

Schurtleff, M.C., Avere III, C.W. 2000. Diagnosing Plant Diseases Caused by Nematodes. The American Phytopathological Society, St. Paul 187 pp. ISBN 0-89054-254-6.

This book is written for scientists, students, consultants and agricultural and quarantine inspectors. It focuses on diagnosis of plant diseases caused by parasitic nematodes commonly encountered in agronomy, horticulture and forestry. The book allows to identify nematodes at least to the level of genus, and in two important plant parasitic genera (*Heterodera* and *Meloidogyne*), to the species or subspecies level. Traditional field and laboratory methods are presented as well as indirect – such as techniques using serology, molecular probes or polymerase chain reaction (PCR).

Chapter 1 “Introduction to plant-parasitic nematodes” (p. 1-19) gives a general description of physical characteristics (size, morphology, anatomy) as well as biological characteristics (survival, feeding, dissemination).

Chapter 2 “Methods” (p. 21-47) describes the collection and submission of soil and plant tissue samples for nematode analysis. Very valuable instructions and advises are given on: extracting nematodes from soil and plant tissues; direct observation of nematodes; staining of plant tissues; preservation and storage of nematodes; and methods of inoculating plants to demonstrate pathogenicity.

Chapter 3 “Classification and descriptions of plant-parasitic nematodes” (p. 49-144) presents a classification of plant-parasitic nematodes and description of 31 genera. For each genus, a list of principal hosts, body dimensions and description of major morphological characteristics are given. Excellent drawings of nematodes in each genus and black and white as well as color photos of damaged plants are included.

The Appendix “Nematode vectors of plant viruses” (p. 145-149) contains information about the five genera of nematodes transmitting plant pathogenic viruses. Of special interests are procedures for virus transmission tests.

An extensive glossary of nematological and related terms is included (p. 151-173). The detailed index makes easy finding of needed information on particular genus or nematode species.

Jerzy J. Lipa