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Sharing entomological knowledge: eight years after the release of the Italian Neuropterological web site*

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Abstract. Ten years after the discussion of the “state of the art” of Italian Neuropterida (Letardi, 1998) during the Sixth International Symposium on Neuropterology, held in Helsinki, the frame is substantially changed: several centres of study in different topics are spread through Italy; some new taxa have been described in these years, specific faunistic databases have been implemented, peculiar faunistic surveys have been organized. When a web page on Italian Neuropterida appeared in 2000, very few information in Italian language could be get back from internet. Several web sites are now available, mostly with pictures of selected species, but recently (starting from 2005) also a web forum with a wide range of news about Neuropterida is highly visited and attended. A review of these developing facts, due to the cooperation of a high number of Italian naturalists, is presented.

Key words: Italy, faunistics, web resources, shared information

*This contribution is dedicated to Ornella Casnati, a keen Tuscanian naturalist and photographer who sadly died just few days after the X International Symposium on Neuropterology, as a sign of deep gratitude for her several discussions on Italian Neuropterida in the last two years.

Introduction

Ten years after the discussion of the “state of the art” of Italian Neuropterida (Letardi, 1998a) during the Sixth International Symposium on Neuropterology, held in Helsinki, the frame is substantially changed. Several centres of study in different topics are now spread through Italy (University of Genova – Faunistics; University of Piacenza – Morphology, Taxonomy, Faunistics; University of Bologna – Lacewings in Applied Entomology; University of Siena – Ultrastructural Morphology; Agricultural Research Centres in Roma – Faunistics, Lacewings in Applied Entomology; University of Sassari – Morphology, Taxonomy, Faunistics, Lacewings in Applied Entomology; in recent past almost all the activities regarding Neuropterida gravitated on University of Bologna round the authoritative personality of Prof. Maria Matilde Principi.

Several field research was organized in different parts of Italian Peninsula and in main as well in some minor islands: among the results, some new species were described (*Calabroraphidia renate* Rausch, Aspöck H. & Aspöck U., 2004 (Rausch *et al.*, 2004), *Subilla principiae* Pantaleoni, Aspöck U., Cao & Aspöck H., 2004 (Pantaleoni *et al.*, 2004)) and several species were reported for the first time in Italy (Nicoli Aldini & Baviera, 2001; Letardi, 2004; Nicoli Aldini, 2005; Letardi *et al.*, 2006; Pantaleoni, 2008), increasing the known biodiversity of Italian Neuroptera fauna.

Specific faunistic databases have been recently implemented, which have considered Neuropterida (Checklist of Italian Fauna (Bernardi Iori *et al.*, 1995), CKMap project (Letardi, 2005; Letardi & Pantaleoni, 2007)); precise faunistic surveys have been organized in different wide Italian areas (Western Liguria (Badano, 2008), Val Camonica (Nicoli Aldini, 2005), several National Parks (Letardi, 1998b, 2007; Letardi & Biscaccianti, 2007;

Letardi & Migliaccio, 2002; Letardi & Nicoli Aldini, 2007), Triveneto (Letardi *et al.*, 2008), Sicily (Nicoli Aldini & Baviera, 2001; Nicoli Aldini *et al.*, 2008) whereas we had only few up-to-date faunistic (and ecologic) study previously (Nicoli Aldini, 1994; Pantaleoni, 1982, 1984, 1990, 1994), usually for smaller areas.

From 1980 since the Fifth International Symposium on Neuropterology in 1994, only few Italian researchers attend the neuropterological meetings (Carfi, Cianchi, Insom, all in French Symposium held in 1991) and only three contributions have been presented; after 1997, we have had a constant presence (except for Texas Symposium), with 17 participants involved and 27 contributions up to the Slovenian Symposium in 2008.

When a web page on Italian Neuropterida was released in 2000, very few information in Italian language could be get back from internet. Most of pictures I used for my specific sketches (see <http://neuroterri.casaccia.enea.it/checklist.html>) depended on a willingness of Ekkehard Wachman and Christoph Saure who send me in 2001 a CD-Rom with all the photos they used in their book of 1997. Several web sites are now available in Italian language, mostly with pictures of selected species; moreover, recently (starting from 2005) also a web forum (at the URL <http://www.naturamediterraneo.com/forum>) with a wide range of news about Neuropterida is highly visited and attended. Debates, researches, interest in Neuropterology, which for a long time were restricted in a small niche of Italian naturalists, become a shared discipline.

