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Perry R.N., Wright D.J. (Editors). 1998. The Physiology and Biochemistry of Free-living and Plant-parasitic Nematodes. CABI Publishing, Wallingford, 438 pp., ISBN 0851992315.

Accurate and detailed information on the fundamental biology of soil and plant nematodes has several important functions. Among other things it is needed to gain an understanding of their highly complex ecology and, since many plant- parasitic nematodes are important pests, it also greatly enhances attempts to implement crop protection strategies.

Generally, the reviewed book integrats the all world works on *Caenorhabditis elegans* with the broader spectrum of the phisiology and biochemistry of soil and plant nematodes. It is organized into 15 chapters, each written by authorities and well referenced with substantial number of articles. Each chapter ends with a paragraph of two of conclusions and future prospects.

Chapter 1 is an Introduction to Functional Organization relates nematode structure to adaptibility and survival or, more generally, to functional biology in broad sense. In chapter 2 are detailed Cuticule composition and structure. Chapter 3 on Musculature and Neurobiology in mainly derived form work on C. elegans and Ascaris. Chapter 4 on Behaviour and Sensory Responses details searching behaviour, taxes and kineses, signal responses, sensory physiology, and a section titled learning and memory. Chapter 5 is on Respiratory Physiology, Nitrogen Excretion and Osmotic and Ionic Regulation. In chapter 6 are reviewed the basic methods of reproduction reported in soil and plant nematodes with brief attention to their ecological and evolutionary contects. Chapter 7 on Developmental Biology reviews information on embryogenesis, growth, sex determination, most of which is derived from studies on C. elegans. Chapter 8 on hatching describes egg structure and packing, dormancy, natural and artificial hatching chemicals, hatching inhibitor chemicals, hatching factor stimulants, and environmental factors affecting hatch. Chapter 9 on Nematode Parasitism of Plants examines feeding behaviour and the cellular response of the host plant to the nematode. Chapter 10 is Feeding in Free- living Soil Nematodes: A functional Approach. Chapter 11 reviews Survival Biology involving diapause, quiescence and cryptobiosis, and metabolic and biochemical changes associated with revival. Chapter 12 on Biosynthesis is a review of the role of different biological compounds in the nematode biochemistry. Chapter 13 on Intermediary Metabolism deals with energy metabolism. Chapter 14 on Biochemical and Molecular Characterization reviews the range of biochemical and molecular techniques for use in systematics of nematodes. Chapter 15 is on Engineering Resistance to Plant- parasitic nematodes and reviews manipulation of natural resistance genes, targets for novel transgenic resistance, effectors for transgenic expression, stocked defences, promoters, and efficacy of resistance. The last parts of the book are Appendix Nematode Classification, Species Index and General Index.

In conclusion, the book is essential reading for all person interested more detailed in function of soil and plant nematodes.

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