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POST-SYMPOSIUM NEUROPTEROLOGICAL EXCURSION IN HUNGARY, 10–15 AUGUST, 2000

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INTRODUCTION

The post-symposium excursion though central and south-west Hungary, provided members of the Seventh International Symposium on Neuropterology with an opportunity to collect Neuroptera in a variety of interesting and unusual habitats. Furthermore, it prolonged the four-day symposium by six days, giving attendees the chance to integrate socially and scientifically, distil new ideas and projects and to further their joint interests.

The purpose of this report is to place on record the route followed (Fig. 1) and the location of the 14 collecting points along that route, including the location of the Symposium, the Leisure Centre at Csillebérc, Budapest. A list of 40 species collected and determined by some of the members on the excursion (Table 1), and compiled from submissions by participants, is also provided. The total number of species known for Hungary was listed at 109 species (SZIRÁKI *et al.* 1992), but probably needs revising to about 112 species (SZENTKIRÁLYI *pers. comm.*). The *Chrysoperla carnea* (STEPHENS, 1836) species group was not treated equally by all collectors submitting reports. It has consequently been recorded firstly as an aggregate and then as the species segregates identified in some submissions.

Although no new taxa were recorded for the area, the list of 40 species is good for the end of season. These data provide additional distribution records for the growing number of records amassed by scientists working on Neuroptera in Hungarian Institutions, although many of the sites visited are already well known to them and previously surveyed. Nonetheless, the fauna was unfamiliar to many of the participants from abroad and this was a unique opportunity to collect species previously not encountered.

The bulk of the collecting was by beating and sweeping vegetation, both highly successful methods for collecting Neuroptera. Supplementing these methods, Mercury Vapour light traps were erected at two locations at Uzsai csarabos erdő Protected Area and at Kaszópuszta, resulting in 7 and 14 species per site. The sites are listed numerically below and are reflected on Table 1. Total species per site are also provided in Table 1, with the highest totals being recorded at locations where more than one day was spent at the site (Csillebérc and Kaszó-puszta), or where the fauna was known to be unusually rich (mixed deciduous-oak woodland and lucerne fields at Tóti-hegy).

The greater diversity and abundance of the Chrysopidae over other families is significant. The *Chrysoperla carnea* (STEPHENS, 1836) complex was particularly widespread, followed closely by *Chrysotropia ciliata* (WESMAEL, 1841). Collecting *Sisyra fuscata* (FABRICIUS, 1793) and *Mantispa perla* (PALLAS, 1772) at light traps (the latter from the ground near a "black-light"), and *Sisyra* spp. from riverine vegetation were highlights of the trip.

COLLECTING SITES

The manner in which collecting sites were recorded by collectors was not consistent. The following list is consequently a harmonised combination of those



Fig. 1. Route of the Neuropterological excursion in Central Hungary, 10–15 August 2000. Numbers along the route indicate sequential collecting sites as listed in text

records and represents the stopping points along the route. Minor (one-off) collections by individuals, at places in between these sites have not been taken into account here. Most of the co-ordinates were taken from a *Garmin GPS 38 Personal Navigator*TM and have been rounded to the nearest minute.

1. Budapest, Csillebérc (Budai-hegység, between 400–500 m a.s.l.). 05–09 August 2000 – Leisure Centre set in mixed deciduous woodland (mainly *Quercus cerris* and *Q. petraea* mixed with hornbeam, or beech in northern cooler and wetter slopes) including material collected at Normafa (47°30'N 18°58'E). Swept, beaten and at lights.

2. Tolna county, Duna–Dráva National Park, Szekszárd, Gemenci-erdő, river bank of Duna (46°26'N 18°47'E). 10 August 2000 – Riverine gallery forest in the Duna (=Danube) river valley (original vegetation fragments: *Quercus robur* mixed with *Fraxinus excelsior*, *Ulmus* and poplars with rich bushy vegetation; recently planted poplars). Swept and beaten.



Figs 2–3. 2 = H. ASPÖCK and U. ASPÖCK at Bugac; 3 = Participants on the top of the hill Tóti-hegy; 4 = Participants on the bank of the river Dráva; 5 = P. OHM at Bugac

Table 1. Genera and species recorded during the Neuropterological excursion in Hungary, 10–15 August 2000. Abbreviation: 1 = Csillebérc, 2 = Gemenci-erdő, 3 = Kunszállás, 4 = Bugacpuszta, 5 = Tihanyi-félsziget, 6 = Vászoly, 7 = Tóti-hegy, 8 = Uzsai csarabos erdő, 9 = Fenékpuszta, 10 = Kaszópuszta, 11 = Lankócpuszta, 12 = Bélavár, 13 = Vízvár, 14 = Baláta-tó

	Site													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
CHRYSOPIDAE														
Chrysopa abbreviata CURTIS, 1834			+											
C. dorsalis BURMEISTER, 1839								+						
C. formosa BRAUER, 1850	+	+	+											
C. pallens (RAMBUR, 1838)	+	+	+		+					+				
C. perla (LINNAEUS, 1758)	+		+								+			
C. phyllochroma WESMAEL, 1841							+							
C. walkeri MCLACHLAN, 1893							+							
<i>Chrysoperla carnea</i> (STEPHENS, 1836) complex	+	+	+	+	+		+	+	+	+	+	+	+	+
" <i>C. carnea</i> complex" "slow motorboat" "morph (=Cc2)"		+	+	+			+							
" <i>C. carnea</i> complex" " <i>kolthoffi</i> " "morph (=Cc4)"	+		+	+			+	+				+		
C. lucasina (LACROIX, 1912)			+											
Chrysotropia ciliata (WESMAEL, 1841)		+			+		+	+		+	+	+	+	+
Dichochrysa flavifons (BRAUER, 1850)	+						+							
D. prasina (BURMEISTER, 1839)	+	+			+		+			+	+			
D. ventralis (CURTIS, 1834)	+						+	+		+				
Nineta flava (SCOPOLI, 1763)							+							
N. guadarramensis (PICTET, 1865)							+							
N. principiae MONSERRAT,1980	+													
Nothochrysa fulviceps (STEPHENS, 1836)	+				+		+							
CONIOPTERYGIDAE														
Coniopteryx lentiae ASPÖCK et ASPÖCK, 1964	+						+							
C. pygmaea (ENDERLEIN, 1906)	+													
Conwentzia psociformis (CURTIS, 1834)	+									+				
Semidalis aleyrodiformis (STEPHENS, 1836)	+									+	+			
HEMEROBIIDAE														
Hemerobius gilvus STEIN, 1863	+				+		+			+				
H. humulinus LINNAEUS, 1758	+	+					+							

