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**Programme and Abstracts**  
**List of Participants**

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**Note:** This publication is not intended to form part of the permanent scientific record; it is therefore not a valid publication for the purposes of biological nomenclature.



The first Australian spider wasp was collected during James Cook's famous exploration of Terra Australis and described by Fabricius in 1775. In the following two centuries Australian pompilids have received relatively little attention and were never comprehensively treated. The continent's fauna is huge with an estimate of more than 500 species, about 60% of which are still undescribed. The generic level classification is confusing and no identification keys are available for most of the fauna. Large numbers of Australian species have been misclassified by previous authors in European genera such as *Cryptocheilus* and *Priocnemis*, which do not occur in Australia. The subfamily Pepsinae is taxonomically most problematic as it comprises the poorest studied Australian genera. Many of these genera are endemic to Australia, have been described on the basis of single specimens and lack proper generic diagnoses. Numerous pepsine genera also exhibit a striking level of sexual dimorphism, which complicates sex associations. In many genera males have either remained undescribed (see Krogmann et al. 2008) or are classified in other genera, sometimes even in different subfamilies. A recent catalogue of Australian pompilids (Elliott 2007) summarizes the current taxonomic state of the fauna and highlights some of the major problems. Here we outline the results of a 4-year study that recognizes 44 genera of Australian pompilids, five of which are recorded from the continent for the first time. Most pepsine genera are reclassified resulting in dozens of new combinations and new synonymies. In addition we recognize a number of species groups that do not fit into existing genera and which will be formally described in future studies. Our generic synopsis also presents large amounts of new distributional data and new host records based on museum collections and recent fieldwork.

#### References

- Elliott, M. (2007) Annotated catalogue of the Pompilidae (Hymenoptera) of Australia *Zootaxa* 1428, 1-83.
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### **Biogeography of the mutillid wasps (Hymenoptera, Mutillidae) in the Palaearctic region**

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The Mutillidae is a large family of solitary wasps which currently numbers 208 genera and about 4200 described (c. 6000 estimated) species. Their greatest diversity occurs in the tropical and subtropical regions of the world. The Palaearctic fauna numbers 57 genera including 14 endemic ones and 506 species.

The distributions of 57 genera in seven biogeographical subregions, as well as the dispersal patterns of nine subfamilies and distribution of 302 species in 24 Palaearctic local faunas, were analysed. Faunal similarities between five biogeographical regions of the Palaearctic were evaluated by using Sørensen's coefficient of similarity. The similarity matrix resulting from pair-wise calculations was then presented by dendrograms, ordination, and Terent'ev pleiades.

The subfamilies Mutillinae (265 species, 30 genera), Dasylabrinae (103 species, five genera), and Myrmillinae (65 species, nine genera) are those most diverse in the Palaearctic region. Subfamilies Myrmosinae and Pseudophotopsidinae have Palaearctic origins. The greatest



diversity of the Mutillidae occurs in the Ancient Mediterranean Region (AMR) - 464 species and 47 genera, including 12 endemic and 18 unique genera. Among the subregions of the AMR, the Mutillidae are most abundant in the Mediterranean subregion (198 species, 34 genera) and Irano-Turanian superprovince (178 species, 31 genera) of the Sahara-Gobi subregion. The East Asian region numbers 48 species in 21 genera, including nine unique ones common with the Oriental region. Thirty eight species in 15 genera are distributed in the Boreal region, but no endemic or unique genera exist there.

The cluster analysis of the distribution of 57 genera among seven Palaearctic regions shows that the branch of East Asian fauna deviates at first (coefficient similarity 0.36) and then the branches of Central Asian and Sahara-Sind faunas. The Mediterranean and Irano-Turanian faunas of the AMR form a stable cluster (coefficient similarity 0.71, bootstrap 84). The Boreal region and Eurasian steppe subregion of AMR have the greatest similarity (coefficient similarity 0.84, bootstrap 96). The cluster analysis of the distribution of 302 species among 24 local faunas shows that the East Asian region is most distinct. The Mutillidae of the Boreal region forms a weak cluster with the Mediterranean subregion. The mutillid fauna of Georgia, Armenia, and Azerbaijan is transitional between the Mediterranean and the Irano-Turanian faunas.

The greatest diversity has AMR - 464 species, 47 genera including 12 endemic and 18 unique genera. On the generic level the Palaearctic fauna is the most similar to the Oriental (31 common genera) and Afrotropical (21 common genera) faunas. The mutillid fauna of the Boreal region is a less diverse and poorest. In spite of the small size of the East Asian mutillid fauna of the Palaearctic, it is closely connected with the Oriental region.

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**A remarkable new species of gallwasp (Hymenoptera: Cynipidae)  
from South Africa, placed in a new tribe**

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We describe as new a species in a new genus and new tribe. Larvae and adult females of the hitherto only known generation were collected from galls on the small tree *Scolopia mundii* (Eckl. & Zeyh.) Warb. (Flacourtiaceae). Diagnostic characters and a key to the tribes of the Cynipidae are included. With its unique South African distribution and seemingly plesiomorphic morphology, this taxon will be important for the future untangling of the early evolution of the microcynipoids.