

COOL: a systematic database dedicated to Cercopoidea

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Abstract

A new taxonomic database dealing with Cercopoidea has been developed. Information is available on the families, genera, and species along with the authors and the publications associated. The transfers, synonymies, and typographical errors are cited and linked to the valid name. This database deals with the names and the taxa separately, distinguishing nomenclature and taxonomy.

Key words: database, Cercopoidea, systematics, taxonomy, nomenclature.

Introduction

COOL (Cercopoidea Organised On Line) is a systematic database driven web application on the Cercopoidea (Froghoppers or Spittlebugs). Its purpose is to gather information on the taxonomy, nomenclature, bibliography, geographic distribution and host-plants for those insects.

The objective is to gather and organise the collected knowledge on froghoppers and to allow any interested person easy access to this information. This database is in the process of being developed. At the moment it uses the Metcalf catalogue (1960/1962) for the families: Cercopidae, Machaerotidae, Clastopteridae and Aphrophoridae as a model.

Since the Epipygidae were described subsequently to this catalogue the information concerning this family was taken directly from the publication of Hamilton (2001).

Results and discussion

This database was developed using a generic system DBTNT (DataBase To Names and Taxa). This system focuses on a dynamic exploration of a systematic database in which the names and the taxa are stored separately. The nomenclatural and taxonomical aspects are separated (Gallut *et. al.*, 2005a; 2005b). This database is built with PostGreSQL.

This system is already used for the databases FLOW (Fulgoromorpha List On the Web) and CIPA (Computer aided Identification for Phlebotoma of south America). Only the graphical user interface (GUI) differs between these three applications, which share independent whilst identical data structure. On all the pages of the COOL website, two menus are permanently available. The presentation of the group and the project are presented on the left hand side when the menu of the database itself is accessible on the right hand side (figure 1). All the information is displayed on the central column of the page.



Figure 1. Web interface of COOL: Cercopoidea Organised On Line (<http://rameau.snv.jussieu.fr/cool/>).

Conclusion

The generic system used to build this database can easily be applied to other taxa. Actually FLOW is already connected to the Catalogue of Life (<http://www.sp2000.org/>). The information is transferred through a wrapper. Since COOL is based on the same system its connection to this catalogue should be facilitated.

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