

M. PAULIAN

*Acta Zoologica Academiae Scientiarum Hungaricae* 47 (2–3), pp. 00–00, 2001

RECENT ADDITIONS TO THE GREEN LACEWING FAUNA OF  
ROMANIA (NEUROPTERA: CHRYSOPIDAE)

M. PAULIAN

*Institutul de Cercetări pentru Protecția Plantelor*  
*Boulevardul Ion Ionescu dela Brad 8, RO-71592 București, Romania*  
*e-mail: paulian@adcon.ro*

The fauna of Romania included 25 species of green lacewings. Eight more species were recently established. The localities where they were found are given.

Key words: Neuroptera, Chrysopidae, Romania, distribution

INTRODUCTION

Thirty years ago, KIS *et al.* (1970) published a monograph of the Neuropteran fauna of Romania, under the authority of the Academy of Sciences of Romania. Then, it constituted a major step forward in the knowledge of lacewings and it is still a basic tool to entomologists with an interest in neuropterology. This study included 24 species of Chrysopidae. Ten years later, the fauna of Europe compiled by ASPÖCK *et al.* (1980) listed the same green lacewings in Romania. However, the authors only added *Anisochrysa prasina* (BURMEISTER, 1839) – now belonging to the genus *Dichochrysa* YANG, 1991 – which was considered in the previous work as a synonym of *Chrysopa (Anisochrysa) ventralis* CURTIS, 1834, but they did not discriminate the two species in the distribution maps.

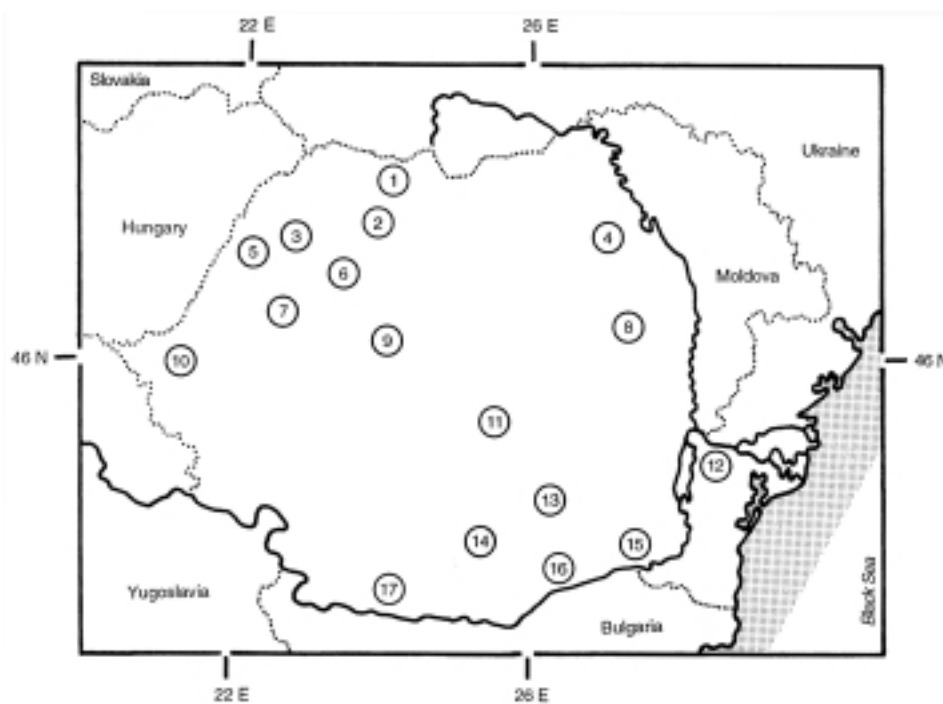
Since 1985, the Plant Protection Research Institute (ICPP) of Bucharest oversees a programme for development of IPM in crop cultivations. A light-trapping survey of beneficial insects was undertaken in several sites across the country providing data on insect predators including chrysopids. In addition, some other specimens of green lacewing were collected in various other localities by several colleagues to whom we wish to express our grateful thanks for their participation in this survey.

Thus, eight green lacewing species were recorded as new to Romania (PAULIAN 1996, PAULIAN *et al.* 1996, PAULIAN & CANARD 2000, PAULIAN *et al.* 2001). The present contribution aims to regroup the above-mentioned results and to indicate the localities (Fig. 1) where newly recorded green lacewings were found, as an update of our knowledge of the chrysopid distribution.