Material and methods

The Italian neuropterological scenario has dramatically changed in the last decade. To summarize the heterogeneous set of events and to give a comprehensive view of the situation in progress by a significant example, it has been analysed performances of the first three years of the neuropterological web forum at the (present) URL address http://www.naturamediterraneo.com/forum/forum.asp?FORUM_ID=122. Four parameters have been considered: (i) number of topics submitted to the forum per year, (ii) number of topics submitted pro capite, (iii) geographical origin of reports, and (iv) families of Neuropterida considered.

Results and discussion

After the end of 2000, when the web page on Italian Neuropterida was released, several Italian web pages with specific information about Neuropterida have been realized, sometimes these shared information points were absolutely new, sometimes else particular sections on Neuropterida were added, often with my collaboration. Among them we could report the Sicilian checklist of Neuropterida (http://www3.unict.it/dipartimenti/biologia_animale/webnatur/insetti/neuroterri/neuroterri.htm) by the middle of 2001, two pages realized by Italian naturalists and photographers (http://xoomer.alice.it/cebrizio/IMM_ARTR/NEUROPTERA/NEUROPTERA.htm and <http://it.geocities.com/elansael/insetti2.htm#Planipenni>) during 2002, and so on.

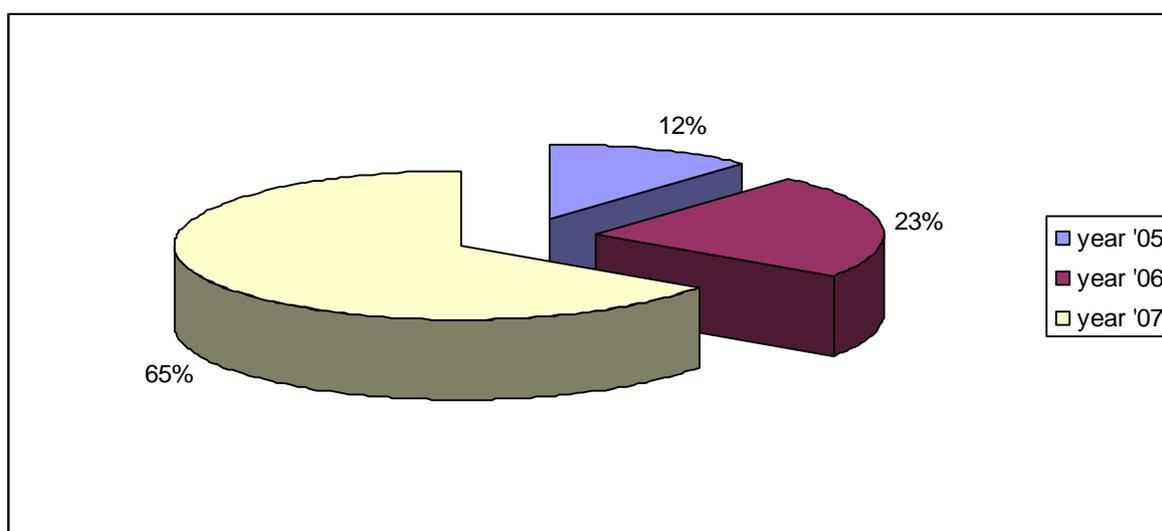


Fig.1. Number of topics submitted to the forum per year (in per cent).

