

## *Hylecthrus rubi* Saunders, 1850 — a new species of strepsipteron (Insecta: Strepsiptera: Stylopidae) in the fauna of Belarus

## *Hylecthrus rubi* Saunders, 1850 — новый вид веерокрылых (Insecta: Strepsiptera: Stylopidae) в фауне Беларуси

A.M. Ostrovsky  
А.М. Островский

Gomel State Medical University, Lange Str. 5, Gomel 246000 Belarus. E-mail: Arti301989@mail.ru.  
Гомельский государственный медицинский университет, ул. Ланге 5, Гомель 246000 Беларусь.

**Key words:** *Hylecthrus rubi*, finding, fauna, Belarus.

**Ключевые слова:** *Hylecthrus rubi*, находка, фауна, Беларусь.

**Abstract.** *Hylecthrus rubi* Saunders, 1850 (Strepsiptera: Stylopidae) is firstly recorded in Gomel Region of Belarus near Gomel city as a parasite of bee *Hylaeus* (*Hylaeus*) *communis* Nylander, 1852 in July 2019. Brief information on distribution and ecology of the species is given.

**Резюме.** Веерокрылое *Hylecthrus rubi* Saunders, 1850, вид из семейства Stylopidae, найденный в окрестностях города Гомель на *Hylaeus* (*Hylaeus*) *communis* Nylander, 1852 в июле 2019 года, впервые отмечен для фауны Беларуси. Приведены краткие данные по распространению и экологии вида.

### Introduction

Members of the order Strepsiptera display highly peculiar morphology and lifestyles. They are small to medium sized insects (1.0–7.5 mm long) exhibiting extreme sexual dimorphism [Kinzelbach, 1971a; Kathirithamby, 1989]. Free living and flying males have twisted hind wings, while their fore wings are reduced to club-like appendages. Usually endoparasitic and wingless females are known to colonize members of seven insect orders [Kathirithamby, 1989, 2009]. Approximately 600 Strepsiptera species are known to exist globally [Kathirithamby, 2002; Kinzelbach, Pohl, 2003], while 30 species from 7 families are known in Europe [Pohl, 2010; Soon et al., 2011]. There are 3 species registered in Belarus [Medvedev, 1965; Ostrovsky, 2018, 2019]. Continuing our research, the *Hylecthrus rubi* Saunders, 1850 has been found in Belarus.

### Results

Strepsiptera  
Stylopidae Kirby, 1813  
Stylopinae Kirby, 1813  
*Hylecthrus rubi* Saunders, 1850

Fig. 1.

**Material.** Republic of Belarus, Gomelskaya Oblast, near Gomel city, floodplain meadow in the valley of the Iput River, 21.07.2019 — 1♀ of *Hylaeus* (*Hylaeus*) *communis* Nylander, 1852 stylotized by female of *H. rubi*. A.M. Ostrovsky leg. et det.

**Distribution.** Widely distributed in Europe and extending to the Near East, currently known from Albania, Austria, Bulgaria, Croatia, French mainland, Germany, Great Britain, Greek mainland, Hungary, Italian mainland, Romania, Sicily, Slovakia, Slovenia, Spanish mainland, Switzerland, Ukraine [Pohl, 2010].

**Notes.** *H. rubi* is a typical parasite of many *Hylaeus* Fabricius, 1793 (Hymenoptera: Colletidae) species [Medvedev, 1965; Kinzelbach, 1971b]. However, from Belarus only *H. (H.) communis* has been recorded as its host. In Belarus *H. (H.) communis* is a widespread and common species.

### Conclusion

A strepsipteron species *Hylecthrus rubi* Saunders, 1850 and genus *Hylecthrus* Saunders, 1850 from the family Stylopidae is described for the fauna of Belarus for the first time. From Belarus only *H. (H.) communis* has been recorded as its host of *H. rubi*.

### References

- Kathirithamby J. 1989. Review of the Order Strepsiptera // Systematic Entomology. Vol.14. P.41–92.  
Kathirithamby J. 2002. Strepsiptera. Twisted-wing parasites. Version 24 September 2002 (under construction). — The Tree of LifeWeb Project. Available at <http://tolweb.org/Strepsiptera/8222/2002.09.24> (accessed 5 February, 2019).  
Kathirithamby J. 2009. Host-Parasitoid Associations in Strepsiptera // Annual Review of Entomology. Vol.54. P.227–249.  
Kinzelbach R.K. 1971a. Morphologische Befunde an Fächerflüglern und ihre phylogenetische Bedeutung (Insecta: Strepsiptera) // Zoologica. H.119. S.1–256.  
Kinzelbach R.K. 1971b. Redescription and revision of the Strepsiptera genus *Hylecthrus* Saunders, 1850 // Angewandte Parasitologie. Jg.12. H.4. S.204–220.  
Kinzelbach R.K., Pohl H. 2003. Ordnung Strepsiptera, Fächerflüger // Wirbellose Tiere. 5. Teil: Insecta. Heidelberg-Berlin: Spektrum Akademischer Verlag. S.526–539.  
Klaus M. 2016. Über Fächerflüger (Strepsiptera) bei Hautflüglern (Hymenoptera) in Franken und darüber hinaus // Galathea. Bd.32. S.83–99.  
Medvedev L.N. 1965. [The order Strepsiptera] // Keys to the insects of the European part of the USSR. Coleoptera and Strepsiptera. M.–L.: Nauka Publ. Vol.2. P.641–645. [In Russian].

