

# Contents

Contributors—ix

- Andreas Schmidt-Rhaesa
1. **Gastrotricha, Cycloneuralia and Gnathifera: General History and Phylogeny—1**
    - 1.1. The large worms—1
    - 1.2. The discovery of microscopically small animals—1
    - 1.3. Changing relationships—2
    - 1.4. From typological classification to phylogenetic systematics—4
    - 1.5. The contribution of molecular studies—6
    - 1.6. Outlook—7
  2. **Gastrotricha, Cycloneuralia and Gnathifera: The Fossil Record—11**
    - 2.1. Gastrotricha—11
    - 2.2. Gnathifera—11
    - 2.3. Cycloneuralia—11
  3. **Nematomorpha—29**

Andreas Schmidt-Rhaesa

    - Introduction—29
    - 3.1. Morphology—29
    - 3.2. Reproduction and development—62
    - 3.3. Physiology—95
    - 3.4. Phylogeny—96
    - 3.5. Systematics—96
    - 3.6. Biogeography—122
    - 3.7. Paleontology—122
    - 3.8. Ecology—123

- Andreas Schmidt-Rhaesa
4. **Priapulida—147**

Andreas Schmidt-Rhaesa

    - Introduction—147
    - 4.1. Morphology—147
    - 4.2. Reproduction and development—163
    - 4.3. Physiology—164
    - 4.4. Phylogeny—165
    - 4.5. Systematics—166
    - 4.6. Biogeography—174
    - 4.7. Palaeontology—175
    - 4.8. Ecology—176
  5. **Kinorhyncha (= Echinodera)—181**

Birger Neuhaus

    - Introduction—181
    - 5.1. Morphology—183
    - 5.2. Reproduction and development—260
    - 5.3. Physiology—271
    - 5.4. Phylogeny—271
    - 5.5. Systematics—273
    - 5.6. Biogeography—308
    - 5.7. Paleontology—323
    - 5.8. Ecology—323
  6. **Loricifera—349**

Iben Heiner Bang-Berthelsen, Andreas Schmidt-Rhaesa and Reinhardt Møbjerg Kristensen

    - Introduction—349
    - 6.1. Morphology—349
    - 6.2. Reproduction and development—362
    - 6.3. Phylogeny—364
    - 6.4. Diversity—365
    - 6.5. Ecology—370

