Zootaxa 1668: 265–293 (2007)
www.mapress.com/zootaxa/

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

Phylum Nematoda*

MIKE HODDA
Nematode Biosystematics & Ecology, CSIRO Entomology, GPO Box 1700 Canberra ACT 2601 Australia
Mike.hodda@csiro.au

**In*: Zhang, Z.-Q. & Shear, W.A. (Eds) (2007) Linnaeus Tercentenary: Progress in Invertebrate Taxonomy. *Zootaxa*, 1668, 1–766.

Table of contents

Abstract

The systematics of nematodes is reviewed, including: an overview of the general biology, ecology, scientific and economic importance of the group; a history of classification; evolutionary affinities and origins of nematodes; and the current diagnosis of the group. Alternative classifications within the Phylum Nematoda are discussed, and a classification to family level incorporating the latest molecular, developmental and morphological research is presented. This classification reflects the current views on evolution within the phylum, as well as significant areas of uncertainty, particularly related to the early evolution of nematodes. It includes 5 classes, 9 subclasses, 23 superorders, 39 orders, 52 suborders, 89 superfamilies and 241 families. There are few changes at the superfamily and family levels.

Key words: classification, phylogeny, biology, ecology, economic importance, nematodes

Overview of the group

The nematodes are a taxonomically, ecologically and geographically diverse group, with a large number of species, huge economic and ecological impact, and an astronomical number of individuals (representing perhaps four out of every five multicellular animals on earth, or an estimated 10^{22} individuals). Because of the enormous abundance and diversity of the group, only an estimated 2–10% of the world fauna has been for-

Accepted by Z.-Q. Zhang: 27 Nov. 2007; published: 21 Dec. 2007