

# First Record of *Protracheoniscus franzi* Strouhal, 1948 (Isopoda, Oniscidea: Porcellionidae) from Hungary

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This is the first report on the occurrence of *Protracheoniscus franzi* Strouhal 1948 in Hungary. Morphological description, original figures, earlier and new data of distribution are given.

Keywords: *Protracheoniscus franzi*, Isopoda, Oniscidea, woodlice.

Prof. H. Franz collected terrestrial isopods among other places in Salzburg, South-Burgenland and North-Styria (Austria) between 1939 and 1944. During the identification of the material Strouhal found a new *Protracheoniscus* species. He named it *Protracheoniscus franzi* and gave a complete morphological description (Strouhal, 1948). He stated that isopods collected in the basin of the river Enns in Styria, Strechau were misidentified as *Protracheoniscus hermagorensis* Verhoeff 1927 (Verhoeff, 1939), and belonged to *P. franzi*. Similarly, the juvenile *Protracheoniscus* specimen from Salzburg, "Haid bei Zell am See" (Franz, 1941) were also identical with the new species. Strouhal (1948) mentioned different places of occurrence, all of them situated in Salzburg and North-Styria. *P. franzi* was defined as an endemic species to the South-Alps (Strouhal, 1951) suggesting that it might also occur in West-Hungary. In a following paper about the wildlife of the Alps Strouhal and Franz (1954) summarized the known localities of *P. franzi* again. Frankenberger (1959) mentioned *P. franzi* as a possible element of the Slovakian and South Moravian fauna and enclosed Strouhal's figures. Schmölzer (1965) gave a relatively detailed morphological description in his key enclosing the drawing of the tip of the first pleopodal endopodit (this figure is identical with Fig. 5. in Strouhal, 1948). He listed *P. franzi* among the isopods of Austria (Schmölzer, 1974). It is missing from Slovenia (Potočnik, 1979, 1980, 1989) and from the Czech Republic (Flasarová, 2000). To my knowledge there is no other information up to now about the distribution of this species.

In May 2002 I sampled woodlice Southwest of the Balaton Lake. In one locality (Szőkedencs) I found some specimens of *P. franzi*. Two weeks later E. Hornung, L. Ábrahám and myself found the species again in the Drava basin, in the surroundings of Gyékényes. These are the first records of the species outside Austria.

## Material Examined

1♂, 4♀♀ with marsupium, Szőkedencs (UTM: XM 75), 46° 32'14"N-017° 14'17"E, 166 m, under *Quercus petraea* litter and rotting wood, leg. Farkas, 13 May 2002; – 1♂, 1♀ with marsupium, Gyékényes, Lankóci forest (UTM: XM 52), 46° 13'14"N-017° 02'59"E, 148 m, under *Quercus petraea* litter at the edge of the wood, leg. Hornung, Ábrahám and Farkas, 31 May 2002; – 1♂, 1♀ with marsupium, Gyékényes, Lankóci forest, 46° 14'10"N-017° 02'50"E, 148 m, meadow, under rotting *Carex* leaves, leg. Hornung, Ábrahám and Farkas, 31 May 2002; – 1♂, 2♀♀ without marsupium, Szőkedencs, 46° 32'14"N-017° 14'17"E, 166 m, under *Quercus petraea* litter and rotting wood, leg. Farkas, 04 May 2003.

## Description of the Species

**Measurements:** The biggest specimen of the investigated material, a female without marsupium, measures 8.16 × 3.4 mm, the biggest male, of which the figures are taken, 6.5 × 2.5 mm.

**Coloration:** Head dark brown, with ca. 80 light yellowish-brown rounded spots. In the middle part of the pereion tergits a wide dark brown streak without spots. Both sides of the streak mottled yellowish-brown stripes and spots. In the lateral quarter of the pereion tergits greater, longish spots. Noduli laterales in little, yellowish-brown circles. Pleon similarly dark brown mottled with lighter spots. Edge of the segments light.

**Cuticular structures:** Dorsal surface of the body smooth. All the noduli laterales in one row (*Fig. 1*). Their distance from the lateral and hind edge of the epimeron equal on the I. tergit. From segment II to segment VII backward the distance gradually decreases between noduli laterales and the hind edge. On segment VII circle of noduli laterales touch the hind margin.

**Cephalon:** Central lobe smoothly curved, lateral lobes small. Eyes with 18 ommatidia arranged in four rows.

**Flagellum:** Distal segment of flagellum 1.5–2 times longer than proximal (*Fig. 2*).

**Pereion:** Hind corner of epimera I rounded, hind margin slightly concave before the angel. Hind and lateral edges of epimeron III–VII in acute angel.

**Pereiopods:** External margin of ischium VII ♂ almost straight, slightly concave with two great spines and numerous small setae (*Fig. 3*).

**Pleopod-exopodite I ♂** medial margin straight, hind-lobe short forming an acute triangle with rounded tip. External lobe rounded, 1.5 times longer than hind lobe (*Fig. 4*).

**Pleopod-endopodites I ♂** slightly turned outwards, denticulate on the outer margin near the pointed apex (*Figs 5–6*). Lacking protrusion on the outer margin below the apex present in *Protracheoniscus politus*.

**Pleopod II ♂** see *Fig. 7*.

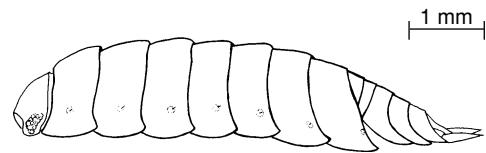


Fig. 1. *Protracheoniscus franzi* Strouhal 1948, ♂, 6.5 mm long. UK No. 228.

