

# FRAGMENTA FAUNISTICA

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## ***Sialis morio* KLINGSTEDT, 1932 (*Megaloptera*, *Sialidae*), an alderfly species new to Poland**

**Abstract:** *Sialis morio* KLINGSTEDT, 1932 is reported from Poland for the first time. It was found in two sites in the Masurian Lake District in the years 1998-1999.

**Key words:** *Neuropteroidea*, *Megaloptera*, *Sialis morio*, Poland.

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The *Megaloptera* is a small order of insects of the superorder *Neuropteroidea* whose larval development occurs in an aquatic habitat. In Europe, this taxon is represented by 10 species of the genus *Sialis* LATR., the family *Sialidae* (ASPÖCK et al. 1980, VSHIVKOVA 1985, 1987). However, according to ASPÖCK (1992) and ASPÖCK and HÖLZEL (1994), this genus should be revised, for some of the recently described species may be synonyms of others. The species considered unquestionable by these authors include *Sialis lutaria* L., *S. morio* KLINGST., *S. sordida* KLINGST., *S. fuliginosa* PICT., *S. nigripes* PICT. and *S. sibirica* MCLACHL. Three of these have been recorded from Poland, namely *S. lutaria*, *S. fuliginosa*, and *S. nigripes* (CZECHOWSKA, DOBOSZ 1990, DOBOSZ 1990, 1999).

Quite recently, 33 imagines of a fourth species, *S. morio*, have been found in Pojezierze Mazurskie (the Masurian Lake District), N Poland. The first individual was caught by chance in 1998, the others as the result of a special search a year later. The research was made on the Lake Maróz near the locality of Waplewo and on several lakes of the Iławski Park Krajobrazowy (the Iławski Landscape Park) near the locality of Jerzwałd (Fig. 1). All individuals but one were caught on the western bank of the Lake Maróz at a place over-

grown with spreading willows, *Salix purpurea* L. The alderflies were sitting on willow shoots and on herbaceous plants growing nearby. The material collected includes the following:

- Waplewo ad Olsztynek, Lake Maróz (53°30'N, 20°25'E, UTM DE52), 27.05.1998, 1♂, leg. W. CZECHOWSKA; 2.06.1999, 16♂♂, 15♀♀, leg. W. CZECHOWSKA et P. BICZYK;

- Jerzwałd ad Ilawa, Lake Witoszewskie (53°50'N, 19°30'E, UTM DE06), 3.05.1999, 1♂, leg. E. WEGNER.

The forewing of the males was from 9.8 to 10.0 mm long, that of the females ranged from 11.0 to 14.0 mm.

Taxonomically, *S. morio* is close to *S. lutaria*. The species are easily distinguishable on the basis of the male abdominal genital segments, whereas females differ only slightly by the shape of the 8th sternite. Drawings of the genital segments in *Sialidae* can be found in KLINGSTEDT (1932), MEINANDER (1962), ASPÖCK et al. (1980) and VSHIVKOVA (1985, 1987); the last four papers also include identification keys to species of *Sialidae*.

*S. morio*, like *S. lutaria*, undergoes its larval development in stagnant or slowly-flowing waters (KAISER 1977, VSHIVKOVA 1985, ÁBRAHÁM, KOVÁCS 1999). *S. morio* females usually oviposit on the underside of leaves of trees of the genera *Salix*, *Alnus* and *Betula* growing near water, or far more seldom on herbaceous plants of the genera *Carex*, *Equisetum* and *Comarum* (KAISER 1977).

*S. morio* is a North-Palaeartic species, but a few relic sites are also

known in southern Europe and south-western Asia. In Europe, the species has been recorded from Norway, Sweden, Finland, Hungary, Romania, the countries of former Yugoslavia, and those of the former Soviet Union. In Asia, it has been reported from Anatolia, Caucasia and Siberia up to Yakutia in the east (ASPÖCK et al. 1978, 1980, VSHIVKOVA 1987, 1995).



Fig. 1. Localities of *Sialis morio* KLINGST. in Poland (1 - Waplewo, 2 - Jerzwałd).