## COLLECTION SITES AND RECENTLY IDENTIFIED SPECIES

The specimens mentioned in this study were collected at or in the near neighbourhood of 17 locations which are from North to South and from West to East (Fig. 1) (collection sites for each species are given below in brackets):

- |                 |               |                |
|-----------------|---------------|----------------|
| 1 – Rodna       | 7 – Beiuş     | 13 – Bucureşti |
| 2 – Beclean     | 8 – Crasna    | 14 – Troianu   |
| 3 – Groşi       | 9 – Tîrnăveni | 15 – Oltenitsa |
| 4 – Scobîltseni | 10 – Arad     | 16 – Mitreni   |
| 5 – Oradea      | 11 – Sinaia   | 17 – Dabuleni  |
| 6 – Huedin      | 12 – Uzlina   |                |



**Fig. 1.** Collection sites of the green lacewings recently recorded in Romania (for explanation see text)

*Chrysoperla* spp. The “common green lacewing” auctorum occurs in western Europe as a complex of probably five sibling species (BROOKS 2000). In the Romanian biotopes studied, we found three species (PAULIAN *et al.* 1996):

– a majority of *Chrysoperla kolthoffi* (NAVÁS, 1927) this taxon being here understood sensu LERAUT (1991) in absence of further information concerning its actual status; very common [1, 2, 3, 4, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 17], probably everywhere;

– a smaller number of *Chrysoperla lucasina* (LACROIX, 1912) whose identity is now agreed (HENRY *et al.* 1996); common [1, 6, 7, 11, 12, 13, 14, 15, 16, 17];

– and more rarely the “true” *Chrysoperla carnea* (STEPHENS, 1836) sensu stricto [4, 6, 7, 9, 11, 13, 17].

Among *Chrysoperla* with claws having a subtriangular enlargement, we caught a specimen of *Chrysoperla renoni* (LACROIX, 1933) in the Danube delta [12]. This rare species was recently collected in northwestern Hungary, also in a wet habitat (SZIRÁKI 1998).

*Dichochrysa prasina* (BURMEISTER, 1839) occurred in many collections of green lacewings. On the contrary, *D. ventralis* (CURTIS, 1834) sensu stricto was uncommon, only identified in montane habitats of the Transylvanian district [11]. Consequently, all references from KIS’s monograph need to be reviewed to ascertain the actual distributions of these two species. *Dichochrysa prasina* is considered eurytopic whilst *D. ventralis* is more dependent on woodlands (PLANT 1994) or localised in higher altitude.

*Dichochrysa abdominalis* (BRAUER, 1856) was recently reinstated as a bona fide species by HÖLZEL (1998) although it is morphologically close to *D. prasina*. It is poorly known, probably rare, and seems localised in montane habitats. It was captured in montane habitats of the Transylvanian district [11].

*Chrysopa dasyptera* MCLACHLAN, 1872 is a small Euro-Siberian species collected in the vicinity of Bucharest [13] and in the Transylvanian Alps [11]. It was recently recorded from Poland (DOBOSZ 1999). Its occurrence in Hungary previously reported by SZABÓ & SZENTKIRÁLYI (1981) however remains dubious (SZIRÁKI pers. comm.).

*Chrysopa dubitans* MCLACHLAN, 1887 is a eurytopic species, widely distributed in the Palaearctic Region, from Spain where its occurrence remains dubious (MONSERRAT & MÁRIN 1994), Greece and Anatolia, up to Mongolia and China; it was also found in Algeria (ASPÖCK & HÖLZEL 1996). Rare, only found in the montane habitats of the Transylvanian district [11], light trapped in an open forest habitat, at 810 m of altitude.

*Nineta inpunctata* (Reuter, 1894) was collected in the mountains [11]. It has a Euro-Siberian distribution from West and North Europe to Ukraine. This lacewing was everywhere rarely encountered (CANARD *et al.* 1998).

*Cunctochrysa baetica* (HÖLZEL, 1972) is a holomediterranean species (ASPÖCK *et al.* 1980). Until recently, it has been collected in Romania only in the southern part of the Danubian Plain [15].

\*

Acknowledgements: Thanks are due to Dr Andrew WHITTINGTON (Edinburgh, Scotland, UK) for linguistic improvement of an earlier version of the manuscript.

