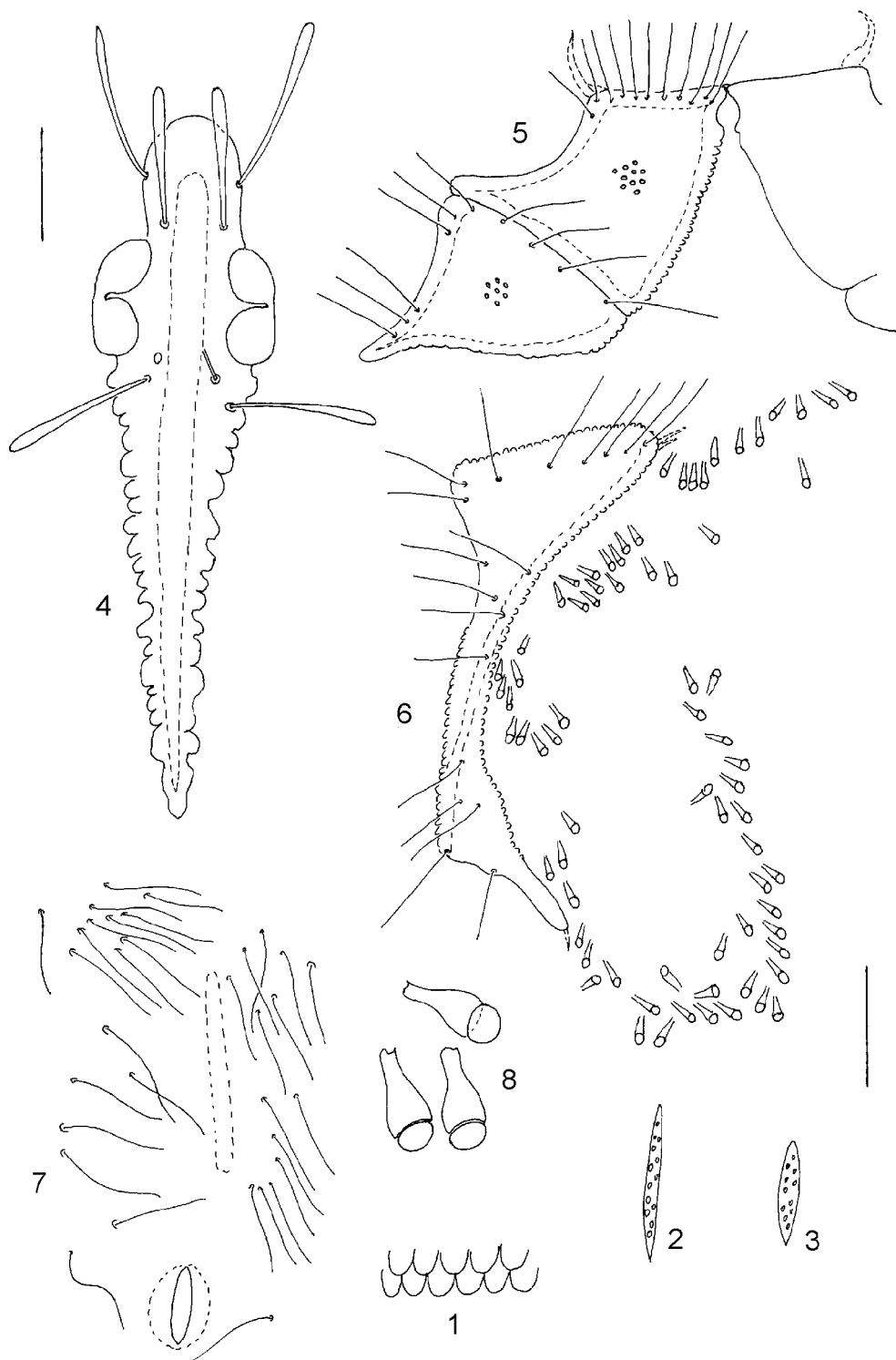
margin. Posterior coxal group (Fig. 6) elongate, anterior margin of coxae III 1.5 times as long as posterior margin of coxae IV. Coxae of all leg with a few thin setae. Interspace between anterior and posterior coxal groups without setae. Genital field with numerous acetabula. Genital opening surrounded by a few thin perigenital setae (Fig. 7), anal opening without sclerotized ring. Genital acetabula with rather long stalks (Fig. 8).

