Insect Types in the ZFMK Collection, Bonn: Heteroptera
(last update: April 2006)

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running title: LAMPE, ROHWEDDER & RACH: Insect Types in ZFMK section Hymenoptera

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Abstract. The type specimens of Heteroptera housed in the Zoologisches Forschungsinstitut und Museum Alexander Koenig (ZFMK), Bonn, are listed. There are 4 names recorded; of these 4 (100%) are represented by name bearing (i.e., primary) types. Specific and subspecific names are listed alphabetically, followed by the original genus name, bibliographic citation, original label information (in case of primary types), date and place collected, and finally the geographical coordinates (latitude and longitude based on geo-referencing process).

Key words. Type specimens, Heteroptera

Introduction
This catalogue is generated from the specimen based database BIODAT. Data capture was mainly done within the DIG project (‘Digitization of key Insect groups at ZFMK’). DIG is one of the subprojects of the German GBIF subnode Insecta. It is financially supported by the German Ministry of Science and Education (BMBF) and will run until the end of the year 2005. By adaptation to the ABCD schema (Access to Biological Collection Data) BIODAT became both a BIOCASE- (Biological Collection Access Service for Europe) and GBIF- (Global Biodiversity Information Infrastructure) provider. Therefore full information at the specimen level, and not only of type specimens, for selected ZFMK insect collections (starting with “Homoptera” & Orthoptera) will be sustainably available on the World Wide Web. In case of type specimens we will successively provide images of the type itself and of the original labels.

In this publication the specific and subspecific taxa are grouped by orders and arranged alphabetically. They are listed by species epitheta, followed by the genus name (both in the original spelling), author and year. The citation of the original description was checked and is followed by BIODAT’s catalogue number, type status, number of specimens, developmental stage and sex. If the current classification differs from the original name, the valid name is added together with it’s bibliographic source. In a similar manner the designation of lecto- and neotypes are referenced. The abbreviations of all citations are based on the "World List of Scientific Periodicals" (Brown, P. and G. B. Stratton, 1983). All primary types are listed with the original label information, supplemented by date- and place collected information (normally ‘named area’ information, the more exact ‘gathering site’ information are marked). Historical or ‘older’ place names are updated with names in common use (in parentheses) and higher ranked geographic information such as region, country and continent is added in a hierarchy. Since geo-referencing of collecting places and sites, by using the Alexandria Digital Library gazetteer (ADL) and similar authority files, is part of databasing our collections with BIODAT, the resulting latitude and longitude information could be added easily. To avoid hypertrophic text length most of the secondary types are listed without original label information. If the collection, however, harbour only secondary types of a given taxon the original label information is given for the first type specimen. Table 1 shows the number of primary and secondary types in insect orders of ZFMK section Hymenoptera.
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Acknowledgements
For checking the english text we want to thank Dr. B.J. Sinclair (ZFMK, Bonn).

Tab. 1: Types in insect collections of ZFMK (last update: April 2006)

<table>
<thead>
<tr>
<th></th>
<th>Holo-types</th>
<th>Lecto-types</th>
<th>Syn-types</th>
<th>Neo-types</th>
<th>'Allo-types'</th>
<th>Para-types</th>
<th>Para-lecto-types</th>
<th>Para-neo-types</th>
<th>Status of Type unclear</th>
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<tbody>
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<td>Heteroptera</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Images of the respected type specimens are presented on the web via http://www.biodat.de.

Heteroptera

*fuscescens, Alloeorhynchus (Alloeorhynchus)* Kerzhner, 1992

HET 2004/4
Holotype 1 adult male

*martensi, Phorticus* Kerzhner, 1992

HET 2004/3
Holotype 1 adult female

*schawalleri, Phorticus* Kerzhner, 1992

HET 2004/2
Holotype 1 adult female

*simplicipes, Phorticus* Kerzhner, 1992

HET 2004/1
Holotype 1 adult male
References
