

Mantispids species in the Hungarian fauna with some taxonomical remarks (Neuroptera: Mantispidae)

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ABSTRACT: *Mantispa icterica* PICTET, 1865 was recorded first in the Neuroptera fauna in Hungary. So, the collection of Mantis flies of Hungarian museums was reexamined by authors again. Nomenclature problems are summarized in the European Mantispid fauna as well *Mantispa lobata* NAVAS, 1912 is a new junior synonym.

Introduction

There are two species from the Hungarian Mantispids fauna (*Mantispa styriaca*, *Mantispa perla*) mentioned in literature (STEINMANN 1967, SZIRÁKI-ÁBRAHÁM-SZENTKIRÁLYI-PAPP 1991.) Not far from the Hungarian border, from about 300–400 km there's a third Mantis flies species on two areas, the *Mantispa icterica* PICTET, 1865 (= *Mantispa mandarina* Navas, 1914).

This species lives nearest to our borders in Croatia and in Slovenia (DEVETAK 1992), as well as in the Southern Carpathians in Rumania (KIS et al 1970), so we can consider this species to turn up here. It seemed most likely that it lives on the strongly submediterranean southern slopes of Mecsek or Villányi mountains, so L. Ábrahám searched it several times but hasn't found it yet.

Z. Papp got Neuroptera material from lepidopterologists from the Somlyó hill at Fót and among them the *Mantispa icterica* PICTET, 1865 was identified by authors in autumn 1992, so it can be regarded as a new species in the Hungarian fauna.

Taxonomic notes

The Mantispidae family's European species need revision in taxonomic respect.

There are 5 Mantispidae species in Europe (ASPÖCK et al 1980) the identification of three of them doesn't seem to be difficult (*Mantispa styriaca* (PODA, 1761), *Mantispa scabricollis* McLACHLAN 1875, *Nampista auriventris* (GUERIN, 1838)). Only the *Mantispa styriaca* lives in Hungary among the easily identifiable species. There are taxonomic, nomenclature problems around the other two living species in Europe (*Mantispa perla* (PALLAS, 1772), *Mantispa icterica* PICTET, 1865) which we sum up briefly. After the European faunawork (ASPÖCK et al 1980) a new species is mentioned by the name of Poivre *Mantispa hauseri* from Rovinj, Croatia (POIVRE 1982). ASPÖCK (1992) questions its presence and therefore suggests its taxonomic revision. DEVETAK synonymizes it: *Mantispa hauseri* POIVRE, 1982 (= *Mantispa styriaca* (PODA, 1761)). ASPÖCK (1992) doesn't deal with the raisings of Zakorenko's nomenclature theory. Zakorenko writes the following at the examination of the Russian Mantispidae fauna. There are two types of *Mantispa perla* described by Navas:

Mantispa perla var. *lobata* NAVAS, 1912

Mantispa perla var. *adelungi* NAVAS, 1912

The *Mantispa lobata* is put into a new status and brought to a species position, then identified with the *Mantispa mandarina* described also by NAVAS in 1914, so it's synonymized. Therefore the valid name of *Mantispa mandarina* is *Mantispa lobata* NAVAS, 1912 (ZAKORENKO 1987).

The *Mantispa perla* var. *adelungi* (= *M. lobata*) is a new synonym name. Zakorenko made the comparison on the syntypes. POIVRE (1983) brings the *Mantispa perla* var. *icterica* name to a species status. He identifies this species with *Mantispa mandarina* NAVAS, 1914 so he doesn't deal with it in his works. In eastern part of Palearctic region this species has been separated, not cleared up, yet. So, *Mantispa japonica* McLACHLAN, 1875 is considered as *Mantispa perla* or *Mantispa icterica* (= *lobata*) by MAKARKIN (1990)

According to the rules of taxonomy the species (*Mantispa lobata*) is put to a new status by Zakorenko is a new synonym name.

Mantispa icterica (PICTET, 1865)

Mantispa perla var. *icterica* PICTET, 1865

Mantispa perla var. *adelungi* NAVAS, 1912

Mantispa mandarina NAVAS, 1914

Mantispa lobata NAVAS, 1912 – syn. nov.