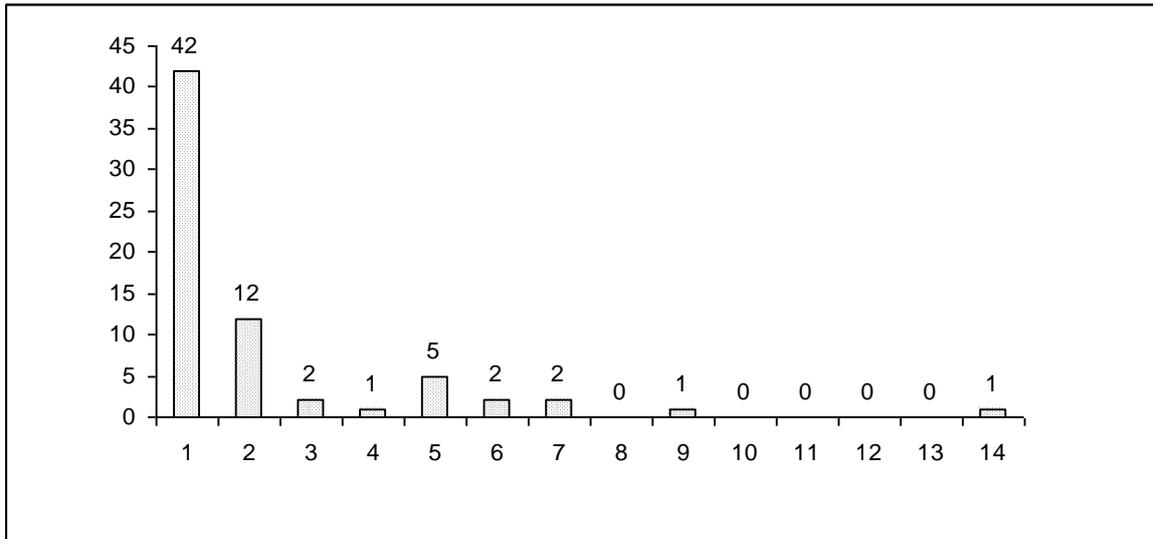


Fig.2. Number of topic (x-axis) submitted pro capite.

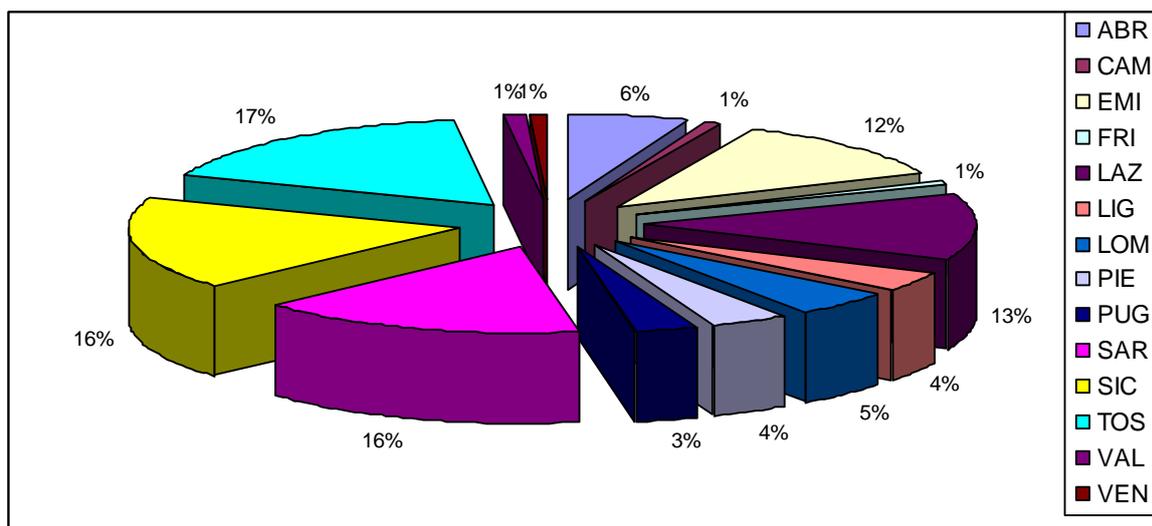


Fig.3. Geographical origin of reports (in per cent) (ABR = Abruzzo; CAM = Campania; EMI = Emilia Romagna; FRI = Friuli Venezia-Giulia; LAZ = Lazio; LIG = Liguria; LOM = Lombardia; PIE = Piemonte; PUG = Puglia; SAR = Sardegna; SC = Sicilia; VAL = Val d'Aosta; VEN = Veneto).

