

## PREFACE

Incorporated in the present thesis are the results of a research project carried out in the Entomology laboratory, Department of Zoology, University of Burdwan, over a period of four years beginning in May, 1973, on the taxonomy of the twenty nine Indian species of midge-insects belonging to ten genera of the subfamily Orthoclaadiinae under the family Chironomidae of the order Diptera. The specimens concerned have been collected through extensive field-surveys made in the different parts of the eastern India and they represent the genera such as : Brillia Kieffer by one known species, Ekiefferiella Thienemann by two new species, Heterotrissocladius Sparck, by two known species, Limnophyes Eaton by ten new species, Metriocneme van der Wulp, by one new species, Parametriocneme Goetghebuer, by two new species, Paraphaenocladus Thienemann, by three new species, Thienemannia Kieffer, by two new species and Rheocricotopus Thienemann and Harnish, by three new species. Besides the above, the taxonomic position of three species belonging to the genera, Metriocneme van der Wulp, Parametriocneme Goetghebuer and Trichocladus Kieffer are viewed in the light of modern taxonomic usages.

To facilitate easy identification, the revised diagnostic features of the genera and the newly proposed dichotomous keys upto the specific level have been included in this work.

Further, the descriptions of known as well as new species encountered during the field surveys have been made with the help of a number of camera-lucida illustrations and morphometric data. Those for the new species sufficiently reflect their true taxonomic status vis-à-vis their relationship with others known to be congeneric, while those for the known species previously described from the different parts of the world go to record not only the principal diagnostic and characteristic features of the Indian forms but also show the extent of their variation from the congeneric/conspecific world populations. The data presented in the text in regard to the distribution of the species indicate their relative population-size in the eastern belts of India. The significant findings of the present investigations are :

- (1) the discovery of as many as twenty three new species of mites belonging to seven different genera as stated earlier, and
- (2) new report of six of the aforesaid ten genera from the Indian sub-continent.

It is presumed that this work will be looked upon as a valuable addition to the field of research on the Chironomid-taxonomy, which, prior to this work, remained less explored despite the abundance of these insects in several parts of India.