It is apparent that the *Mantispa perla* and the *Mantispa icterica* are polotypical and their revisions are unsolved. There was no way to compare the holotypes and the aim of our essay was not to make taxonomic and nomenclature revisions.

Mantispids species in the Hungarian fauna

Mantispa styriaca (PODA, 1761)

Material:

Ágasegyháza 07/08/1991 1♂ Ábahám L., Aszfő 07/12/1978 1♀ Újhelyi S., Balatonfüred 07/31/1979 1♂ Újhelyi S., Balatongyörök 04/23/1965 1♂ Podlussány A., 07/02/1978 1♂ Podlussány A., Barcs, borókás 06/26/1979 1♂ Sár J., Bátorliget 05/10/1948 1♂ Kaszab Z., Budaörs 07/04/1965 1♂ Újhelyi S., Budapest 08/01/1971 1♀ Újhelyi S., Cserkút 09/28/1982 1♂ Uherkovich Á., Darány, borókás 08/04/1981 1♀ Uherkovich Á., Hódmezővásárhely ???/?? 1♂ Prof. Bodnár, Káptalanfüred 04/23/1965 1♂ 1♀ Neruzsil, Kerecsend 07/17/1962 1♀ ?, Kocsola 07/06/1986 1♀ ligh trap, Kétújfalu 08/16/1987, 1♀ Horvátovich S. & Sár J., Mánfa, Kőlyuk 07/02/1982 4♂ 2♀ Uherkovich Á., Nagybjajom 07/03/1987 1♂ Ábrahám L., Nagybjajom Nagyhomok 08/07/1991 1♀ Ábrahám L., Nagykovácsi 07/17/1952 1♀ Gozmány L., 08/18/1952 1♀ Kovács L., Oroszlány 05/07/1961 1♂ Steinmann H., Pécs Deindol 07/04/1987 2♀ Uherkovich Á., 07/17/1987 2♀ Uherkovich Á., 07/18/1987 2♂ 4♀ Uherkovich Á., 07/19/1987 2♀ Uherkovich Á., 07/20/1988 2♂ Uherkovich Á., 06/20/1990 3♂ 5♀ Uherkovich Á., 06/29/1991 1♂ Uherkovich Á., 07/05/1991 1♀ Uherkovich Á., 07/06/1991 1♂ Uherkovich Á., Sumony 07/07/1972 1♀ Uherkovich Á.

Expansive holomediterranean faunaelement. Practically it can be found anywhere in Hungary, but its characteristic habitat is on the dry, warm open-floral covered places. It lives in the low vegetation and occurs on sandy, limestone localities and sunny slopes. There's no barrier vertically for this species in Hungary. It could be caught on the ski-run of Kékestető (1000 m), as well as in the sands of Kiskunság (Ágasegyháza 100 m). Its larva grows in the cocoon of spiders moving on the ground. The activity graph of the mature insects was summarized by the collecting information in a way that the days and months of collecting were considered (Fig. 1.) Fig. 2. shows the collecting sites in Hungary.

Mantispa icterica PICTET, 1865

Material:

Fót, Somlyó hill 25/07/1992. 1♀ Magasházi P.–Tugyi L.

Holomediterranean faunaelement (ASPÖCK et al 1980). It occurs in the Mediterranean and in the similar habitats of *Mantispa styriaca* in Hungary. Its record of occurrence and catching conditions are specified as follows. The Somlyó hill at Fót village – a popular collecting place for lepidopterologists of Budapest for about a century – can be found about 20 km from Budapest, to the northeast. There's a very rich insect fauna here, and it's one of the fewest places which are protected because of its entomological values. The hill is a limestone soil under a very strong submediterranean influence. The characteristic plant association of its southern part is: *Ceraso-Quercetum pubescentis*, *Corno-Quercetum pubescentis* and the *Aceri tatarici-Quercetum-pubescentis-roboris*. There are *Fescuta sulcata* limestone rock-lawns on the hill's plateau.

Active large moths were collected at night several times on the hill by Peter Magasvári and Lajos Tugyi in June–Juli 1992. Besides the rich lepidopterological material some Neuroptera species were also found among them this species as well. The most northern record of the occurrence of this species in Europe is the Somlyó hill at Fót. Its occurrence is extremely remarkable in the respect of zoogeography and nature conservation. Its only living population in Hungary should be surveyed.

