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| Altri autori (Persone) | DolanJohn R <1955-> (John Richard) |
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| Soggetti | Tintinnida Zoology |
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| Nota di bibliografia | Includes bibliographical references and indexes. |
| Nota di contenuto | Title page; Copyright page; Contents; Contributors; Chapter 1: Introduction to Tintinnids; 1.1 Why A Book on Tintinnid Ciliates?; 1.2 What Is A Tintinnid Ciliate?; 1.3 The Lorica As the Defining Characteristic of Tintinnid Ciliates; 1.4 History of Tintinnid Studies; 1.5 Tintinnids As Model Organisms for Marine Plankton; 1.6 Key Points; Acknowledgments; Chapter 2: The Tintinnid Lorica; 2.1 Introduction; 2.2 Diversity, Formation, and Variability of Loricae; Diversity of loricae; General aspects of lorica formation; Lorica material; Role of the somatic cilia Lorica phenotypes formed during the cell cycle Variability of loricae during the cell cycle in hyaline species; Formation of hard, agglomerated loricae; Soft, agglomerated loricae; Problems of lorica typological taxa; 2.3 Ultrastructure of Loricae; 2.4 Chemical Composition of Loricae; History of chemical studies; Cytochemical stains and enzymatic experiments; 2.5 Lorica Sedimentation; 2.6 Key Points; Acknowledgments; Chapter 3: Systematics and Evolution of Tintinnid Ciliates; 3.1 Introduction; 3.2 History of Tintinnid Taxonomy and Systematics; The beginning The introduction of staining techniques The era of electron microscopy; |

Cladistic analysis; Gene sequence analysis; Species descriptions and redescrptions; Monographs and identification keys; 3.3 Evolution of Tintinnids; Kinetal maps; The ancestor of the stichotrichs, halteriids, oligotrichids, and choreotrichids; The ancestor of the halteriids, oligotrichids, and choreotrichids; The ancestor of the oligotrichids and choreotrichids; The ancestor of the choreotrichids; The early evolution within the tintinnids; Freshwater species; Marine species; The capsule types; The lorica sac

Cladistic analysis Conclusions; 3.4 How to Read the Tintinnid Cladogram; 3.5 Molecular Analysis and Comparison with Morphologic Data; Gene sequence analysis in general; Data acquisition; SSU rRNA phylogenies; Comparison of SSU rRNA phylogenies and cladograms with former hypothesis; 3.6 Systematics; Recent changes in the classification; Additional changes; 3.7 Comparison with the Evolution of Related Planktonic Ciliates: The Aloricate Choreotrichids, Oligotrichids, and Halteriids; The planktonic life style; The somatic ciliature; Resting cysts; The halteriids, an enigmatic ciliate group

Gene sequence analyses 3.8 Key Points; Acknowledgments; Chapter 4: Ecophysiology and Behavior of Tintinnids; 4.1 Introduction; 4.2 Feeding; An overview of tintinnid feeding; Functional response; Size selectivity; Selectivity other than size; 4.3 Growth; An overview of tintinnid growth; Population growth; Numerical response; Scaling tintinnid maximum growth rate to size; Cell size, number, and growth rate; Gross growth and assimilation efficiency; 4.4 Swimming Behavior; The basics of swimming; An assessment of swimming motion; Changes in swimming behavior; Swimming synthesis

4.5 Response to Abiotic Factors and Interactions with Biotic Factors

Sommario/riassunto

Planktonic protists both produce and consume most of the primary production in the world ocean. They not only play key roles in the oceans but also represent an astounding amount of diversity: ecological morphological and genetic. However, for most taxa their ecology, morphology, phylogeny and biogeography are either poorly known or appear to be largely unrelated to one another; this hinders our understanding of their biology as well as interpretation of emerging genetic data. Tintinnid ciliates represent a singular exception. Compared to nearly all other groups of planktonic protists, there i