On September 2003, two brave and enterprising Italian naturalists (Aldo Marinelli and Benito Oliva) started their web site devoted to several aspects of nature in the Mediterranean environments and the related forum. The first neuropterological topic appeared on May, 12th 2003 and it was a discussion about a mantisfly. Usually, each topic was based on one or few specific photos of one or more species of Neuropterida, sometimes it started with a question about the biology of these insects.

Until the end of 2007, 137 discussions have appeared on the whole; number of discussions (Fig.1) has greatly increased during that period. Sixty-eight people started new discussions (and a greater number took part of every specific topics), most of them only one time, whereas some others with several contributions till fourteen topics in one case (Fig. 2).

It was possible to locate the geographical origin of 105 topics (Fig. 3): all the main Italian areas (North-Western Italy, North-Eastern Italy, Central Italy, Southern Italy, main islands) and almost all the administrative regions have been involved.

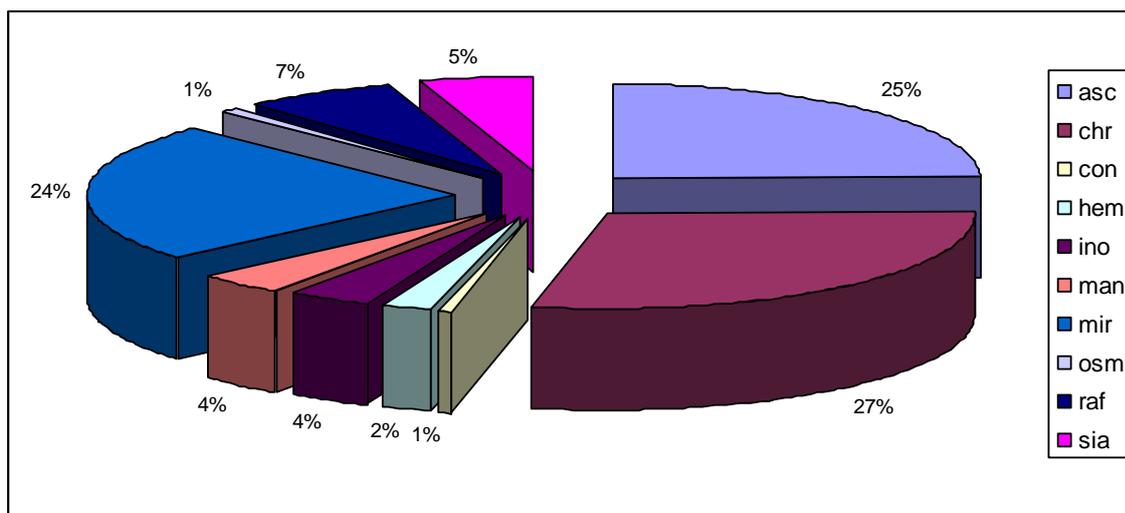


Fig.4. Family of Neuropterida concerned (in per cent) (asc = Ascalaphidae; chr = Chrysopidae; con = Coniopterygidae; hem = Hemerobiidae; ino = Inocelliidae; man = Mantispidae; mir = Myrmeleontidae; osm = Osmylidae; raf = Raphidiidae; sia = Sialidae).

Discussions have mainly concerned Ascalaphidae, Chrysopidae, and Myrmeleontidae (Fig. 4), nevertheless almost all the families of Neuropterida reported for Italy have been considered. As a whole, there has been more participation and discussions about Neuropterida in these three years on that web forum than in institutional entomological Italian meetings: in the last Italian Entomological Congress held in Campobasso in 2007, for instance, there were less than a decade of contributions with at least few faunistic data on Neuropterida.

As a result of this unexpected large participation in detailing knowledge on Neuroptera, a deep enhancement has been achieved in developing the Italian web site on Neuropterida, mostly from a pictorial point of view: for the first time in Italy a new advantageous cooperation between a restricted number of specialists in Neuropterology and a large number of naturalists and photographers has started, allowing a faster change of the scenario of knowledge concerning Neuropterida in Italy.

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