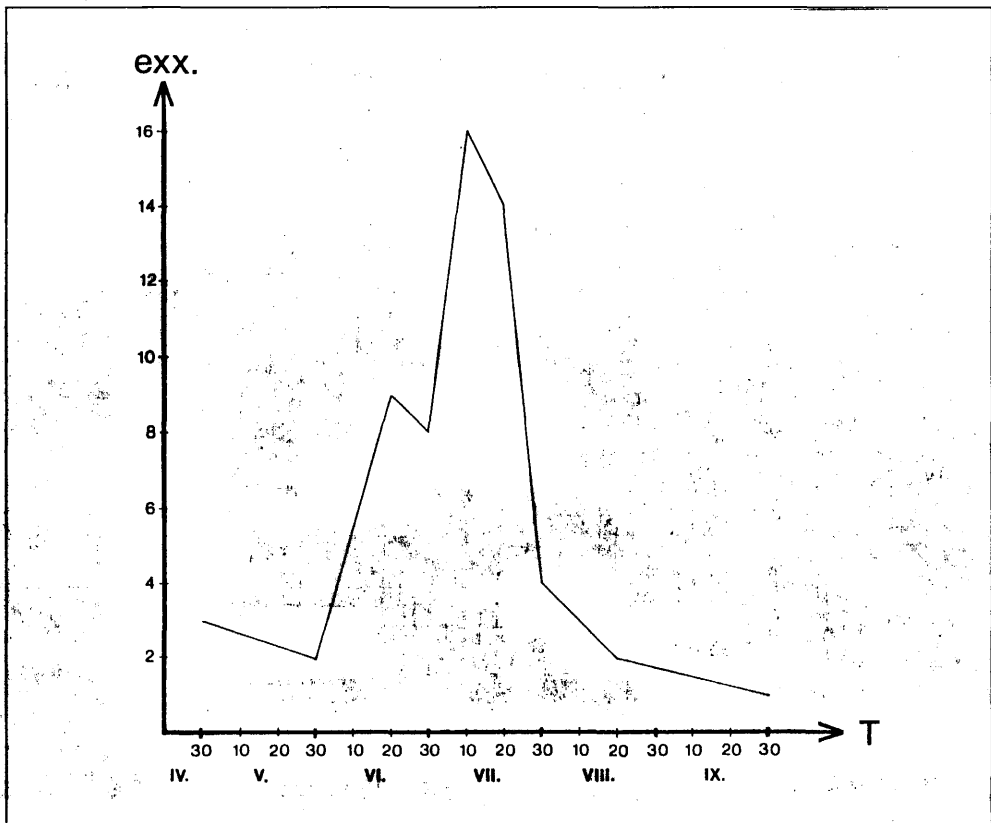


Fig. 1.: Activity graph of *Mantispa styriaca* (PODA, 1761) in Hungary – A *Mantispa styriaca* (PODA, 1761) rajzási diagramja Magyarországon