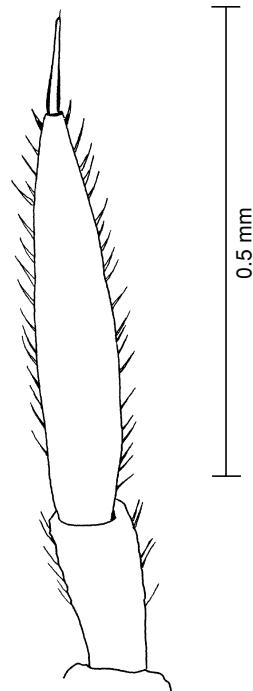


Fig. 2. Flagellum of antenna, ♂. UK No. 228.

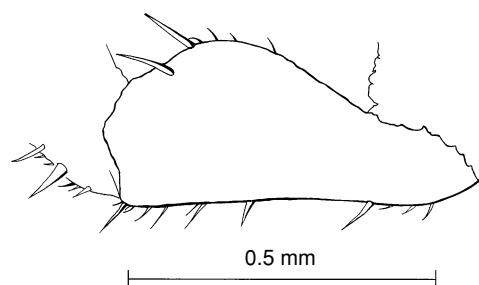


Fig. 3. Ischium of pereiopod VII, ♂. UK No. 228.

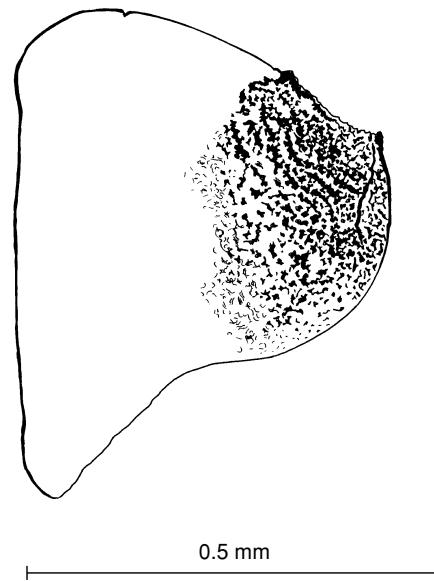


Fig. 4. Pleopod-exopodit I, ♂, ventral view. UK No. 228.

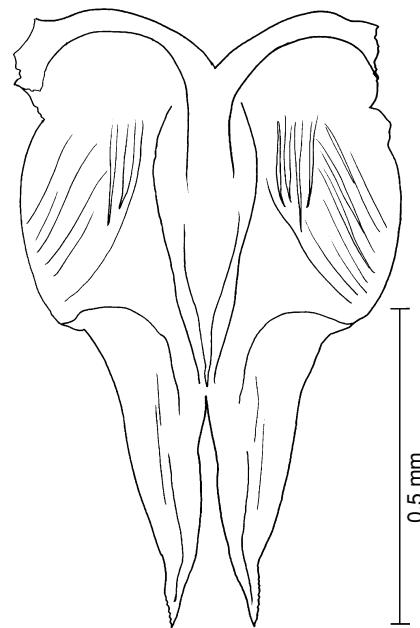


Fig. 5. Pleopod-endopodit I, ♂, ventral view. UK No. 228.

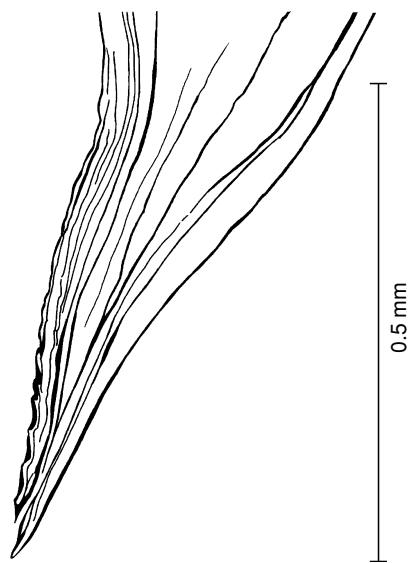


Fig. 6. Apex of pleopod-endopodit I, ♂, ventral view. UK No. 228.

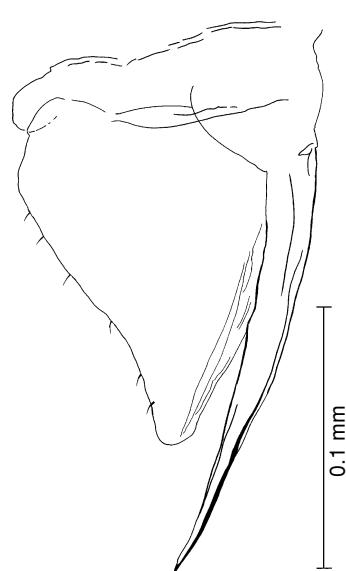


Fig. 7. Pleopod II, ♂, ventral view. UK No. 228.

## Acknowledgements

First of all I wish to thank dr. Helmut Schmalfuss for helping me at the identification and with literature. Thanks to dr. László Forró, dr. Elisabeth Hornung, Karel Tajovsky and dr. Levente Ábrahám for their useful advice.

The research was sponsored by the Hungarian Academy of Sciences (Bolyai János Research Scholarship; BO/00304/01).

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