The Auchenorrhyncha of Central Europe

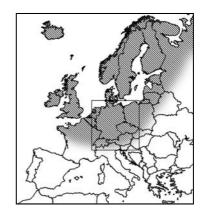
Werner E. Holzinger¹, <u>Ingrid Kammerlander</u>¹ and Herbert Nickel²

¹ Oekoteam, Inst. f. Faunistik und Tieroekologie, Bergmanngasse 22, A-8010 Graz, Austria. office@oekoteam.at

Concerning the insect fauna, central Europe is one of the best-studied regions of the world. This is also true in Auchenorrhyncha. However, no modern comprehensive book on species identification, chorology and ecology is available. For determination, one has to use a combination of outdated keys (Melichar 1896, Haupt 1935, Dlabola 1954), comprehensive books covering adjacent parts of Europe (Great Britain, France, Scandinavia, Russia, Ukraine) and several other papers dealing with single genera and species. In 1994, we began to work on a new "Fauna of Central Europe", and as a first step, a preliminary checklist of the relevant species was published (Holzinger et al. 1997).

Now the first volume of the book is finished and will be printed in autumn 2002 by Brill Academic Publishers, Zeist, Netherlands. It is a bilingual book (English/German) and covers the Fulgoromorpha and Cicadomorpha excluding Cicadellidae. The following volumes 2 and 3 will deal with the Cicadellidae.

Fig 1.: The new book "Auchenorrhyncha of Central Europe" deals with all leafhoppers, plant-hoppers and cicadas known to occur in the hatched area. Detailed information on distribution (species distribution maps) and biology (phenology, habitats, host plants) is provided for all species known from the area within the central rectangle.



Volume 1 covers about 250 species (Cixiidae: ca. 34 spp., Delphacidae: 133 spp., Achilidae: 5 spp., Dictyopharidae: 3 spp., Tettigometridae: ca. 11 spp., Caliscelidae: 7 spp., Issidae: 14 spp., Flatidae: 1 sp., Tropiduchidae: 2 spp., Cicadidae: 12 spp., Cercopidae: 5 spp., Aphrophoridae: 17 spp. Membracidae: 3 spp.), and contains 284 b/w plates with drawings mainly of genitalic structures and more than 700 colour photos of almost all species, sexes and colour morphs. All species known from central Europe, Scandinavia and the British Isles are included (Fig. 1).

Dichotomous keys to families, genera and species are provided. Data on habitat preferences, host plants, overwintering stage and phenology, mainly based on own field data, are given for each species. In addition, we figure their distribution within central Europe and outline their overall range. In some genera (e. g. *Tettigometra*) and species (-groups), we had to face taxonomic problems exceeding the scope of this book by far. In these cases, we tried to discuss the problems and to establish a basic, preliminary framework, that allows to deal with these taxa (for instance in faunistic papers), but without providing final solutions.

W. Holzinger is supported by an APART (Austrian Programme for Advanced Research and Technology) grant of the Austrian Academy of Science.

References

Dlabola, J. 1954. Křísi-Homoptera. Fauna ČSR 1:1-339.

Haupt, H. 1935. 1. Überfamilie Zikaden, Auchenorrhyncha Dum. (Cicadáriae Latr., Cicadina Burm.). In: Brohmer, Ehrmann, Ulmer (eds.): Die Tierwelt Mitteleuuropas 4(3): 115-221.

Holzinger, W.E., W. Fröhlich, H. Günthart, P. Lauterer, H. Nickel, A. Orosz, W. Schedl & R. Remane 1997. Vorläufiges Verzeichnis der Zikaden Mitteleuropas (Insecta: Auchenorrhyncha). Beiträge zur Zikadenkunde 1: 43-70.

Melichar, L. 1896. Cicadinen (Hemiptera-Homoptera) von Mittel-Europa. Felix L Dames Publishers, Berlin, 364+XII pp.

² Inst. f. Zoologie und Anthropologie, Abt. Ökologie, Berliner Str. 28, D-37073 Göttingen, Germany. hnickel@gwdg.de

No catalogue of Northern European Auchenorrhyncha (hereafter shortly named "hop-. persâ€) has previously been published. Existing catalogues covering parts of the area (Vil a northward expanding trend of many species living in central Europe. We here intend to. update the knowledge of hopper records of the countries and other administrative areas in. Northern Europe and to discuss some of the expanding trends in the fauna. 2. Geographic concept. The concept of Northern Europe includes in this work all the Nordic countries, viz. Ice-. land, Norway, Sweden, Finland and Denmark (except the autonomic area of Greenland), all. Are you sure you want to remove The Auchenorrhyncha of Central Europe = from your list? There's no description for this book yet. Can you add one? Cicadellidae (Auchenorrhyncha of Central Europe. 1) (German and English Edition). Holzinger, Werner E; Kammerlander, Ingrid; Nickel, Herbert. This first volume in the bi-lingual handbook The Auchenorrhyncha of Central Europe / Die Zikaden Mitteleuropas (to be published in 3 volumes) is an essential and highly valuable addition to the literature available in this field since the last keys published date from 1935 (Haupt) and 1896 (Melichar) respectively. These insects are a very important group: in grassland ecosystems they are one of the most abundant and diverse groups.