

## A WEB PAGE ON ITALIAN NEUROPTERIDA

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For several reasons, very few researchers devoted their studies to Italian Neuropterida. One of these motives was difficulty in literature searches due to the lack of a review of many data scattered in obscure journals and publications. Internet tools can assist researchers to communicate and easily find and access information. This contribution introduces the present “state of the art” regarding a web catalogue of data pertaining to Italian Neuropterida.

Key words: Internet site, Neuropterida, Italy

### INTRODUCTION

Acceptance of the Internet as a common method for transferring entomological information has brought about a re evaluation of the role of extension entomology, i. e. all the strategies of distributed information systems in this field. New opportunities exist for the collection and sharing of knowledge, but the organization and categorization of information for timely retrieval remains a challenge (VANDYK 2000).

Researchers benefit from using the Internet on a one-to-one basis (e-mail, File Transfer Protocol), a one-to-many basis (discussion groups, Internet conferences), and from accessing large databases of knowledge. The constraints of time and money to accumulate and continually update entomological knowledge is significant, but the cost of posting large databases on the Web is relatively small (ZENGER & WALKER 2000).

Information on most Italian Neuropterida is scattered in obscure journals and publications, making literature searches difficult and discouraging researchers from studying this taxon. Since Neuroptera-L – the Neuroptera listserv managed by PETER MCEWEN – and Neuroweb – the web site of resources managed by JOHN OSWALD – were established in 1995 and 1996, respectively, it has been clear that the Internet could play an important role in facilitating the tasks of researchers who study this group of insects (MCEWEN & OSWALD 1998).

Since 1988, the present author has accumulated much information on Italian Neuropterida (bibliographic references, data from public and private collection, biological and zoogeographical notes and illustrations), both for personal neuropterological studies and for sharing information with colleagues.

After collaboration started in early 1998 on the project “Bibliography of the Neuropterida” to update the on-web bibliography with Italian literature, it was decided to post most of these data on a website.

Some of these “pages under construction” which will be put on web are introduced here.

### CONTENT OF THE WEB PAGE

In the first release of this “home page” of the Italian Neuropterida, four groups of data will be provided:

- 1) A bibliographical listing of collection data on Italian Neuropterida with:
  - bibliographic references;
  - original and updated determination;
  - Italian region;
  - year of capture of specimen (if data is available).

2) A scheme with the regional distribution within Italy and adjoining regions of taxa (Fig. 1).

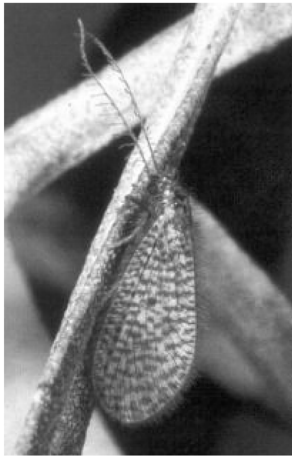
|   | Valle d'Aosta | Piemonte | Lombardia | Trentino Alto Adige | Veneto | Friuli Venezia Giulia | Liguria | Emilia Romagna | Toscana | Umbria | Marche | Lazio | Abruzzo | Molise | Basilicata | Puglia | Calabria | Sardegna | is. Elba | is. Prociano | is. Eolie | is. Egadi | is. Tremiti | is. Pantelleria | isole minori | Corcosca | Vallese | Giugiana | Ticino | Malta | Isola | Slovenia | Croazia | Alpi-Maritime Francesi | altro |  |
|---|---------------|----------|-----------|---------------------|--------|-----------------------|---------|----------------|---------|--------|--------|-------|---------|--------|------------|--------|----------|----------|----------|--------------|-----------|-----------|-------------|-----------------|--------------|----------|---------|----------|--------|-------|-------|----------|---------|------------------------|-------|--|
| <i>Sialis fuliginosa</i> Pictet                       |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Sialis lutaria</i> (Linnaeus)                      |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Sialis morio</i> Klingstedt                        |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Sialis nigripes</i> Pictet                         |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Phaeostigma</i> (s.str.) galloitalica (A. & A.)    |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Phaeostigma</i> (s.str.) italoitalica (A. & A.)    |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Phaeostigma</i> (s.str.) notata (F.)               |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>P.</i> (Pontoraphidia) <i>grandis</i> (Principi)   |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Magnoraphidia major</i> (Burmeister)               |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Dichrostigma flavipes</i> (Stein)                  |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Tjederiraphidia santuzza</i> A., A. & R.           |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Subilla confinis</i> (Stephens)                    |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Ornatoraphidia etrusca</i> (Albarda)               |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Xanthostigma xanthostigma</i> Schummel             |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Xanthostigma corsica</i> (Hagen)                   |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Xanthostigma aloysiana</i> (Costa)                 |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Raphidia ophiopsis</i> Linnaeus                    |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Raphidia mediterranea</i> A., A. & R.              |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Raphidia ulrikae</i> Aspöck                        |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Raphidia ligurica</i> Albarda                      |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Atlantoraphidia maculicollis</i> Stephens          |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Italoraphidia solariana</i> (Navás)                |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Puncha ratzeburgi</i> (Brauer)                     |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Venustoraphidia nigricollis</i> Albarda            |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Fibla maclachlani</i> (Albarda)                    |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Parainocellia braueri</i> (Albarda)                |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Parainocellia bicolor</i> (Costa)                  |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| <i>Inocellia crassicornis</i> (Schummel)              |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
| legenda:  |               |          |           |                     |        |                       |         |                |         |        |        |       |         |        |            |        |          |          |          |              |           |           |             |                 |              |          |         |          |        |       |       |          |         |                        |       |  |
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Fig. 1. Detail of regional distribution scheme for the Italian Neuropterida on the upcoming web page

