

Book Review

Title: **Fundamentals of Systematic Zoology**

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Systematics is that branch of Biology which deals with the study of kinds and diversity of organisms and of any or all relationship among them. In other words, it involves classification and nomenclature of organisms. A biological classification is the ordered grouping of organisms according to their similarities and consistent with their inferred descent. Nomenclature provides labels for taxa at all levels to facilitate communication among the biologists. Systematics has played a very important role in laying the foundation of some important branches of biology. Even today, the study of biodiversity as practiced by system biologists continues to reveal new problems in evolution. The contribution of systematists to the applied sciences like agriculture, forestry, public health, conservation and management of natural resources has been immense and have supplied the key to the solution of previously perplexing problems especially different disciplines of biological science.

Professor Md. Ataur Rahman Khan has written a book on this important branch of Zoology. The book includes 7 chapters. In the first chapter, the author has introduced the subject matter. In the second chapter, terminology of systematics has been defined. To understand the subject, it will be helpful for the readers. But the definition of some of the terms is too elaborate. Moreover, biography of the scientists has been included in this chapter. Instead, a separate chapter on the historical background of the subject could have been a better option. The third chapter describes the taxonomic methods. For taxonomic study, collection of organisms, their preservation, identification, classification and publication are important. In this chapter, collecting methods, killing agent, preservation of specimens, curating, housing, cataloguing, arrangement of collection, maintenance of types, identification and sending of specimens by mail have been discussed.

No systematic study is complete unless the results have been published to make them available to the concerned scientists. Major types of taxonomic publication have been briefly described in chapter 4. Moreover, a bonus of this chapter is that a detailed procedure has been discussed regarding the writing up a taxonomic research paper. The beginner will be immensely benefited from this description.

The systematic works so far accomplished have been recorded in the literature. Some of the important bibliographies and literature have been briefly discussed in chapter 5. Addresses of few journals are also given for ready use. About 800 recent references on different aspects of animal taxonomy/systematics have been cited in the further reading section in chapter 6. These references will provide access to the current literature of the subject.

Chapter 7 contains the appendices. It includes some of the abbreviations particularly relevant to systematics, some Latin phrases, Greek alphabet, S1 prefixes, units and conversions, structure of amino acids occurring in proteins, internet links to systematics. In addition, dorsal view of stingray, important measurements used in describing fish species, measurements of different body parts of spiny-rayed fish and the topography of a bird have been shown in appendices.

The book is written in a simple and lucid language. It is expected that the book will be helpful to the students, teachers and researchers and will contribute to scientific literacy and communication.

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