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**Extended Abstracts** 



# Contribution to the knowledge on the Auchenorrhyncha fauna (Hemiptera: Fulgoromorpha et Cicadomorpha) of the Tuscanian-Emilian Apennines

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# INTRODUCTION

During our research trips 1998-2003 in Central Italy (Guglielmino et al., 2005) one focal point lay on the mountain pastures of the high Apennine massives in Lazio and Abruzzo. In those ecologically quite clearly defined areas we found an association of Auchenorrhyncha taxa that was equally rather constant and characteristic. It was not surprising that many of these taxa are distributed in the Italian Alps as well. In addition however, we discovered some new taxa, which up to now seem to be endemic in the upper regions of Central Italy: Rhopalopyx cigigas Guglielmino, Kelisia italica Guglielmino & Remane, and Euscelis venitala Remane, Bückle & Guglielmino – the last mentioned species distributed at medium altitude (about 1200m).

For further investigation on the distribution of Auchenorrhyncha in Italian mountain areas, subsequently we chose an area in the Tuscanian-Emilian Apennines presenting equally quite high elevations (Monte Cimone: 2165m, Monte Cavalbianco: 1853m, Alpe di Succiso: 2017m) and therefore similar ecological conditions as the high mountain ridges in Central Italy. This interesting area is situated approximately half-way between Maritime Alps and Central Apennines, and separated from both by sections of rather moderately high mountains in southeastern Emilia-Romagna, southern Toscana and northern Marche and Umbria on the one and in Liguria on the other side. Thus, in biogeographical respect a comparison between its Auchenorrhyncha fauna and that of the high mountain areas in Lazio/Abruzzo and in the Maritime Alps, respectively, should be particularly interesting.

Since there are only few data published on the Auchenorrhyncha of the Tuscanian-Emilian Apennines [except for some papers by Vidano (1965a, 1965b, 1982) concerning, however, only Typhlocybinae], we extended our collection area ecologically beyond the high mountain pastures to meadows, forests and river-beds at medium and low altitude and geographically in eastern direction up to Passo di Raticosa.

## **MATERIALS AND METHODS**

The insects were collected in Toscana and Emilia-Romagna (provinces of Firenze, Lucca, Massa, Reggio Emilia, Modena, Bologna). The collection sites range between 250 and 2000m, comprising mountain pastures, meadows, mixed deciduous forests, spring fens and river-bed-biotopes.

The samplings were carried out in 4 collecting trips (2002, 2005 and 2006) in June (24-29), August (9-17) and September (5) with a total of 30 localities (a few of them sampled 2 or 3 times).

We applied two collection methods: a) by entomological net and aspirator, b) directly by sight of single specimens by means of the aspirator.

### RESULTS AND DISCUSSION

On 30 localities on the whole were found 184 taxa, but for some of them it was impossible to attain to a safe specific attribution. Among the collected taxa, 2 [Aphrodes diminuta Ribaut and Rhopalopyx adumbrata (C. Sahlberg)] are new for the fauna of Italy, 3 for northern Italy [Tachycixius cf. remanei D'Urso, Kybos strigilifer (Ossiannilsson), Zygina ordinaria (Ribaut)] and 7 for peninsular Italy [Trigonocranus emmeae Fieber, Ditropsis flavipes (Signoret), Macropsis remanei Nickel, Erythria cf. alpina (Vidano), Ossiannilssonola callosa (Then), Eupteryx immaculatifrons (Kirschbaum), Hauptidia distinguenda (Kirschbaum)]. We follow the formal division of continental Italy in a northern and a southern (peninsular) part applied by D'Urso (1995), even if just in the region investigated here such a division makes little sense with often a few-kilometer-distance deciding if a locality is to be defined as "south" (all localities in Toscana) or "north" (localities in Emilia).

Typical elements of the mountain pasture fauna were Kelisia monoceros Ribaut, Dicranotropis divergens (Kirschbaum), Neophilaenus gr. albipennis (F.), Emelyanoviana mollicula (Boheman), Rh. adumbrata, Arocephalus longiceps (Kirschbaum), Psammotettix gr. helvolus (Kirschbaum), Doratura stylata (Boheman), Adarrus exornatus Ribaut, Diplocolenus bohemani (Zetterstedt). From these taxa only Rh. adumbrata seems to be absent in Central Italy. On the other hand, many typical taxa of the mountains of Central Italy [for instance Peltonotellus quadrivittatus (Fieber), Anaceratagallia venosa (Fourcroy), Nanosius chloroticus (Melichar), Euscelis distinguendus (Kirschbaum), Diplocolenus