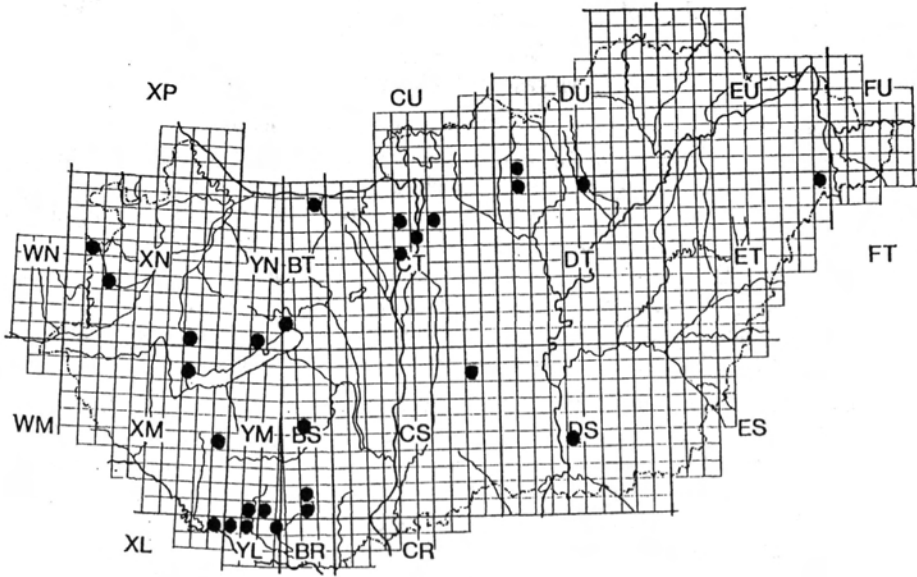


Fig. 2.: Distribution data of *Mantispa styriaca* (PODA, 1761) in Hungary on the basis of collecting and literary information – A *Mantispa styriaca* (PODA, 1761) elterjedése Magyarországon a gyűjteményi és az irodalmi adatok alapján

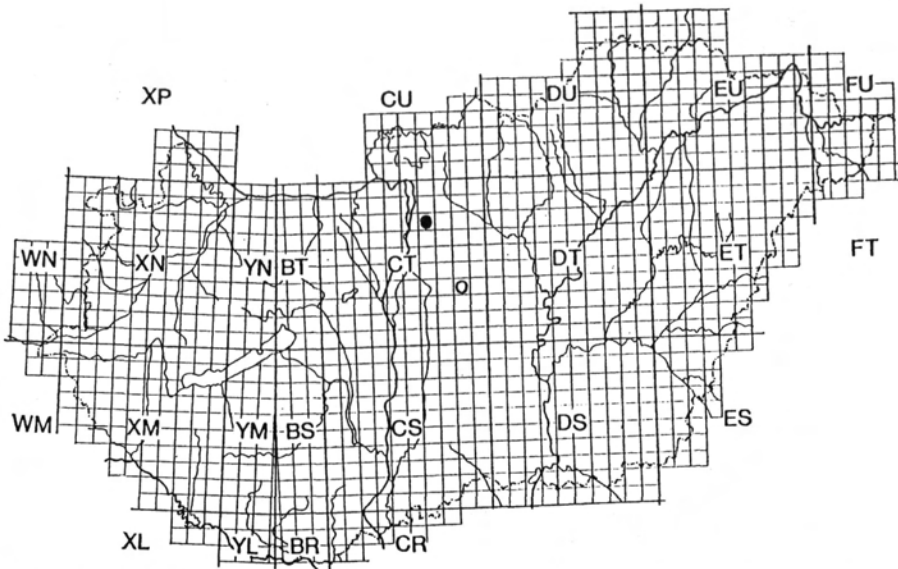


Fig. 3.: Distribution of *Mantispa icterica* PICTET, 1865 (full circle) and *Mantispa perla* (PALLAS, 1772) (empty circle) in Hungary – A *Mantispa icterica* PICTET, 1865 (sötét kör) és a *Mantispa perla* (PALLAS, 1772) (üres kör) elterjedése Magyarországon

