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ROVE BEETLES OF BELARUS: THE GENUS *OLIGOTA* MANNERHEIM, 1830 (COLEOPTERA: STAPHYLINIDAE: ALEOCHARINAE)

A. M. Ostrovsky¹, I. A. Solodovnikov²

1) Department of Public Health and Health Services with the course of the Faculty of Professional Development and Retraining, Gomel State Medical University, Lange Str. 5, Gomel, 246000, Belarus. E-mail: arti301989@mail.ru

2) Vitebsk State P.M. Masherov University, Moskovskiy Avenue, 33, Vitebsk, 210038, Belarus. E-mail: iasolodov@mail.ru

Summary. An annotated list of eight species of the genus *Oligota* collected in Belarus in 1982–2020 is given. Three species, *O. inexpectata* Williams, 1994, *O. pseudoparva* Williams, 1972 and *O. ruficornis* Sharp, 1870, are new for the Belarusian fauna. The data on distribution and ecology of these rove beetles is also given.

Key words: Staphylinidae, Aleocharinae, Hypocyphitini, fauna, new records, Europe.

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Резюме. Приведен аннотированный список восьми видов рода *Oligota*, собранных в Беларуси в 1982–2020 гг. Три вида (*O. inexpectata* Williams, 1994, *O. pseudoparva* Williams, 1972 и *O. ruficornis* Sharp, 1870) являются новыми для фауны Беларуси. Также приведены сведения о распространении и экологии этих жесткокрылых.

INTRODUCTION

Aleocharinae is the most species-rich subfamily of the rove beetles (Staphylinidae), with 207 species recorded from Belarus (Aleksandrowicz *et al.*, 1996). Despite the fact that representatives of this group are quite widespread, Aleocharinae is still one of the poorest known subfamily of the rove beetles in Belarus.

The genus *Oligota* Mannerheim, 1830 is a distinctive group within the tribe Hypocyphitini of the subfamily Aleocharinae. More than 170 species have been described till now. This genus presents in all faunal regions except the Antarctic. There are 34 species in West Palaearctic region (Kapp, 2019), of which five widely distributed European species have been recorded from Belarus (Pisanenko & Monsevičius, 1991; Pisanenko, 1995; Aleksandrowicz *et al.*, 1996; Solodovnikov, 2012). Present paper aims to clarify the Belarusian fauna of *Oligota* and provide new data on distribution of the species in the country.

The study was carried out in territory of north, central and southern Belarus in 1982–2020. Almost all specimens were dissected to examine the genital structures. Extracted genital structures were dehydrated in absolute alcohol, mounted in Faure's liquid on celluloid micro-slides, and pinned with the specimen from whom they originated. The identification of species was based on the keys by Kapp (2009). New for Belarus records are asterisked (*).

LIST OF THE SPECIES

Genus *Oligota* Mannerheim, 1830

Oligota granaria Erichson, 1837

MATERIAL EXAMINED. **Vitebsk Region:** Vitebsk, Bilevo-3, 55.165924° N, 30.289308° E, h=196 m, 15–25.VI 2020, 1♀ (Solodovnikov); the same locality, 02–24.VIII 2020, 1♀ (Solodovnikov); Vitebsk, Bilevo-2, 55.165992° N, 30.264060° E, h=189 m, 25.VI–09.VII 2020, 1♀ (Solodovnikov); 4 km E of Vitebsk, the vicinity of vill. Tulovo, 55.198280° N, 30.323528° E, h=155 m, 22.IX 2020, 9♂, 4♀ (5♂, 3♀ genital preparations) (Solodovnikov, Kulikova & Kuznetsov); Liozno district, 22 km E of the Vitebsk, the vicinity of vill. Novorot'ye, 55.106239° N, 30.582778° E, h=247 m, 19.VI 2016, 4♂, 7♀ (1♂, 2♀ genital preparations) (Solodovnikov); Liozno district, 3 km W of the vill. Velikoe Selo, 55.101444° N, 30.563081° E, h=244 m, in the nest of *Formica rufa* L., 28.IX 2019, 1♂ (genital preparation) (Solodovnikov). **Minsk Region:** NW of the Minsk, surroundings of the Drozdy reservoir, Svisloch River floodplain, 53.947940° N, 27.494136° E, h=197 m, 05.VI 2020, 1♂ (Kuznetsov). **Gomel Region:** SE of the Gomel, Korenevka forestry, 52.376667° N, 31.044444° E, h=137 m, in the nest of *Formica rufa* L., 11.X 2020, 2♀ (Ostrovsky).

