

Oxycarenus lavaterae (FABRICIUS, 1787)
(Hemiptera: Heteroptera: Oxycarenidae) – a new
species to the fauna of Poland

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ABSTRACT: *Oxycarenus lavaterae* (Hemiptera: Heteroptera: Oxycarenidae) has been collected from a *Platanus acerifolia* in Rzeszów-Słocina, Southeastern Poland. This is the first record of this species from Poland.

KEY WORDS: Hemiptera, Heteroptera, Oxycarenidae, *Oxycarenus lavaterae*, first country record, *Platanus acerifolia*

The genus *Oxycarenus* (FIEBER, 1837) is represented in Europe by four species: *O. hyalinipennis* (A. COSTA, 1843), *O. modestus* (FALLÉN, 1829), *O. pallens* (HERRICH-SCHAEFFER, 1850), and *O. lavaterae* (FABRICIUS, 1787). Apart from *O. modestus*, the remaining species occur in Southern Europe, inhabiting mainly the Mediterranean Sea basin, which reaches to Africa and West Asia (PÉRICART 1999, 2001). Until the 21st century, only *O. modestus* (GORCZYCA 2004) had been known from Poland, whereas *O. pallens* was recorded only in 2013 (LIS & DUBIEL 2013).

During the research on the fauna of invertebrates overwintering under the

bark of the London plane tree *Platanus* × *acerifolia* in Southeastern Poland one species of *Oxycarenus lavaterae* was collected. It is the first record of this species from Poland:

– The Sandomierz Basin: EA74 Rzeszów-Słocina, 2 III 2014, 1 ex., leg.

T. OLBRYCHT, the manor park under the bark of a *Platanus acerifolia* with 360 cm in circumference, det. et coll. G. HEBDA.

Oxycarenus lavaterae stands out among other representatives of this genus in Europe, with the largest body sizes (4.8–6.0mm), a red base of hemelytrae, uniformly black prothorax, head and antennae, and a colorless and transparent membrane of the hemelytrae (PÉRICART 1999; WACHMANN & all. 2007).

The species develops on herbaceous plants belonging to the family Malvaceae JUSS., such as *Hibiscus* L., *Lavatera* L., and *Althaea* L. It also inhabits trees belonging to this family, for example lime trees *Tilia* L., creating sometimes numerous groupings comprising hundreds of specimens. When appearing in abundance, these bugs can cause damage in weakening lime trees, hence they are considered as insects with an economic importance (VELIMIROVIĆ & all. 1992; WACHMANN & all. 2007).

Until recently, *Oxycarenus lavaterae* had inhabited merely the western part of the Mediterranean Sea. For roughly 20 years, however, it has been expanding its inhabited area by colonizing other regions located to the east and north off its original range, reaching to the countries neighboring with Poland: Slovakia (1995), the Czech Republic, and Germany (2004) (RABITSCH 2008). The most probable reasons behind this rapid colonization of new areas are thought to be the climate warming in Europe and an easy acclimatization of this species. In Bulgaria, 10 years after the first record of the *O. lavaterae*, its mortality rate during overwintering decreased (VELIMIROVIĆ & all. 1992, KALUSHKOV & all. 2007).

Oxycarenus lavaterae is another – after *Arocatus longiceps* STÅL, 1872 and *Corythucha ciliata* (SAY, 1832) – Heteropteran bug new to Poland, found in plane trees or connected with them (GIL & all. 2011; LIS 2009). Also, it is worth noting that it is the seventh – after *Cameraria ohridella*

DESCHKA & DIMIĆ, *Phyllonorycter issikii* (KUMATA), *P. robiniella* (CLEMENS), *P. platani* (STAUDINGER), *Corythucha ciliate*, *Leptoglossus occidentalis* HEIDEMANN, 1910 – invasive species reported from the green areas of Rzeszów (CZERNAKOWSKI & OLBRYCHT 2015).

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SUMMARY

Oxycarenus lavaterae is the third out of four representatives of the genus in Europe that has been listed from Poland. One specimen of this species was collected under the bark of a *Platanus acerifolia* at the locality in Rzeszów-Słocina, Southeastern Poland. The species is included among pest heteropterans, feeding on the representatives of the Malvaceae such as the lime (*Tilia L.*). In the last 20 years, it has extended its range northwards, probably due to climate warming in Europe and rapid acclimatization abilities.

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