

A new water mite species of the genus *Piona* Koch from Karelia (Acariformes: Pionidae)

P.V. Tuzovskij

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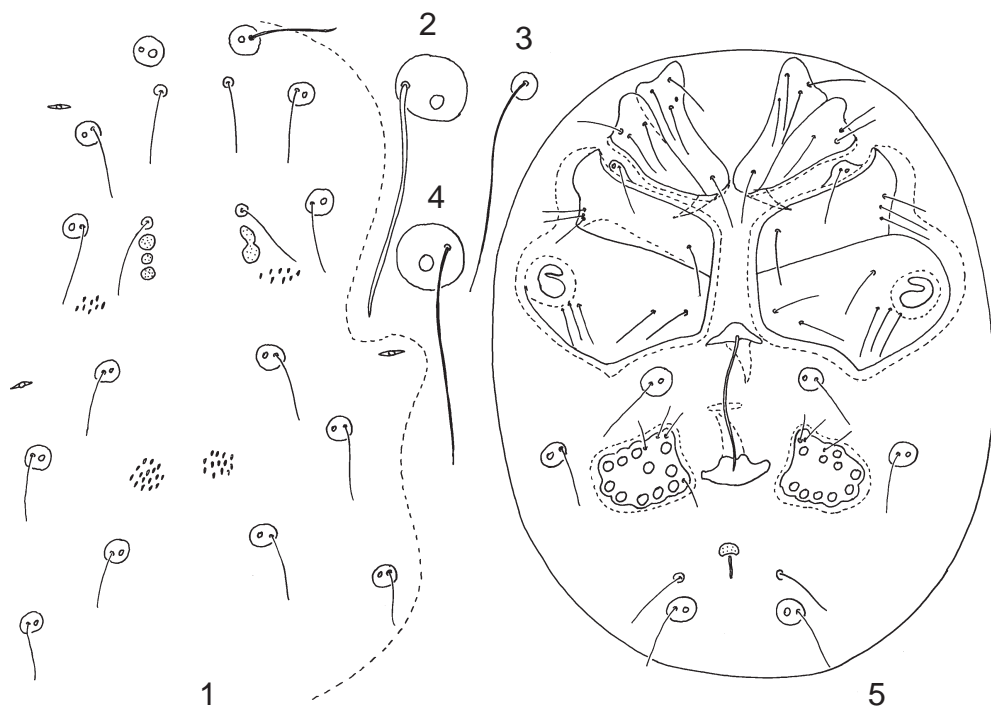
Piona shatrovi sp. n. (female) from Rudnichnoe lake in Kandalaksha National Park (Northern Karelia) is described.

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

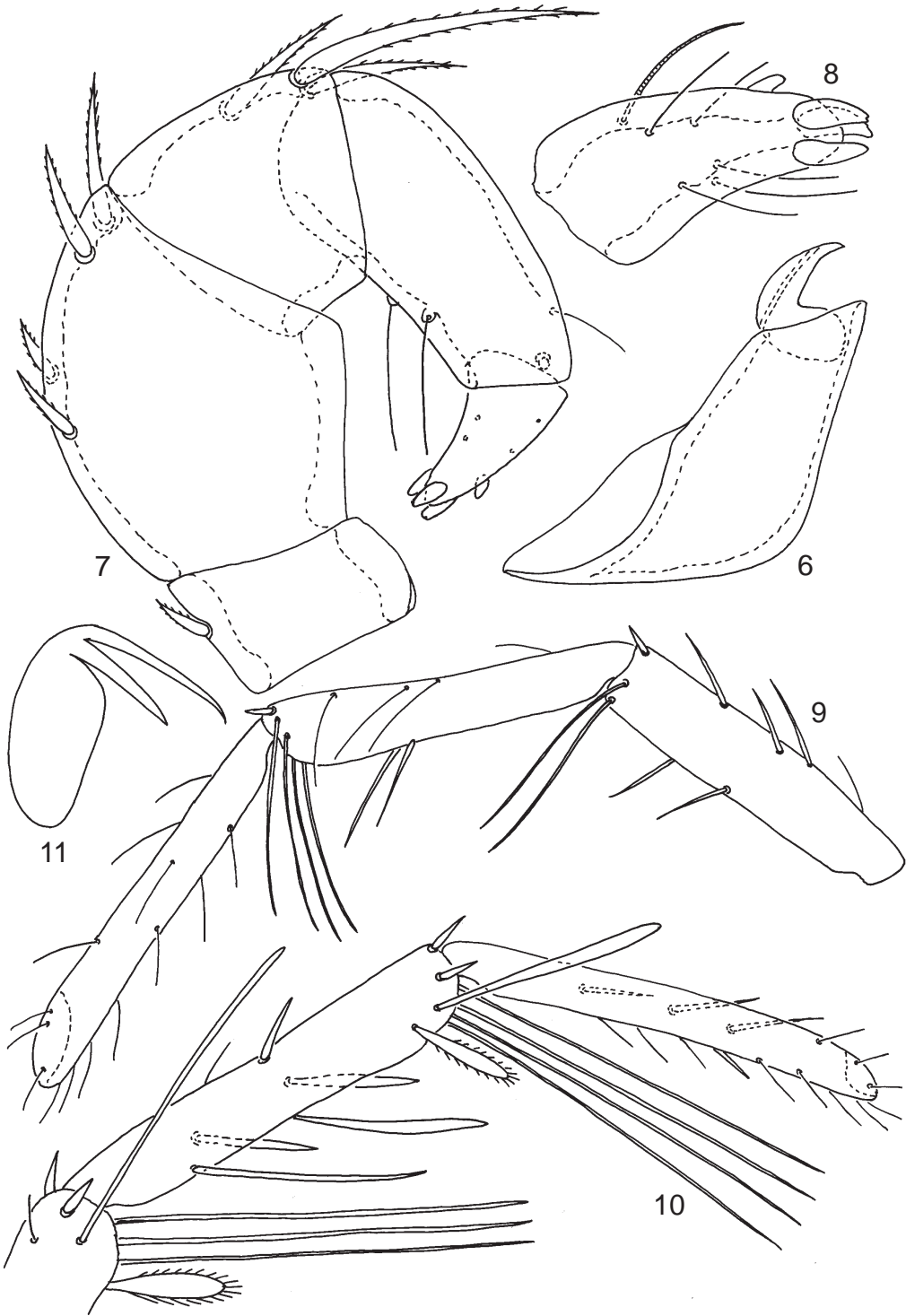
Piona shatrovi sp. n. (Figs 1-11)