DISTRIBUTION. Belarus (Pisanenko & Monsevičius, 1991); Austria, Belgium, Great Britain, Czech Republic, Denmark, France, Germany, Hungary, Ireland, Italia, Poland, Romania, Russia (European part), Slovakia, The Netherlands, Ukraine (Smetana, 2004; Semenov, 2007; Kapp, 2019). West-Palaeartic species.

NOTES. Beetles live in compost, haystacks, under fallen leaves, dry grass, in the nests of mice and ants (*Formica* spp.). Imago observed from June to September.

**Oligota inexpectata* Williams, 1994

MATERIAL EXAMINED. **Gomel Region:** Buda-Koshelevo district, near vill. †Yasli-shche, 52.559167° N, 30.398333° E, h=143 m, in the nest of *Formica rufa* L., 08.XI 2020, 1♂, 1♀ (all genital preparations) (Ostrovsky).

DISTRIBUTION. Belarus (new record); Austria, Denmark, Finland, Germany, Norway, Sweden, Switzerland (Williams, 1994; Assing, 1995; Smetana, 2004; Kapp, 2019). West-Palaeartic species.

NOTES. This species is xerophilous (Kapp, 2019). Here it is firstly found in the ant nests.

Oligota inflata (Mannerheim, 1830)

MATERIAL EXAMINED. **Vitebsk Region:** Senno district, 14 km SE Bogushevsk, vicinity of "Luzhki" railway station, mixed forest, in the nest of *Formica polyctena* Förster, 22.IV 2000, 1♂ (genital preparation) (Solodovnikov); 4 km E of the Vitebsk, vicinity of vill. Tulovo, 55.198280° N, 30.323528° E, h=155 m, 22.IX 2020, 4♂, 1♀ (Solodovnikov, Kulikova & Kuznetsov). **Brest Region:** Brest district, vill. Orhovo S of Tomashovka, 51.537278° N, 23.609967° E, h=171 m, 4–5.VII 2020, 1♂ (Kuznetsov).

DISTRIBUTION. Belarus (Pisanenko, 1995), Europe, North Africa, Egypt, Congo, North America and Brazil (Smetana, 2004; Kapp, 2019). Cosmopolitan species.

NOTES. Beetles are found in rotten hay, compost, and other decaying plant debris from spring to autumn. In some places this species is common.

***Oligota parva* Kraatz, 1862**

MATERIAL EXAMINED. **Vitebsk Region:** Vitebsk, House Building Factory, 55.166669° N, 30.106027° E, h=142 m, 18.VIII 1996, 3 ex. (Solodovnikov); the same locality, 08.IV 2020, 2 ex. (Solodovnikov); 4 km E of the Vitebsk, the vicinity of vill. Tulovo, 55.198280° N, 30.323528° E, h=155 m, 22.IX 2020, 1♂, 1♀ (Solodovnikov, Kulikova & Kuznetsov); Liozno district, 22 km E of Vitebsk, the vicinity of vill. Novorot'ye, 55.106239° N, 30.582778° E, h=247 m, 19.VI 2016, 1♀ (Solodovnikov). **Brest Region:** Brest district, vill. Orhovo S of Tomashovka, 51.539419° N, 23.609241° E, h=168 m, in compost near the farm, 10.X 2020, 1♂ (Kuznetsov).

DISTRIBUTION. Belarus (Solodovnikov, 2012). Almost cosmopolitan species while absent in Australia (Williams, 1975).

NOTES. It is found in general vegetable refuse, grass cuttings, compost heaps and the waste of woodworking enterprises. Quite rare and local species; imago from April to September.

****Oligota pseudoparva* Williams, 1972**

MATERIAL EXAMINED. **Gomel Region:** Gomel district, vill. Starye Dyatlovichi, 52.229722° N, 30.859167° E, h=124 m, in the nest of *Formica rufa* L., 20.IX 2020, 1♀ (Ostrovsky).