Capitulum (Fig. 9) elongate, its surface with small pores, but its dorsolateral portions with large pores. Capitular base almost twice as long as rostrum. The mouth disk slightly turned on ventral side of capitulum. Basal segments of chelicera long and narrow, cheliceral stylets very small. Distolateral portions of basal segment of chelicerae with large pores.

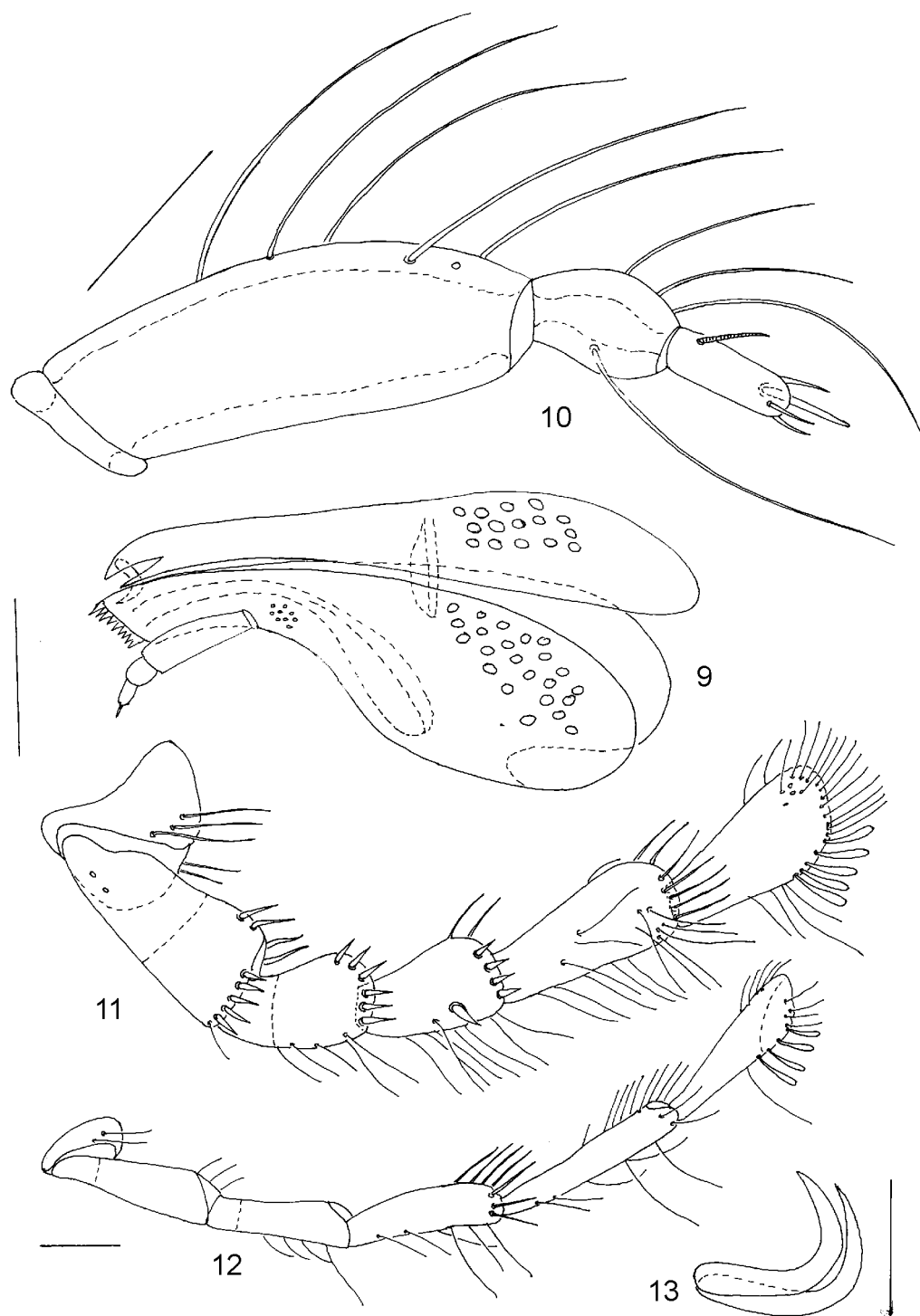
Pedipalps short and attached to ventrolateral surface of rostrum. Trochanter of pedipalp (Fig. 10) very short and without setae. Second pedipalpal segment (femur+genu) very large (ratio length/height 2.8) with 5-6 long dorsal setae, with straight ventral margin and slightly convex dorsal one. Tibia relatively short with convex dorsal and ventral margins, provided by single long ventral and three unequal dorsal setae. Pedipalpal tarsus relatively long with proximal solenidion, rather large terminal and three short distal setae.

