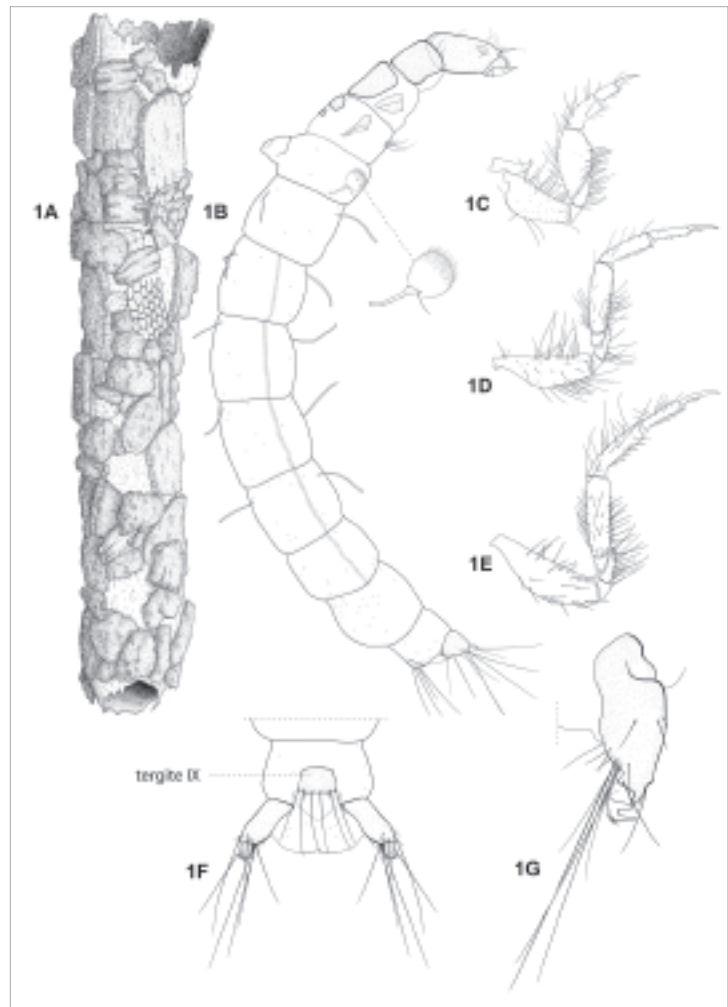


SURVEY AND BIOLOGY SÃO PAULO STATE OF BENTHIC FRESHWATER INSECTS AND OLIGOCHAETES

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The present project aims at carrying on faunistic survey of two groups of benthic freshwater macroinvertebrates, insects and oligochaetes, with emphasis on lotic systems. The previous project included also crustaceans and molluscs. For both, a survey was made in the main hydrographic basins of the State. The area sampled for insects was smaller due to the much poorer knowledge of their taxonomy. The emphasis was on protected areas in Serra do Mar and Serra da Mantiqueira in order to have a better knowledge of local faunas and ecological aspects included. The survey of oligochaetes also was restricted, as the group was included into the project in the beginning of the third year. For the present project, the area to be sampled is enlarged, with three new areas in the State, the State Parks of Vassununga, Fumas do Bom Jesus and Caetetus. Two areas from the first project, The State Parks of Intervales and Campos do Jordão, are maintained because there are still ongoing research projects there. Samplings in the neighborhood of the principal researchers' institutions (Araraquara, São Carlos and Ribeirão Preto) will also be continued. At the end of the second year, the inclusion of new areas will be considered. The project comprises three subprojects, to be carried on in an integrated manner, optimizing resources and field activities: Freshwater Diptera (Chironomidae, Simuliidae), Ephemeroptera, Plecoptera, Trichoptera



Notalina morsei Holzenthal. Larva: A) larval case; B) body, legs removed; lateral sclerite of abdominal segment I enlarged; C) fore leg; D) mid leg; E) hind leg; F) Abdominal segments IX and X, showing tergum IX; G) abdominal proleg and anal claw, lateral

(EPT), and Oligochaeta. Other aquatic insects will also be collected. A significant part of the material will be deposited in the Museum of Zoology of the University of São Paulo.

SUMMARY OF RESULTS TO DATE AND PERSPECTIVES

Research areas covered include taxonomy, biology and ecology, extending to environmental impacts and biomonitoring.

The necessity of bringing together the creation of scientific knowledge and its effective use in decision making and environmental management is one of the great challenges of the project. In this context, an agreement has been made between participants of the project and CETESB, the State's Sanitation Organization, aiming to develop a firm taxonomic basis needed to develop metrics to be used in the quality standards of its laboratories.

Checklists and identification keys, important as tools for the evaluation of the environmental status of streams and rivers are being made and included in the site.



Gripopteryx: *Gripopteryx* sp.,
nymph (*Gripopterygidae*: *Plecoptera*).
Photo L.S. Lecci.

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