DISTRIBUTION. Belarus (new record). This species of Brazilian origin is not native to Europe (alien species). It had been introduced to Liverpool (Britain) (Williams, 1972), Poland, Sweden and Switzerland (Kapp, 2019). Synanthropic and introduced species.

NOTES. Synanthropic species (Kapp, 2019). Most of the findings are related to the import of nuts. In the nature, it has not yet been registered, naturalization was considered unlikely. This species was not previously known from ant nests.

***Oligota pumilio* Kiesenwetter, 1858.**

MATERIAL EXAMINED. **Vitebsk Region:** Lepel district, Berezinskiy Biosphere Reserve, vill. Postrezhie, in the nest of *Microtus arvalis* Pall., 14.VII 1982, 2 ex. (Chikilevskaya); Chashniki district, city of Chashniki, 54.850606° N, 29.169058° E, h=137 m, in cellar, 4–18.V 2019, 7 ex. (1♂, 1♀ genital preparations) (Shvarackaya); Liozno district, 3 km W of the vill. Velikoe Selo, 55.101444° N, 30.563081° E, h=244 m, in the nest of *Formica rufa* L., 28.IX 2019, 1♀ (genital preparation) (Solodovnikov); Vitebsk, Bilevo-3, 55.165924° N, 30.289308° E, h=196 m, 15–25.VI 2020, 2♂, 5♀ (all genital preparations) (Solodovnikov); 5 km SE of the Vitebsk, the vicinity of vill. Oktyabrskaya, 55.128264° N, 30.242668° E, h=140 m, 17.X 2020, 1♀ (Solodovnikov & Kulikova).

DISTRIBUTION. Belarus (Pisanenko & Monsevičius, 1991), Europe from France to eastern Turkey and the Crimea, in the north to Finland, in the south to Greece and southern Italy. The species is recorded by Schülke & Smetana (2015) from North Africa, the Nearctic and the Neotropical regions. Cosmopolitan species.

NOTES. This species occurs in all habitats from the plain to the subalpine zone. *Oligota pumilio* was found in hollow trees, in leaves of various tree species, leftover wild fodder, in hay in cattle sheds, on moldy substrate, in mushrooms and once in a mole's nest. It also occurs in ant nests. Imago is overwinter.

