PREFACE

The survey of the genital organs from a comparative and evolutionary viewpoint in different Insect orders by Ryuichi Matsuda (1976)* in the book entitled, "Morphology and Evolution of Insect Abdomen" unravelled that the work on the reproductive system of Odonata, especially the internal reproductive organs of Zygoptera is still scarce, a fact corroborated recently by Corbet (1980) also in his review article on the "Biology of Odonata". The author, therefore, undertook the present study.

The thesis incorporates a detailed study of the morphology and histology of the male and the female internal reproductive organs and the external genitalia of nine Zygopteran species. The salient features of the present work include the account of the accessory glands in the female damselflies, the vestigial penis of the ninth abdominal segment and the secondary copulatory apparatus of the second abdominal segment in the male damselflies, the musculature of the genital segments, the functional morphology of the intromittent organ and the ovipositor, the homology and elaborate histomorphology of the components of the '8th Complex' and a special reference on the spermatophores. In the last chapter, the reproductive organs of Zygoptera are discussed with those of Anisoptera in a comparative manner.