Table 1 (continued)														
	Site													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
H. lutescens FABRICIUS, 1793	+													
H. micans OLIVIER, 1792	+	+					+			+	+			
H. nitidulus FABRICIUS, 1777	+													
Micromus angulatus (STEPHENS, 1836)							+			+				
M. lanosus (ZELENÝ, 1962)	+													
M. variegatus (FABRICIUS, 1793)	+									+				
Psectra diptera (BURMEISTER, 1839)								+		+				
Sympherobius elegans (STEPHENS, 1836)										+				
MANTISPIDAE														
Mantispa perla (PALLAS, 1772)								+						
MYRMELEONITDAE														
Euroleon nostras (FOURCROY, 1785)	+					+								
Creoleon plumbeus (OLIVIER, 1811)				+										
Myrmecaelurus trigrammus (PALLAS, 1781)	+		+	+										
Myrmeleon inconspicuus RAMBUR, 1842				+										
Sisyridae														
Sisyra fuscata (FABRICIUS, 1793)										+		+	+	
S. terminalis CURTIS, 1855												+	+	
Totals	23	8	9	6	6	1	17	7	1	14	6	5	4	2

3. Bács–Kiskun county, Kunszállás (46°44'N 19°45'E). 10 August 2000 – Dry fallow agricultural fields near to and in the grounds of Róna Panzió Hotel. Sandy soil. Swept, beaten and at lights.

4. Bács–Kiskun county, Kiskunsági National Park, Bugacpuszta (46°39'N 19°37'E). 11 August 2000 – Juniper-white poplar mixed forest (Juniperetum: *Juniperus communis, Populus alba*) and planted *Pinus sylvestris* stands on sand dune substrate. Swept and beaten (Fig. 2).

5. Veszprém county, Balaton-Felvidéki National Park, Tihanyi-félsziget, a peninsula at Lake Balaton (46°55'N 17°50'E). 11 August 2000 – Meadows and wooded walk to the hills Nyereg-hegy and Csúcs-hegy. Mixed deciduous dry oak forest with rich bushy vegetation on volcanic substrate. Swept and beaten.

6. Veszprém county, Balaton-Felvidéki National Park, Vászoly (46°56'N 17°20'E). 11 August 2000 – Agricultural pasture and mixed woodland. Domestic lights.

7. Veszprém county, Balaton-felvidéki National Park, Káptalantóti, Tóti-hegy, 3 km W from Salföld (46°50'N 17°33'E). 12 August 2000 – Mixed dry deciduous-oak woodland (mainly *Quercus cerris* and *Q. pubescens*) with scattered xerothermous grassy patches (Fig. 3). At the wetter base of the hill, mixed oak-hornbeam forest and lucerne fields. Swept and beaten.

8. Veszprém county, Sümeg, Uzsai csarabos erdő Protected Area, 5 km SE of Sümeg (46°56'N 17°20'E). 12 August 2000 – Mixed dry birch-oak woodland (*Quercus cerris* and *Q. pubescens*) and plantations of *Pinus sylvestris* and *P. nigra* and scattered patches of grass and *Calluna vulgaris*. Sauer soil on sand-conglomerate. Swept, beaten and at light trap with use of 125W Mercury-vapour bulb, 21h00–24h00.

9. Zala-county, Keszthely, Fenékpuszta, 4 km S of Keszthely (ca. 46°40'N 17°15'E). 13 August 2000 – Fourth century Roman ruins. Unmanaged meadow with ruderal vegetation and agricultural lands. Swept.

10. Somogy county, Somogyszob, Kaszópuszta, 7 km NW of Somogyszob (46°19'N 17°14'E). 13 August 2000 – Mixed birch-oak woodland and *Pinus sylvestris* plantations on sandy soils. Swept, beaten and at light trap (125 W mercury vapour bulb), 21h00–24h00.

11. Somogy-county, Duna–Dráva National Park, Gyékényes, Lankócpuszta (5 km SE of Gyékényes) (46°13'N 17°03'E). 14 August 2000 – Canopy mixed oak woodland (*Q. robur, Fraxinus*) on wet soils of lowland. Swept and beaten.

12. Somogy county, Duna–Dráva National Park, Bélavár, river bank of Dráva (46°07'N 17°12'E). 14 August 2000 – Dráva river and riverine gallery forest (Fig. 4), also few smaller patches of half-opened sand-grassland vegetation, maize fields. Swept and beaten.

13. Somogy county, Duna–Dráva National Park, Vízvár, river bank of Dráva (46°05'N 17°14'E). 14 August 2000 – Dráva river and riverine gallery forest. Swept and beaten.

14. Somogy county, Szenta, Baláta-tó (Lake Baláta) Protected Area, 1 km SW of Kaszópuszta (46°18'N 17°13'E). 15 August 2000 – Mixed old oak forest on wet sandy soil. Swept and beaten.

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