***Oligota pusillima* (Gravenhorst, 1806)**

MATERIAL EXAMINED. Vitebsk Region: Braslav district, Braslav National Park, SW shore of Strusto Lake, the vicinity of vill. Bulavishki, 30.V 1997, 2♂, 2♀ (all genital preparations) (Solodovnikov); Senno district, 14 km SE of Bogushevsk, vicinity of “Luzhki” railway station, in the nest of *Formica rufa* L., 23–29.VI 2000, 1♀ (genital preparation) (Solodovnikov); the same locality, 27.VII–6.VIII 2000, 1♂, 1♀ (all genital preparations) (Solodovnikov); the same locality, in the nest of *Formica polyctena* Förster, 06.VIII 2000, 1 ex. (Solodovnikov); 12 km SE Bogushevsk, 0,7 km WSW “Luzhki” railway station, 54.752188° N, 30.267364° E, h=188 m, in the nest of *Formica polyctena* Förster, 17.VII 2020, 4♂ (Solodovnikov); 36 km SSE of Vitebsk, 3 km N of vill. Shchitovka, 54.883753° N, 30.379244° E, h=185 m, in the nest of *Lasius fuliginosus* Latr., 5–10.VI 2013, 1♀ (Solodovnikov); Vitebsk district, 3 km SE of the Vitebsk, 13.IV 1996, 1♀ (Solodovnikov); Vitebsk, botanical garden, 8–18.V 2000, 1♂ (genital preparation) (Solodovnikov); 3 km SE of Vitebsk, in the nest of *Formica rufa* L., 26.IV 2000, 1♂ (genital preparation) (Solodovnikov); 4 km S of the Vitebsk, right bank of Luchesa River, in the nest of *Formica rufa* L., 06.IV 2016, 2♀ (Solodovnikov); Vitebsk, Bilevo-3, 55.163559° N, 30.276733° E, h=192 m, 15–25.VI 2020, 2♂ (genital preparations), 2♀ (Solodovnikov); Vitebsk, Bilevo-1, 55.167646° N, 30.253899° E, h=190 m, 9–20.VII 2020, 1♂ (Solodovnikov); Vitebsk, Bilevo-2, 55.165992° N, 30.264060° E, h=189 m, 25.VI–9.VII 2020, 1♀ (genital preparation) (Solodovnikov); the same locality, 2–24.VIII 2020, 2♂ (genital preparations) (Solodovnikov); 4 km E of Vitebsk, the vicinity of vill. Tulovo, 55.198280° N, 30.323528° E, h=155 m, 22.IX 2020, 2♂, 1♀ (all genital preparations) (Solodovnikov, Kulikova & Kuznetsov); Vitebsk, Frunze park, 55.193344° N, 30.211082° E, h=142 m, 23.IX 2020, 1♂ (genital preparation), (Solodovnikov & Kulikova); Liozno district, 30 km SSE of Vitebsk, 1 km S of vill. Kurtenki, 54.944314° N, 30.444069° E, h=185 m, in the nest of *Formica exsecta* Nyl., 9.X 2012, 1♀ (Solodovnikov & Pliskevich); 22 km E of Vitebsk, the vicinity of vill. Novorot'ye, 55.106239° N, 30.582778° E, h=247 m, 19.VI 2016, 2♂ (genital preparations), 4♀ (Solodovnikov). **Minsk Region:** N of Minsk, Dolginovsky tract, in the nest of *Formica rufa* L., 16.V 2020, 1♀ (Kuznetsov). **Gomel Region:** Loev district, E of the vill. Abakumi, 51.989722° N, 30.864722° E, h=117 m, in the nest of *Formica rufa* L., 13.VI 2020, 2♂, 2♀ (all genital preparations) (Ostrovsky); Dobrush district, SW of the vill. Dudarevo, 52.364722° N, 31.198889° E, h=143 m, in the nest of *Formica polyctena* Förster, 12.IV 2020, 1♂ (genital preparation) (Ostrovsky); Gomel district, NE of Gomel, Makeevka forestry, 52.403056° N, 30.893056° E, h=136 m, in the nest of *Formica rufa* L., 2.V 2020, 1♂ (genital preparation) (Ostrovsky).

DISTRIBUTION. Belarus (Pisanenko, 1995). Cosmopolitan species, widely distributed in Europe, Asia, North and South America (Aleksandrowicz *et al.*, 1996; Smetana, 2004; Semenov, 2007; Kapp, 2019).

NOTES. This species occurs in vegetable refuse, including compost heaps and cut grass, under stones, in urban- and agrocenoses, ant nests (*Formica rufa* group and *Lasius fuliginosus* Latr.), grass tufts and rotting seaweed. Imago observed from April to September.

****Oligota ruficornis* Sharp, 1870**

MATERIAL EXAMINED. Gomel Region: Svetlogorsk district, vicinity of vill. Chirkovich, left bank of the Berezina River, 52.684294° N, 29.661018° E, h=126 m, 28.VII 2020, 1♂ (genital preparation), 2♀ (Solodovnikov).

DISTRIBUTION. Belarus (new record); North-Western Africa, Southern and Western Europe (Kapp, 2019). West-Palaearctic species.

NOTES. It is found in general vegetable refuse but seems to prefer a drier situation than *O. pusillima* and is more often found in old haystacks and reed stacks (Williams, 1975).

CONCLUSION

As a result of this study, eight species of *Oligota* are recorded from Belarus. Three species, *O. inexpectata*, *O. pseudoparva* and *O. ruficornis*, are new for the Belarusian fauna. Three species (*O. inexpectata*, *O. pseudoparva*, *O. ruficornis*) are recorded from the Gomel region for the first time, two species (*O. inflata* and *O. parva*) are new for Brest region, and *O. pusillima* is new for the Minsk region. Another species *O. apicata* Erichson, 1837 is known from the Polish part of the National Park "Belovezhskaya pushcha" (Aleksandrowicz *et al.*, 1996) and probably also occurs in Belarus. The fauna of Belarus is not original. It consists of four cosmopolitan species, three West-Palaearctic and one introduced species.

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Address: Federal Scientific Center of the East Asia Terrestrial Biodiversity (former Institute of Biology and Soil Science), Far East Branch of the Russian Academy of Sciences, 690022, Vladivostok-22, Russia.

E-mail: storozhenko@biosoil.ru

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