

BOOK REVIEW

STEVEN L. STEPHENSON & CARLOS ROJAS, EDs. 2017. **Myxomycetes: Biology, Systematics, Biogeography, and Ecology.** (ISBN-13: 978-0-12-805089-7, pbk). Academic Press (imprint of Elsevier), 525 B St., Ste. 1800, San Diego, California 92101-4495 U.S.A. (Orders: www.elsevier.com/books-and-journals). \$99.95 US, 474 pp., color photographs, b/w and color figs., 6" x 9".

If asked for a list of the world authorities regarding the myxomycetes, the list would crosswalk nicely with the chapter authors listed in this book. This reviewer was privileged to meet and visit with many of the authors at the Seventh International Congress on the Systematics and Ecology of Myxomycetes: ICSEM 7, Recife, Brazil (2011). These wonderful folks are dedicated followers of the Myxomycete Greek mythology sirens who are lured and addicted to the world of Myxomycetes. Myxomycete specialists are not a large group, but instead a small, closely allied circle of individuals who have fallen in love with this unique, beautiful, and odd classification of organisms. The reader of this remarkable work will become absorbed in the information that flows throughout. The collection of chapters is truly outstanding and provides a current and thorough presentation of knowledge regarding the myxomycetes.

The first chapter—The Myxomycetes: Introduction, Basic Biology, Life Cycles, Genetics and Reproduction—will appeal to all myxomycetologists and students of the field as a thorough and concise treatment to pique anyone's interest. Excellently written and illustrated, this chapter whets the appetite to continue to learn more about this most interesting group of unique organisms.

Meticulous documentation and high-quality illustrations make the *Myxomycetes: Biology, Systematics, Biogeography, and Ecology* a comprehensive valuable resource bound to appeal to a wide audience of several disciplines.—*Relf Price, Ph.D., Los Alamos National Laboratory, Los Alamos, New Mexico, U.S.A.*

Introduction—*Steven L. Stephenson & Carlos Rojas*

Chapter 1. The Myxomycetes: Introduction, Basic Biology, Life Cycles, Genetics, and Reproduction—*Harold Keller, Sidney Everhart & Courtney M. Kilgore*

Chapter 2. The History and Study of Myxomycetes—*Bruce Ing & Steven L. Stephenson*

Chapter 3. The Phylogeny of Myxomycetes—*Dmitry Leontiev & Martin Schnittler*

Chapter 4. Genomics and Gene Expression in Myxomycetes—*Dennis Miller, Ramesh Padmanabhan & Subha Sarcar*

Chapter 5. Molecular Techniques and Current Research Approaches—*Laura Walker, Thomas Hoppe & Margaret Silliker*

Chapter 6. Physiology and Biochemistry of Myxomycetes—*Qi Wang, Yu Li & Pu Liu*

Chapter 7. Taxonomy and Systematics: Current Knowledge and Approaches on the Taxonomic Treatment of Myxomycetes—*Carlos Lado & Uno Eliasson*

Chapter 8. Ecology and Distribution of Myxomycetes—*Yura Novozhilov, Adam W. Rollins & Martin Schnittler*

Chapter 9. Biogeographical Patterns in Myxomycetes—*Martin Schnittler, Nikki Dagamac & Yura Novozhilov*

Chapter 10. Techniques for Recording and Isolating Myxomycetes—*Diana Wrigley de Basanta & Arturo Estrada-Torres*

Chapter 11. Uses and Potential: Summary of the Biomedical and Engineering Applications of Myxomycetes in the 21st Century—*Hanh Tran & Andrew Adamatzky*

Chapter 12. Myxomycetes in Education: The Use of These Organisms in Promoting Active and Engaged Learning—*Katherine Winsett, Thomas dela Cruz & Diana Wrigley de Basanta*

Chapter 13. Myxomycetes in the 21st Century—*Carlos Rojas & Tatyana Krivomaz*

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