

## A new record of strepsipteron *Paraxenos sphecidarum* (Dufour, 1837), (Insecta, Strepsiptera: Xenidae) from Belarus

### *Paraxenos sphecidarum* (Dufour, 1837) — новая находка веерокрылого (Insecta: Strepsiptera: Xenidae) в фауне Беларуси

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**Key words:** *Paraxenos sphecidarum*, fauna, Belarus.

**Ключевые слова:** *Paraxenos sphecidarum*, фаунистика, Беларусь.

**Abstract.** *Paraxenos sphecidarum* (Dufour, 1837) (Strepsiptera: Xenidae) is firstly recorded from Gomel city (June 2016) and Uza village (August 2017) in Belarus as a parasite of the sphecid wasp *Ammophila sabulosa* (Linnaeus, 1758). The distribution and ecology of the species are briefly discussed.

**Резюме.** Веерокрылое *Paraxenos sphecidarum* (Dufour, 1837), вид из семейства Xenidae, найденный в Гомельской области в окрестностях города Гомель (июнь 2016) и деревни Уза (август 2017) на *Ammophila sabulosa* (Linnaeus, 1758), впервые отмечен для фауны Беларуси. Приведены данные по распространению и экологии вида.

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, 1971; 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 2 species registered in Belarus [Medvedev, 1965; Ostrovsky, 2018]. Continuing our research, the *Paraxenos sphecidarum* (Dufour, 1837) has been found in Belarus.

Strepsiptera  
Xenidae Saunders, 1872  
Paraxeninae Kinzelbach 1971  
*Paraxenos sphecidarum* (Dufour, 1837)

Fig. 1.

**Material.** Belarus, *Gomelskaya Oblast*, near Gomel city, 6.06.2016 — 1♂ of *Ammophila sabulosa* (Linnaeus, 1758) stylized by male of *P. sphecidarum*; near Uza village, 12.08.2017 — 1♂ of *A. sabulosa* (Linnaeus, 1758) stylized by 2 females of *P. sphecidarum*. A.M. Ostrovsky leg. et det.

**Distribution.** Widely distributed in Europe and extending to the Near East and North Africa, currently known from Albania, Austria, Croatia, Czech Republic, Finland (?), the European part of Russia (East, North and Northwest), French mainland, Germany, Great Britain, Hungary, Italian mainland, Poland, Portuguese mainland, Sicily, Spanish mainland, Switzerland, Vóreion Aiyáion (North Aegean Is.); also distributed in East Palaearctic [Pohl, 2010].

**Notes.** *P. sphecidarum* is a typical parasite of solitary wasps of the genus *Ammophila* W. Kirby, 1798 (Hymenoptera: Apoidea: Sphecidae) [Medvedev, 1965; Klaus, 2016]. However, from Belarus only *A. sabulosa* has been recorded as its host. In Belarus *A. sabulosa* is a widespread and common species.

## Conclusion

The family, subfamily, genus and species are formally new to Belorussia's list of Strepsiptera: Xenidae, Paraxeninae, *Paraxenos* Saunders, 1872, and *Paraxenos sphecidarum* (Dufour, 1837). From Belarus only *A. sabulosa* has been recorded as its host of *P. sphecidarum*.