## REFERENCES

- ASPÖCK, H. & HÖLZEL, H. (1996) The Neuropteroidea of North Africa, Mediterranean Asia and of Europe: a comparative review (Insecta). Pp. 31–86. In CANARD *et al.* (eds) *Pure and Applied Research in Neuropterology. Proceedings of the Fifth International Symposium on Neuropterology*. Cairo, Egypt, 1994. Sacco, Toulouse.
- ASPÖCK, H., ASPÖCK, U. & HÖLZEL, H. (unter Mitarbeit von H. RAUSCH) (1980) *Die Neuropteren Europas. Eine zusammenfassende Darstellung der Systematik, Ökologie und Chorologie der Neuropteroidea (Megaloptera, Raphidioptera, Planipennia) Europas*. Goecke & Evers, Krefeld, 2 vols, 495 & 355 pp.
- BROOKS, S. (2000) Lacewings by Royal appointment. *Neuro News* **26**: 2–3.
- CANARD, M., CLOUPEAU, R. & LERAUT, P. (1998) Les chrysopes du genre *Nineta* Navás, 1912, en France (Neuroptera: Chrysopidae). *Bull. Soc. Entomol. France* **103**: 327–336.
- DOBOSZ, R. (1999) Owady siatkoskrzydłe (Neuropteroidea: Raphidioptera, Neuroptera) Puszczy Białowieskiej – stan poznania. *Parki Narodowe i Rezerwaty Przyrody* **18.1** (suppl.): 125–132 [in Polish, English summary]
- HENRY, CH. S., BROOKS, S. J., JOHNSON, J. B. & DUELLI, P. (1996) *Chrysoperla lucasina* (Lacroix): a distinct species of green lacewing confirmed by acoustical analysis (Neuroptera: Chrysopidae). *System. Entomol.* **21**: 205–218.
- HÖLZEL, H. (1998) Kommentare zu den von Friedrich Brauer in den Jahren 1850 und 1856 aus Österreich beschriebenen “*Chrysopa*” Spezies (Neuroptera: Chrysopidae). *Stapfia* **55**: 409–420.
- KIS, B., NAGLER, C. & MÂNDRU, C. (1970) *Fauna Republicii Socialiste România. Insecta, Neuroptera (Planipennia)* **8** (6). Academia Republicii Socialiste România, Bucuresti. 343 pp.
- LERAUT, P. (1991) Les *Chrysoperla* de la faune de France (Neuroptera: Chrysopidae). *Entomol. Gallica* **2**: 75–81.
- MONSERRAT, V. J. & MÁRIN, F. (1994) Plant substrate specificity of Iberian Chrysopidae (Insecta: Neuroptera). *Acta Œcol.* **15**: 119–131.
- PAULIAN, M. (1996) Green lacewings from the southeast of the Rumanian Plain, as recorded by light-trapping (Insecta: Neuroptera: Chrysopidae). Pp. 197–202. In CANARD *et al.* (eds) *Pure and Applied Research in Neuropterology. Proc. 5th International Symposium on Neuropterology*. Cairo, Egypt, 1994. Sacco, Toulouse.
- PAULIAN, M. & CANARD, M. (2000) Green lacewings (Neuroptera: Chrysopidae) new to the fauna of Rumania. *Entomofauna* **53**: 249–251. PAULIAN, M., CANARD, M., THIERRY, D. & CIUBUC,

- C. (2001) Green lacewings (Neuroptera: Chrysopidae) in southern Transylvania, Rumania: a light-trapping survey. *J. Neuropterol.* **3**. [in press]
- PAULIAN, M., CANARD, M., THIERRY, D. & CLOUPEAU, R. (1996) Les Chrysoperla Steinmann de Roumanie (Neuroptera: Chrysopidae). *Ann. Soc. Entomol. France* (N.S.) **32**: 285–290.
- PLANT, C. W. (1994) *Provisional atlas of the lacewings and allied insects (Neuroptera, Megaloptera, Raphidioptera and Mecoptera) of Britain and Ireland*. Biological Records Centres, Huntington. 203 pp.
- SZABÓ, S. & SZENTKIRÁLYI, F. (1981) Communities of Chrysopidae and Hemerobiidae (Neuroptera) in some apple orchards. *Acta Phytopath. Acad. Sci. Hung.* **16**: 157–169.
- SZIRÁKI, G. (1998) Baëtis buceratus Eaton, 1870 (Ephemeroptera: Baëtidae) és Chrysoperla renoni (LACROIX, 1933) (Neuroptera: Chrysopidae) – Magyarország faunájára új rovafajok a Fertő–Hanság Nemzeti Parkból. *Folia ent. hung.* **59**: 272–273. [in Hungarian, English summary]