Holotype. ♀, **Russia, Karelia**, Lukhovitskiy Distr., Rudnichnoe lake, 30 km east of Chupa, 26.VIII.2001 (A.B. Shatrov); slide 8314, deposited in the collection of Institute for Biology of Inland Waters (Borok, Russia).

Description (nomenclature of body setae according to Tuzovskij, 1987). *Female*. Body oval. Integument soft and smooth. Anterior dorsal plate slightly developed, may break up into 2 or 3 fragments (Fig. 1). Anteromedial and posterior plates reduced, only areas of integument with attached



Figs 1-5. *Piona shatrovi* sp. n., female: **1**, central part of dorsal surface; **2**, seta *Fch*; **3**, trichobothrium *Oi*; **4**, seta *Hi*; **5**, ventral surface.



Figs 6-11. *Piona shatrovi* sp. n., female: 6, chelicera; 7, pedipalp; 8, tarsus of pedipalp; 9, genu, tibia and tarsus of leg I; 10, genu, tibia and tarsus of leg IV; 11, ambulacra.

muscles visible. All dorsal setae subequal in length, but setae *Fch* (Fig. 2) thicker than trichobothria (Fig. 3) and other body setae (Fig. 4).

Coxae of legs cover less than half of ventral surface (Fig. 5). Anterior coxae with short apodemes. Sclerites bearing setae *Hv* fused with anterior margin of coxae III. Medial margins of coxae III and IV subequal in length. Posterior margins of coxae IV forming obtuse angle, apodemes not developed. Genital opening twice as long as genital plate; posterior genital sclerite slightly larger than anterior sclerite. Genital plate transverse, with 10-11 acetabulae and 3-4 thin setae. Inner margin of genital plates slightly concave, anterior and posterior margins straight, outer margin convex. Genital acetabulae situated mainly on the periphery of plates. Anal opening only with small anterior sclerite. Setae *Pi* without accompanying glandularia. Sclerites bearing ventral and dorsal setae rather large.

Capitulum with short anchoral projection. Basal segment of chelicera (Fig. 6) with convex dorsal surface. Cheliceral stylet very small, crescent.

Pedipalp short and massive (Fig. 7). Trochanter of pedipalp with a single short dorsal seta. Femur rather large, with straight ventral margin bearing 4 dorsal setae. Genu with 1 long and 2 rather short dorsal setae. Tibia shorter than femur; ventral setae relatively long, their bases situated on tiny tubercles; distolateral spine short. Tarsus of pedipalp with one solenidion, 5 thin setae and 4 thick distal spines; dorsal spine smaller than terminal spines (Fig. 8).

Legs thin and slender. Genu of leg I with 2, tibia with 4 short swimming setae (Fig. 9). Legs II-IV (Fig. 10) with long swimming setae, their number as following: 1-2 on genu II, 3 on both genu III-IV and tibia II-III, and 4 on tibia IV.

Ambulacrae with long external and short internal teeth, lamella with straight ventral margin (Fig. 11).

Measurements, μm . Length of body 600; length of seta *Fch* 72; diameter of sclerites bearing idiosomal setae 24-30; length of genital plate 66-72, its width 78-84; length of anterior genital sclerite 20, its width 48; length of posterior genital sclerite 27, its width 60; length of basal segment of chelicera 108; length of stylet of chelicera 30; lengths of pedipalpal segments: 20, 70, 40, 60, 30; length of leg segments: I – 42, 65, 85, 120, 125, 138; II – 48, 80, 85, 108, 130, 150; III – 55, 82, 90, 115, 140, 155; IV – 78, 78, 102, 132, 160, 160.

Etymology. The species is named after Russian acarologist Andrew Shatrov.

Comparison. *Piona shatrovi* sp. n. is similar to *P. gyrophora* Lundblad 1924, from which especially clearly differs in the structure of the pedipalp tarsus, which has only thin setae in *P. gyrophora* (Lundblad, 1924, 1962; Sokolow, 1940), in contrast to has 6 thin and 4 thick terminal spines in *P. shatrovi*.

References

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