Legs I (Fig. 11) and II shorter and thicker than legs III and IV (Fig. 12). Basifemur, telofemur and genu of legs I and II with short distal spine-like setae. Tarsi of all legs with any lanceolate dorso-distal setae. All claws simple (Fig. 13).

Measurements, μm . Length of body 2000, width 1340; length of ocular plate 275, length of anterior portion of ocular plate 50, width of anterior margin of ocular plate 40, width of ocular plate at level eyes 75; length of eye capsules 50,



Figs 1-8. *Neolimnochaes lanceseta* sp. n., male. **1**, fragment of integument, lateral view; **2**, anterior dorsal plate; **3**, posterior dorsal plate; **4**, ocular plate; **5**, anterior coxal group; **6**, posterior coxal group; **7**, perigenital setae; **8**, genital acetabula. Scale bars: **1**, **4**, **8** = 50; **2-3**, **5-7** = 25.



Figs 9-13. *Neolimnochaes lanceseta* sp. n., male. 9, gnathosoma, lateral view; 10, pedipalp, lateral view; 11, leg I; 12, leg IV; 13, claw. Scale bars: 9, 11 = 25; 12 = 100; 13 = 50.

length of medial margin of coxae I 165, length of lateral margin of coxae I+II 260, width of anterior margin of coxae I 105, width of posterior margin of coxae II 185; length of medial margin of coxae III+IV 375, width of anterior margin of coxae III 150, width of posterior margin of coxae IV 100; diameter of genital acetabula 10-13, height of stalk of acetabula 22-27; length of capitulum 375, length of rostrum 125, diameter or width of mouth disk 50; length of basal segment of chelicera 385, length of cheliceral stylet 25; length of pedipalpal segments (*P*1-4) – 6, 71, 21, 17; length of legs segments: I Leg. 1-6 – 65, 150, 100, 87, 137, 112; II Leg. 1-6 – 75, 175, 125, 112, 150, 125; III Leg. 1-6 – 50, 150, 125, 125, 162, 150; IV Leg. 1-6 – 62, 180, 150, 175, 212, 175.

Comparison. The new species is similar to the *N. longimaxillaris* Lundblad, 1969 and differs it by the following characters (character stases of *N. longimaxillaris* are indicated in parenthesis from Lundblad, 1969): dorsum with ocular plate

and two pairs of plates (with ocular plate only), anterior margin of ocular plate convex (concave), ocular plate with lance-oblong setae (with simple, setiferous, setae), coxae II trapezoidal with short medial margin (triangular, medial margin not developed).

Acknowledgements

The author expresses sincere gratitude to Reinhard Gerecke for the material supplied.

References

- Lundblad, O. 1969. Indische Wassermilben, hauptsächlich von Hinterindien. *Arkiv för Zoologi*, **22**(10): 289-443.
Tuzovskij, P.V. 1987. *Morfologiya i postembrionalnoe razvitie vodyanykh kleshchey* [Morphology and Post-embryonic Development in Water Mites]. Moscow: Nauka. 172 p. (In Russian).

Received 5 May 2008, accepted 10 June 2008.