

**The Auchenorrhyncha of central Italy: a faunistic survey
completed by new records from recent field work**

Adalgisa Guglielmino¹, Christoph Bückle² & Reinhard Remane³

¹Dipartimento di Protezione delle Piante, Università della Tuscia, 01100 Viterbo, Italy

²Neckarhalde 48, D-72070 Tübingen, Germany

³Fachbereich Biologie (Zoologie) der Philipps Universität Marburg Lahnberge, D-35032 Marburg, Germany

Nearly 890 taxa have been reported from Italy so far (D'Urso, 2000). With the contingent of yet unknown taxa being estimated at about 20-30%, the current state of knowledge of this interesting insect group is, in spite of the high number of known species and subspecies, little satisfactory.

The present research has the aim to increase our knowledge about the set of cicadina species inhabiting Italy and the distribution of these species in central Italy with particular reference to some types of biotopes. The data presented here are meant to supply a database for nowadays presence and distribution of these species, so that future changes in species distribution or even species set may be reliably recognized and perhaps correlated with either climatic changes (global warming) or direct impacts (agriculture, tourism, pollution, etc.).

The results of several research trips performed during the past six years in central Italy (Lazio, Abruzzo and few localities in Umbria) cover a variety of biotopes (127 collection sites) from coastal up to high mountain sites. In total, 331 taxa were collected, but for some of them it was impossible to attain to a safe specific attribution. Among the collected taxa, 3 species, already published separately, are new to science (*Kelisia italica* Guglielmino & Remane, *Platymetopius cebifurcatus* Guglielmino and *Rhopalopyx cigigas* Guglielmino), 10 are new for the fauna of Italy, 11 for continental Italy and 38 for peninsular Italy.

We may attempt to arrange at least a part of the habitats, in the following categories: 1) Mountain pastures and meadows (1700-2200 m); 2) Moist meadows, swamps, river sides and lake shores; 3) Mixed submediterranean woods (ca. 800-1300 m); 4) Beech woods (ca. 1400-1650 m); 5) Lowland mediterranean woods (- ca. 700 m); 6) Seashore. This is obviously a general subdivision, but it is nevertheless possible to delineate some characteristics of the ecological and orographical distribution of the collected Auchenorrhyncha taxa.

Whereas two of newly described species (*Kelisia italica* Guglielmino & Remane and *Rhopalopyx cigigas* Guglielmino) provisionally might be

considered as endemics of the Apennines (central Apennines only?), many of the species newly recorded from this area however are rather widely distributed at least in the Mediterranean "region" (e.g. *Kelisia monoceros* Rib., *Balclutha nicolasi* (Leth.), *Ribautodelphax fanari* Asche, Drosopoulos & Hoch, etc.) and their presence in this area was to be expected. The fact that they were collected only by now shows on the one hand the gaps in previous research and on the other hand the need for intense future research.

This new research should cover - more as done by now - all parts of the vegetation period, for many Cicadina species are rather short living as adults (the only age at which most of them may be safely identified). During the present research, e.g. short research trips in springtime resulted in a disproportionately large number of species not collected otherwise (e.g. *Cixius dubius* Wagn., *Eurysa rubripes* (Mats.), *Cercopis* spp., *Thamnotettix zelleri* (Kbm.), *Metropis latinus* Lnv.). The future research activities should cover as many biotopes and plant species as possible for the present research has revealed a very local or ecologically specialized presence of several taxa within the examined area, e.g. *Kelisia italica* Guglielmino & Remane and *Rhopalopyx cigigas* Guglielmino, which have been found at rather elevated sites only, *Eupteryx* cfr. *origani* Zachv. on one host-plant species different from the one recorded up to now and in one site only. Many species were observed living in similar biotopes on the same host-plant species as in other regions and as recorded in other publications. Some taxa, however, were observed occurring in ecologically very different biotopes: two rich populations of *Ommatidiotus dissimilis* (Fall.) - in Central Europe confined to fens and bogs (normally feeding on *Eriophorum* species) - were found: one of them at 1800 m inhabiting a mountain meadow with *Carex* spp., but no *Eriophorum* present, another one in a coastal biotope at sea level on a small *Carex* species. In addition, the specimens, on which previous records of several species are based, ought to be reexamined: especially the data published by Servadei have been found wrong in many cases.

Reference

- D'Urso, V. 2000. Faunistic and zoogeographical remarks on the Italian Auchenorrhyncha (Insecta Homoptera). *Boll. Soc. Entomol. Ital.*, 132(1): 3-16.

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RUSSIAN ACADEMY OF SCIENCES
DEPARTMENT OF BIOLOGICAL SCIENCES
ST. PETERSBURG SCIENTIFIC CENTRE
ZOOLOGICAL INSTITUTE

THIRD EUROPEAN HEMIPTERA CONGRESS

St. Petersburg
June 8-11, 2004

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St. Petersburg
2004

Editor: *I.M. Kerzhner*

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