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Article *in* Acta Biologica Sibirica · October 2020

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SHORT COMMUNICATION

Porcellionides pruinosus (Brandt, 1833) – a new woodlouse species (Isopoda: Oniscidea: Porcellionidae) in the fauna of Belarus

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Academic editor: R. Yakovlev | Received 7 August 2020 | Accepted 1 September 2020 | Published 22 October 2020

http://zoobank.org/DD7CF77E-8815-4FA3-955C-C17D854441C0

Citation: Ostrovsky AM (2020) *Porcellionides pruinosus* (Brandt, 1833) – a new woodlouse species (Isopoda: Oniscidea: Porcellionidae) in the fauna of Belarus. Acta Biologica Sibirica 6: 381–384. https://doi.org/10.3897/abs.6.e57364

Abstract

We presented our findings of woodlouse *Porcellionides pruinosus* (Brandt, 1833), a new Porcellionidae species for the fauna of Belarus. We collected this species in Gomel region (June 2020). We also presented the data on species distribution.

Keywords

Porcellionides pruinosus, Isopoda, Oniscidea, Porcellionidae, new record, Belarus

Introduction

Among the edaphic organisms, the terrestrial isopods are fundamental representatives of the soil fauna, playing an important role in decomposition of leaf litter and in mineralizing of organic matter (Sutton 1980). Despite the fact that representatives of this group are well visible and extremely widespread, they are inadequately studied in Belarus. Some authors reported 4-8 species found in Belarus (Maximova 2005, Kuznetsova & Gongalsky 2012, Novitsky 2013). Nevertheless, we recently

added new species to this list and classified their periodical occurrence (Ostrovsky 2019a, b). Thus, we registered the *Porcellionides pruinosus* (Brandt, 1833) in Belarus territory that was the result of our continuous research.

Material and methods

New species was identified from author field survey data. The species was assigned to the suborder Oniscidea Latreille, 1802 of the crustaceans order Isopoda Latreille, 1817.

Results

Ligiamorpha Vandel, 1943
Porcellionidae Brandt, 1831

***Porcellionides pruinosus* (Brandt, 1833)**
Figure 1

Material examined. 1♂, 1♀, Republic of Belarus, Gomel Region, near horticultural partnership "Romantika" not far away vill. Klenki under the bark of a fallen oak on the edge of the swamp, 52°27'45.4" N, 31°5'42.8" E, 21.06.2020; 1♂, 1♀, in the same place, 25.06.2020. A.M. Ostrovsky leg. et det., 2020. The examined specimens are preserved in ethanol 70% and housed at the author's collection.

Distribution. *P. pruinosus* is widespread synanthropic species of Mediterranean origin, currently known from many European and American countries, as well as in Transcaucasia and Pakistan (Schmalfuss 2003, Kuznetsova & Gongalsky 2012, Kazmi 2015). In European part of Russia this species has previously been found in central and southern parts of the country. It was also known from Siberia (Kuznetsova & Gongalsky 2012, Khisametdinova et al. 2016, Nefediev et al. 2018). The nearest localities of *P. pruinosus* are registered in Poland, Ukraine and the European part of Russia. The distribution of this species is associated with human settlements and dung heaps as compost substance keeps the warm temperature during winter periods (Cawley 1996).

Remarks. *P. pruinosus* is known to exhibit patterns of geographical variation between populations, and has been suspected to consist of several very closely related species (Salzat et al. 2001). Ten subspecies are recognized. Recent investigations have suggested that some morphologically similar populations may consist of separate species. For example, the previously reported single North American species *P. pruinosus* in fact consisted from two separate species. Although these species had subtle physiological and morphological differences, they were electrophoretically, reproductively, and distributionally distinct (Garthwaite & Sassaman 1985). Formally, *P. pruinosus* can be distinguished from other species by the extent of white bands at the antennae. We supposed that world taxonomic status of *P. pruinosus* should be re-evaluated.

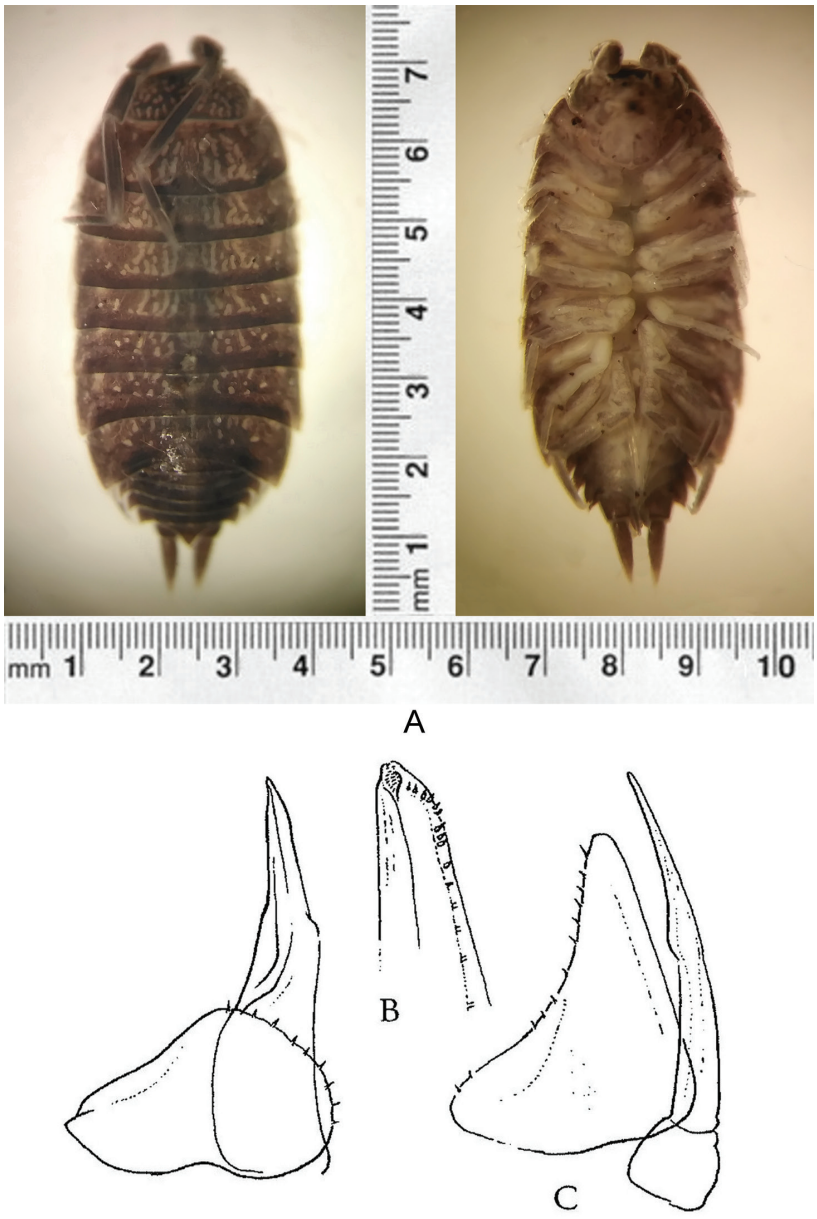

Figure 1. *Porcellionides pruinosus* (Brandt, 1833): A – general view, B – 1 pleopod ♂, C – 2 pleopod ♂.

Conclusions

The genus Porcellionides with woodlouse species *Porcellionides* Miers, 1877 and *Porcellionides pruinosus* (Brandt, 1833) are formally new to the Belarus faunistic list. We suggested that these species were probably arrived here by human activity.

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