Preface

Molluscs have held a prominent place in the animal kingdom. In numerical abundance they are second only to arthropods. On varied aspects of molluscan studies, a good number of scientific papers and treatises have appeared in the periodicals of the learned societies of the world. Compared to the wealth of information available in the various parts of the world on physiology, ecology and biochemistry of freshwater prosobranchs, considerably very less is known in India.

Some gastropods in India have been reported to be the intermediate hosts of trematode parasites of medicinal, veterinary and agricultural importance. Of these *Melania scabra* is one of the important freshwater prosobranchs, which is the vector snail of economically important monostome cercariae. As this snail is a commonly occurring species in freshwaters of the river Godavari, near Pravara-sangam, Ahmednagar district, Maharashtra, India, it was felt worthwhile to study its physiology, biochemistry and ecology in detail. With this broad view the present investigation was initiated two years back.

The results of the investigation are presented in seven chapters. Chapter 1 deals with Breeding and Development of the snail, *Melania scabra*. Reproductive Biology
is included in Chapter 2. Chapters 3 and 4 deal with the Neuroendocrinology and Respiratory Metabolism of the snail. Besides this extensive studies on temperature tolerance and Ecology and Control of the snail have been made which are represented in subsequent chapters.