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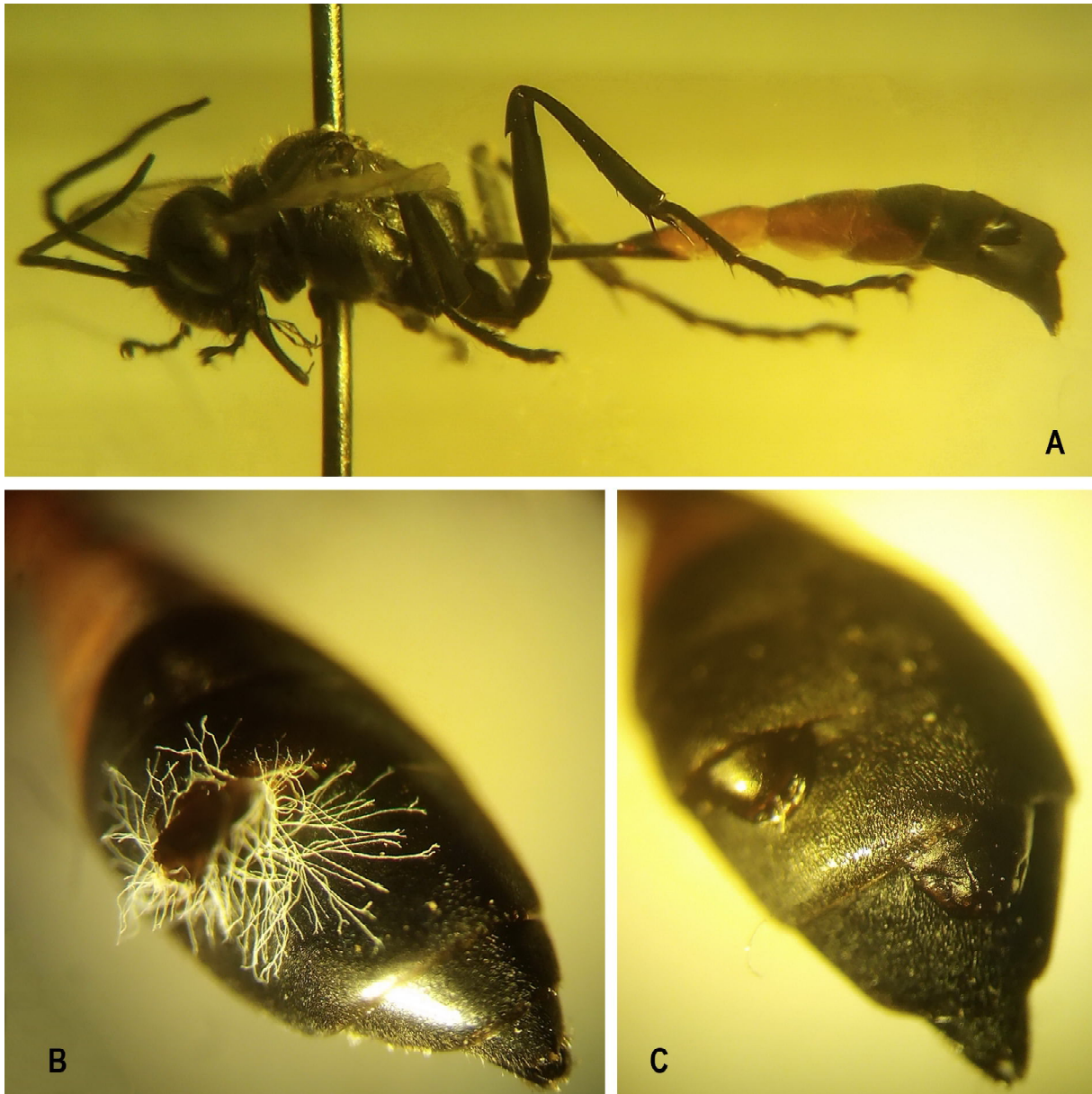


Fig. 1. A — *Ammophila sabulosa* (Linnaeus, 1758): specimen (male) stylopized by a females of *Paraxenos spheccidarum* (Dufour, 1837); B — Posterior dorsum of male *A. sabulosa* showing the remains of a male puparium exerted at posterior border of gastral tergite IV following the adult's emergence of *P. spheccidarum*; C — Posterior dorsum of male *A. sabulosa* showing two females of *P. spheccidarum* exerted at posterior border of gastral tergites IV and V.

Рис. 1. А — *Ammophila sabulosa* (Linnaeus, 1758): экземпляр (самец), стилопизированный самками *Paraxenos spheccidarum* (Dufour, 1837); В — Конец брюшка самца *A. sabulosa* с остатками мужского пупария на задней границе IV тергита брюшка после появления взрослой особи *P. spheccidarum*; С — Конец брюшка самца *A. sabulosa* с двумя самками *P. spheccidarum* на задней границе IV и V тергитов брюшка.

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