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## REFERENCES

- ÁBRAHÁM L., KOVÁCS T. 1999. A report on the Hungarian alderfly fauna (*Megaloptera: Sialidae*). A Janus Pannonius Múz. Évk., Pécs, 43 (1998): 49–56.
- ASPÖCK H. 1992. Current research in neuropterology. In: M. CANARD, H. ASPÖCK, M. W. MANSELL (eds). Proceedings of the Fourth International Symposium on Neuropterology, Bagnères-de-Luchon, France, 1991. Toulouse, pp. 43–56.
- ASPÖCK H., ASPÖCK U., HÖLZEL H. 1978. *Megaloptera et Planipennia*. In: J. ILLIES (ed.). Limnofauna Europaea. Stuttgart, pp. 329–332.
- ASPÖCK H., ASPÖCK U., HÖLZEL H. 1980. Die Neuropteren Europas. 2 vols. Goecke & Evers, Krefeld, 495 and 335 pp.
- ASPÖCK H., HÖLZEL H. 1994. The *Neuropteroidea* of North Africa, Mediterranean Asia and of Europe: a comparative review (*Insecta*). Pure and applied research in neuropterology. In: M. CANARD, H. ASPÖCK, M. W. MANSELL (eds). Proceedings of the Fifth International Symposium on Neuropterology, Cairo, Egypt, 1994. Toulouse, pp. 31–86.
- CZECHOWSKA W., DOBOSZ R. 1990. *Megaloptera*. In: J. RAZOWSKI (ed.). Wykaz Zwierząt Polski. I. Wrocław, Warszawa, Kraków, p. 137.
- DOBOSZ R. 1990. *Sialidae (Megaloptera, Neuropteroidea)* of Poland – a faunistic review. Ann. Upper Siles. Mus. (Ent.), Bytom, 1: 149–157.
- DOBOSZ R. 1999. Nowe stanowiska *Sialis nigripes* PICTET, 1865 w Polsce (*Neuropteroidea: Megaloptera*). Acta ent. siles., Bytom, 5/6: 50.
- KAISER E. W. 1977. Aeg og larver af 6 *Sialis*-arter fra Skandinavien og Finland (*Megaloptera, Sialidae*). Flora Fauna, Silkeborg, 83: 65–79.
- KLINGSTEDT H. 1932. Neuropterologisches aus Finland. 5. Revision der Gattung *Sialis* nebst Beschreibung von zwei neuen Arten. Mem. Soc. Fauna Flora fenn., Helsinki, 8: 3–14.
- MEINANDER M. 1962. The *Neuroptera* and *Mecoptera* of Eastern Fennoscandia. Fauna fenn., Helsinki, 13, 96 pp.
- VSHIVKOVA T. S. 1985. Vislokrylki (*Megaloptera, Sialidae*) Evropy i Kavkaza. Entomol. Obozr., Leningrad, 64: 146–157.
- VSHIVKOVA T. S. 1987. Otryad *Megaloptera* – Bolshekrylye. In: G. S. MEDVEDEV (ed.). Opredelitel' Nasekomykh Evropeiskoi Chasti SSSR. Tom IV. 6 Chast': Bol'shekrylye, verblyudki, setchatokrylye, skorpionovye mukhi, rucheiniki. Leningrad, pp. 14–26.
- VSHIVKOVA T. S. 1995. Otryad *Megaloptera* – bol'shekrylye, ili vislokrylki. In: A. S. LELEY et al. (eds.). Opredelitel' Nasekomykh Dal'nego Vostoka Rossii. Tom IV. Setchatokryloobraznye, skorpionnicy, pereponchatokrylye. Chast' 1. Sankt-Peterburg, pp. 9–34.

## STRESZCZENIE

[Tytuł: *Sialis morio* KLINGSTEDT, 1932 (*Megaloptera, Sialidae*) – nowy dla Polski gatunek z rzędu wielkoskrzydłych]

*Sialis morio* KLINGST., przedstawiciel rodziny *Sialidae*, został wykazany z dwóch stanowisk na Pojezierzu Mazurskim jako gatunek nowy dla Polski.