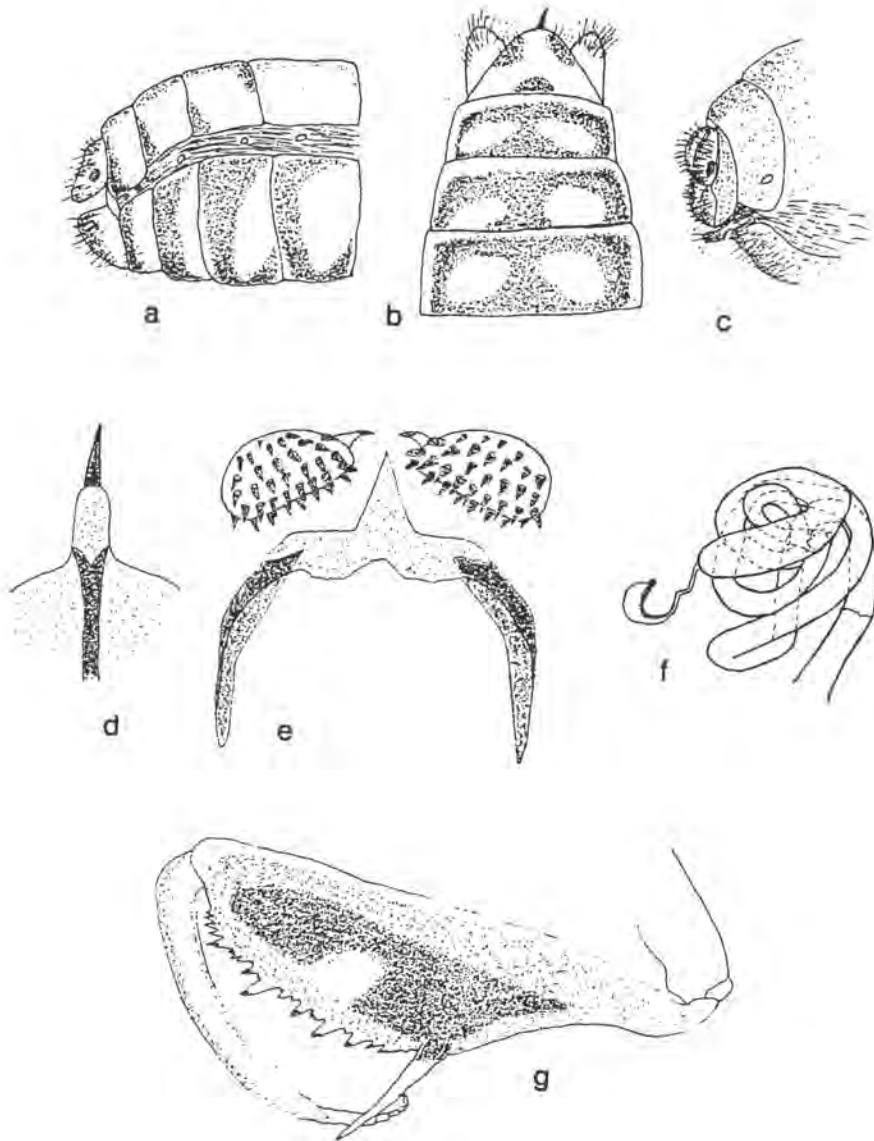


Fig 4.: *Mantispa icterica* PICTET, 1865 a : male terminal of abdomen (lateral view) b.: male abdomen (ventral view) c.: female apex of abdomen (lateral view) d.: male spinasterum e.: male arc coxapodal f.: female spermatheca g.: femur (inside and lateral view) – A *Mantispa icterica* PICTET, 1865 a.: hím külső ivarszerve (oldal nézet) b.: hím ivarszerve és potroh mintázata (hasi nézet) c.: nőstény külső ivarszerve (oldal nézet) d.: hím spinasterum e.: hím arc coxapodal f.: nőstény spermatheca g.: femur (belső és oldalsó nézet)

Mantispa perla (PALLAS, 1772)

Material:

Csévharaszt 05/27/65 1♀ Nagy B.

Its record of occurrence in Hódmezővásárhely (? date leg: Prof. Bodnár) is first mentioned by STEINMANN (1967) in the Hungarian fauna. Sziráki ranked this specimen correctly among the *Mantispa styriaca* (PODA, 1761) during the revision of the collection of Hungarian Natural History Museum. Then an *Mantispa styriaca* specimen collected in Csévharaszt was identified as a *Mantispa perla* (PALLAS, 1772) (SZIRÁKI, et al 1991).

It is a holomediterranean faunaelement (ASPÖCK et al 1980) which captured sites are mainly on mediterranean and submediterranean district.

Summary

We summarize the nomenclature theory used in the *Mantispa* genus in the last decade and we point out that the nomenclature theory problem without the revision of the holotypes needs solution. *Mantispa icterica* PICTET, 1865 was recorded first in the Hungarian fauna.

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Magyar összefoglaló

A szerzők a *Mantispa incteric* PICTET, 1865 nevű faj hazai faunájában való első megtalálása kapcsán áttekintik a Magyarország múzeumi gyűjteményeinek *Mantispa* anyagát.

Összefoglalják a Mantispidae családban az elmúlt tíz évben azokat a nomenklaturai változásokat, melyek érintik a most előkerült faj faji státuszát. Közlik a hazai elterjedési adatok térképét és megadják a faj ivarszervében található morfológiai jellegzetességeket (4. ábra).

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