

Redescription of *Protracheoniscus communis* (Borutzky, 1945) (Isopoda: Oniscidea) formerly a member of the genus *Hemilepistus* Budde-Lund, 1879

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The family Agnaridae Schmidt, 2003 was established for those terrestrial isopods with monospiracular covered lungs on lateral margin of all pleopod exopodites (Schmidt, 2003). According to the world catalogue of terrestrial isopods (Schmalfuss, 2003), the family includes 15 genera. The members of the genus *Hemilepistus sensu lato* are characterized by possessing tubercles only on the vertex and anterior pereon-tergites (Borutzky, 1945; Lincoln, 1970; Kashani *et al.*, 2010, 2011), while smooth tergites is a significant character to distinguish the members of the genus *Protracheoniscus* (Schmidt, 2003). Borutzky (1945) described *Hemilepistus communis* and deposited the type material in the Zoological Museum of Moscow State University (ZMMU). In the original paper, he illustrated pleopods I-II (figs. 47-49, therein). Re-examination of the type material including the male holotype and five female paratypes revealed that no tubercle exists on tergites. Furthermore, characteristics of the head, pereon-tergite I and pleotelson along with the position of noduli laterales verified the assignment of these specimens to the genus *Protracheoniscus* Verhoeff, 1917. In spite of missing pleopod appendages except pleopod-exopodites I and V in holotype, the species is redescribed here and some more diagnostic characters for the species are figured (Fig. 1).

Family Agnaridae Schmidt, 2003

Protracheoniscus communis (Borutzky, 1945)

Hemilepistus communis Borutzky, 1945:198.

Material examined. Holotype: male, 13 mm, Uzbekistan, Namangan region, Pahtalyk-kul, 13 May 1925 (ZMMU Mc-574).

Paratypes: five females, 14–16 mm, same data for holotype (ZMMU Mc-574).

Diagnosis. The species is distinguished by the cephalothorax with well developed lateral and shorter median lobes; short pleotelson along with the bilobate pleopod endopodite I at apex in males.

Redescription. Maximum length 16 mm. Color brown in fixative. Cephalothorax with well developed rounded lateral and shorter median lobes (Fig. 1A); no supraantennal line. Antenna short, slightly surpassing the posterior margin of pereon-tergite I; fifth article of the peduncle to flagellum ratio 1.1:1; flagellum with two articles of the same size (Fig. 1C).

Pereon smooth; posterolateral margins of pereon-tergite I convex (Fig. 1A); noduli laterales on all pereonites nearly with the same distance from the lateral margins (Fig. 1B). Pleotelson short,

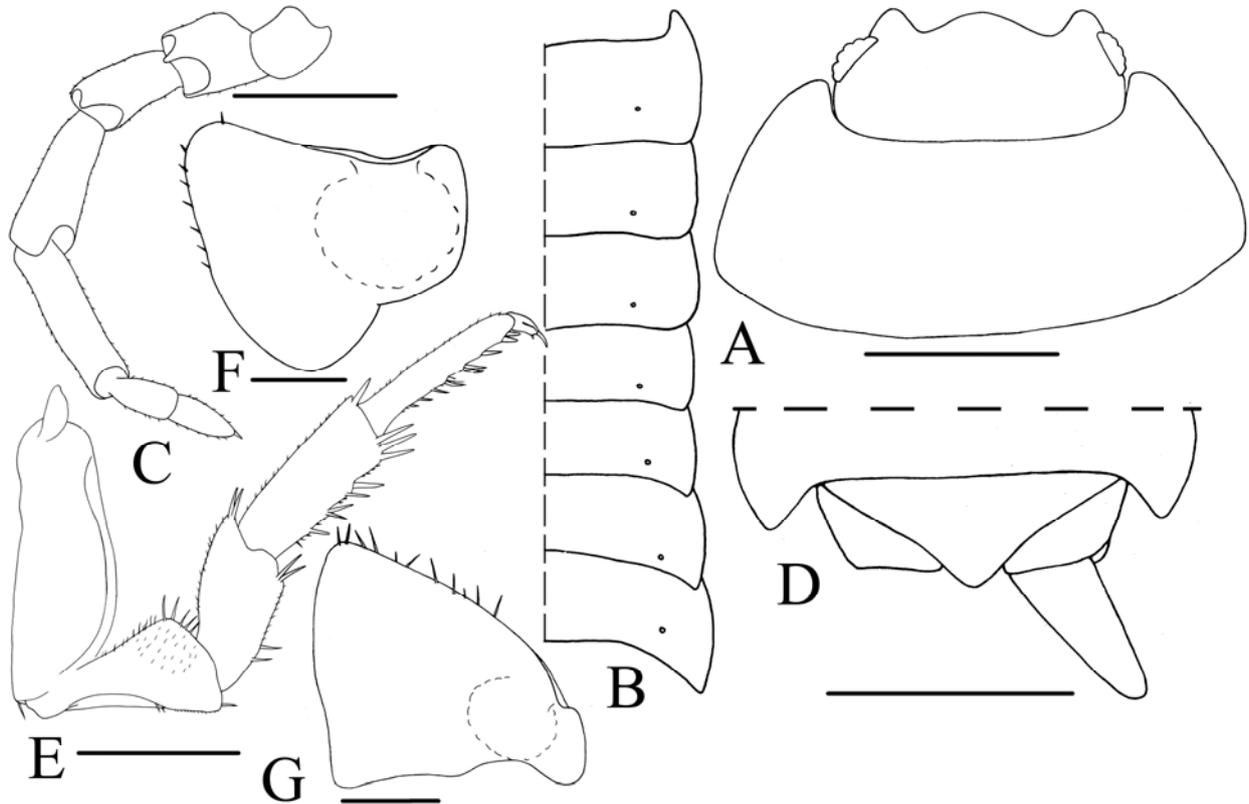


FIGURE 1. *Protracheoniscus communis* (Borutzky, 1945), holotype. A, cephalon and first pereonite; B, right side of pereon showing disposition of noduli laterals; C, antenna; D, telson and uropods; E, pereopod 7; F, pleopod exopodite I; G, pleopod exopodite V. Scales = 2 mm for A, D; 1 mm for C, E-G.

triangular, 2.5 times as wide as long, with slightly concave sides and rounded apex, slightly surpassing uropod-protopodites. Uropod- exopodites conical, almost as long as pleotelson (Fig. 1D). Pleopod-exopodites I-V with monospiracular covered lungs (Fig. 1F, G).

Male: Pereopod I-V merus and carpus with brushes of setae. Pereopod VII ischium with convex sternal margin; merus and carpus equipped with strong spine setae (Fig. 1E).

Pleopod-endopodite I straight, with two lobes at apex (see Fig. 47 in Borutzky, 1945). Pleopod-exopodite I with a short hind lobe; inner margin equipped with a row of short setae (Fig. 1F). Pleopod-exopodite V as in Fig. 1G.

Distribution. Uzbekistan.

Remarks. This relatively large species was found inside of the burrows dug into the soil by individuals of *Hemilepistus reductus*; demonstrating an explicit cohabitation of two species of terrestrial isopods (Borutzky, 1945). *Protracheoniscus communis* characterizes among the other species of the genus by the short antenna and telson, male with bilobate pleopod endopodite I at apex and exopodite I with short rounded hind lobe.

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