3) A collection of literature containing data on Italian Neuropterida, that can be downloaded as pdf (Portable Document Format) file.

4) A card for each taxon with biological, faunistic, morphological and taxonomical notes (Fig. 2).

***Dilar parthenopaeus* Costa, 1855**



Maschio adulto (Foto Lentini)



Femmina adulta (Foto Pantaleoni)

Specie dalle caratteristiche ecologiche pressoché sconosciute. Raccolta in Italia in querceti misti di bassa quota, in lecceta e sul limite superiore della vegetazione, tra i 300 e i 1700 m. nel periodo luglio - metà agosto (Letardi, 1994b,c; Pace, comm. pers.).

**Endemismo italiano**

**Locus typicus italiano:** Monti della Cava [prob. Cava de' Tirreni], Campania

**Stadi preimmaginali:** sconosciuti.

Ampiezza dell'ala anteriore delle immagini: da 4,5 a 6,5 mm. i ? ? (Aspöck H., Aspöck U., Hölzel U., 1980); 4 mm. le ? ? (ali modificate, inabili al volo, ali posteriori vestigiali di 0,5 mm. ca.; Pantaleoni e Letardi, 1996).

**Distribuzione regionale italiana:**

Lazio; Campania; Basilicata; Calabria; Sicilia?; Sardegna?

**Pubblicazioni che citano questa specie in Italia:**

Costa, 1855; Brauer, 1876; Costa A., 1884b; Hagen, 1860a; Hagen, 1866; Navás, 1909; Navás, 1910; Navás, 1914; Grandi, 1951; Aspöck et al., 1980; Letardi, 1994b; Letardi, 1994c; Bernardi Iori et al., 1995; Pantaleoni & Letardi, 1996; Aspöck U. & H., 1999;

**Fig. 2.** Example card for a specific taxon of Italian Neuropterida on the upcoming web page

Further information, and links with other web resources pertaining to Italian Neuropterida, will be added during the updating of this first contribution to the sharing of knowledge about these insects.

### CONCLUSION

Between the end of 2000 and the beginning of 2001 this “home page” of the Italian Neuropterida will be included in the frame of the home pages of the Civic Museum of Zoology of Rome.

In future, when more sophisticated tools become available, it will be possible to generate online information. At the moment, this contribution represents another, uncategorized source of entomological information, but hopefully this tool will help the Italian research community towards a more common sharing of knowledge about this small, but important group of insects.

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