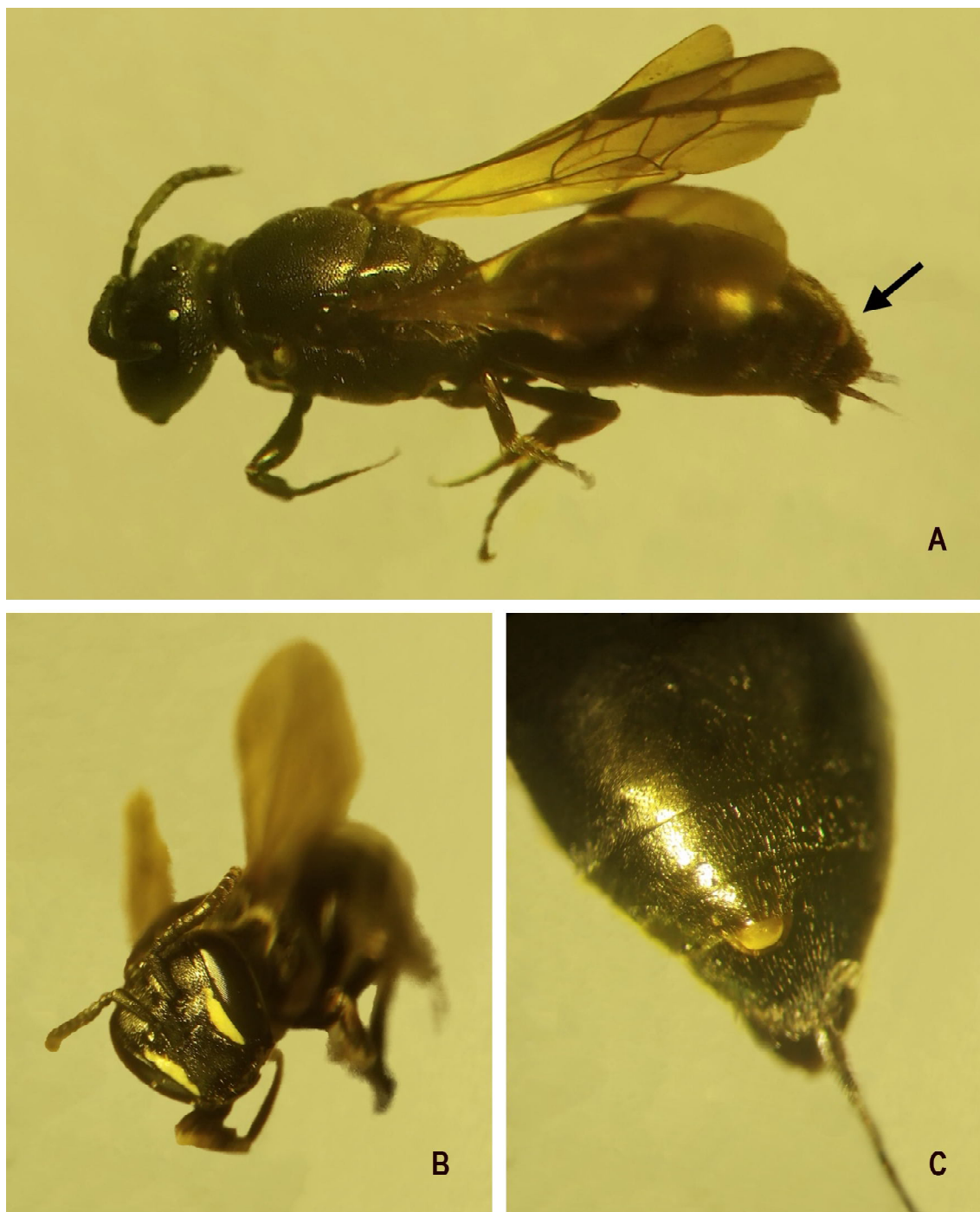


Fig. 1. A, B — *Hylaeus (Hylaeus) communis* Nylander, 1852: specimen (female) stylized by a female of *Hylecthrus rubi* Saunders, 1850; C — posterior dorsum of female *H. (H.) communis* showing female of *H. rubi* exerted at posterior border of gastral tergites V and VI.

Рис. 1. А, В — *Hylaeus (Hylaeus) communis* Nylander, 1852: экземпляр (самка), стилизованный самкой *Hylecthrus rubi* Saunders, 1850; С — конец брюшка самки *H. (H.) communis* с самкой *H. rubi* на задней границе V и VI тергитов брюшка.

Ostrovsky A.M. 2018. A first record of *Stylops melittae* Kirby, 1802 (Insecta: Strepsiptera: Stylopidae) in Belarus // Euroasian entomological journal. Vol.17. No.3. P.189–190. DOI: 10.15298/euroasentj.17.3.08.

Ostrovsky A.M. 2019. A new record of strepsipteron *Paraxenos sphecidarum* (Dufour, 1837), (Insecta, Strepsiptera: Xenidae)

from Belarus // Euroasian entomological journal. Vol.18. No.3. P.186–187. DOI: 10.15298/euroasentj.18.3.07.

Pohl H. 2010. Fauna Europaea: Strepsiptera. Fauna Europaea, ver. 2.4. Available at <http://www.faunaeur.org> (accessed 5.02.2019).

Soon V., Kesküla T., Kurina O. 2011. Strepsiptera species in Estonia // Entomologica Fennica. Vol.22. P.213–218.

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