



<http://dx.doi.org/10.11646/zootaxa.3737.1.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:9CE7C175-9FBD-4855-B038-8F8FA4A19175>

## New species of the genus *Jacekaphorura* (Collembola: Onychiuridae) from upper reaches of Kolyma river (North-East of Russia)

ANATOLY BABENKO

*The Severtsov Institute of Ecology & Evolution RAS, Leninski pr. 33, Moscow 119071, Russia. E-mail: lsdc@mail.ru*

### Abstract

Two new species of the genus *Jacekaphorura* from the North-East of Russia, viz. *J. catherinae* sp. nov. and *J. furcata* sp. nov., were described and illustrated. The former species clearly differs from the only previously known species of the genus by a high and variable number of dorsal pso, the latter can easily be distinguished due to specific structure of furcal remnant. The generic diagnosis and position within modern tribal subdivision of the Onychiurinae are discussed.

**Key words:** generic diagnosis, *J. catherinae* sp. nov., *J. furcata* sp. nov., Beringian region

### Introduction

The monotypic genus *Jacekaphorura* was erected for two specimens from the eastern mountainous part of Yakutia (Pomorski & Babenko 2010). It was placed in Protaphorurini due to simple lobes in PAO, the absence of unpaired chaeta  $d_0$  on head, and complete distal whorl of tibiotarsal chaetae. On the other hand, the structure of furcal remnant considered as a very important feature of generic or even tribal level in Onychiurinae resembles that in Thalassaphorurini, i.e. four small chaetae set in two rows behind an area of finer granulation in midsection of sternum of Abd. IV. A recent discovery of two new species of the genus being very similar in general appearance but rather different in important details adds further uncertainty in tribal attribution of the genus. Below descriptions of these new species are present together with remarks on diagnosis of the genus. The types are deposited in the MSPU collection.

**Abbreviations.** Abd. I–VI—abdominal segments; A, B, C, T, and M chaetae—tibiotarsal chaetae according to Deharveng (1983); A–E papillae—papillae on labial palp (Fjellberg 1999), Ant. I–IV—antennal segments, AIII–antennal organ on Ant. III,  $d_0$ —unpaired axial chaeta on dorsal side of head; PAO—postantennal organ; pso—pseudocellus(-i); pso a, b and c—medial, intermediate and lateral pso on terga; psx—parapseudocellus(-i); q-chaetae—proximal chaetae on manubrial field in juveniles of Onychiurinae (Pomorski 1996); Th. I–III—thoracic segments; Ti. I–III—tibiotarsi; VT—ventral tube; MSPU—Moscow State Pedagogical University, Department of Zoology and Ecology.

### Taxonomy

#### *Jacekaphorura catherinae* sp. nov.

Figs 1–5

**Type material.** Holotype, male, Russia, Magadan District, Bolshoi Annachag Mts. Range, upper reaches of Kolyma River, field station “Aborigen” 61°56' N 149°40' E, thick *Sphagnum* mat around stone, 1400 m alt., 27.vii.1979, A. Fjellberg leg. Paratypes, female, the same area, litter in *Alnus fruticosa* thicket at stream bank, 24.vii.1979; 3 juveniles, same area, *Solorina crocea* on gravel at snow edge, 1500 m alt., 27.vii.1979; 6 females, 3 males, and 2 specimens of unknown sex, the same area, thick moss in wet area, 1500 m alt., 27.vii.1979, all A.

## References

- Bagnall, R.S. (1948) Contributions toward a knowledge of Onychiuridae (Collembola: Onychiuroidea). I–IV. *Annals and Magazine of Natural History* (Series 11), 14 (117), 631–642.  
<http://dx.doi.org/10.1080/00222934708654672>
- Deharveng, L. (1983) Morphologie évolutive des Collemboles Neanurinae en particulier de la lignée neanurienne. *Travaux du Laboratoire d'Ecobiologie des Arthropodes Edaphiques, Toulouse*, 4 (2), 1–63.
- Fjellberg, A. (1998) *The Collembola of Fennoscandia and Denmark*. Part. I: Poduromorpha. *Fauna Entomologica Scandinavica*, v. 35, 183 pp.
- Fjellberg, A. (1999) Labial palp in Collembola. *Zoologischer Anzeiger*, 237, 309–330.
- Martínez, M., Baquero, E., Barranco, P., Ariño, A.H. & Jordana, R. (2004) A new genus and species of Collembola from caves of south Iberian Peninsula (Collembola, Poduromorpha, Onychiuridae). *Zootaxa*, 734, 1–15
- Pomorski, R.J. (1996) The first instar larvae of Onychiurinae – a systematic study. *Genus* (Wrocław), 7 (1), 1–102.
- Pomorski, R.J. & Babenko, A. (2010) *Jacekaphorura* gen. nov. – a new genus of Protaphorurini (Collembola: Onychiuridae) from mountainous Yakutia, East Siberia. *Zootaxa*, 2444, 65–68.
- Salmon, J.T. (1959) Concerning the Collembola Onychiuridae. *Transactions of the Royal Entomological Society of London*, 111 (6), 119–156.  
<http://dx.doi.org/10.1111/j.1365-2311.1959.tb02279.x>
- Stach, J. (1954) *The apterygotan fauna of Poland in relation to the world-fauna of this group of insects. Family: Onychiuridae*. Polska Akademia Nauk, PWN, Kraków, 219 pp.