

## JOURNAL NOTICE

GWYN A. BEATTIE AND SOPHIE N. KAMOUN, EDs. 2025. **Annual Review of Phytopathology, Volume 63.** (ISSN: 0066-4286, ISBN-13: 978-0-8243-1363-0, hbk). Annual Reviews, Inc., 1875 Grant Street, Suite 700, San Mateo, California 94402, U.S.A. (**Orders:** [annualreviews.org](https://annualreviews.org), [science@annualreviews.org](mailto:science@annualreviews.org)). Price not given (Open Access subscription encouraged), 650 pp., 7½" x 9".

**ABOUT THIS JOURNAL**—The *Annual Review of Phytopathology*, in publication since 1963, covers significant developments in the field of plant pathology, including plant disease diagnosis, pathogens, host-pathogen interactions, epidemiology and ecology, breeding for resistance and plant disease management, and includes a special section on the development of concepts.

**Contents of Volume 63**

*Recognition and gratitude for the leadership of John McDowell*—Gwyn Beattie

*Reflections on the Past, Present, and Future of Quantitative Plant Disease Epidemiology*—Laurence V. Madden

*Plant Pathogen Name Game: Cross Kingdom Review for the Naming of Biotic Agents Associated with Plants*—Carolee T. Bull, Catalina Salgado-Salazar, Megan K. Romberg, Cavan Allen, Mihail Kantor, Zafar Handoo, Nina Aboughanem-Sabanadzovic, Sead Sabanadzovic and Teresa Coutinho

*Seed Pathology: Challenges and Advances in Ensuring a Safe Global Seed Supply*—Gary Munkvold, Lindsey du Toit and Ric Dunkle

*Phytopathogen Effector Biology in the Burgeoning AI Era*—Darcy Adam Bain Jones and Sylvain Raffaele

*Functions and Mechanisms of Secreted Proteinaceous Effectors of Broad-Host-Range Necrotrophic Fungal Pathogens*—Xiaofan Liu, Yongkun Huang, Weidong Chen, Daohong Jiang and Jiasen Cheng

*Translational Regulation of Plant Stress Responses: Mechanisms, Pathways, and Applications in Bioengineering*—Yezi Xiang and Xinnian Dong

*Diverse Functions of Plant MLO Proteins: From Mystery to Elucidation*—Pai Li and Shunyuan Xiao

*The Spectrum of Diverse Disease-Resistance Genes Cloned and Characterized in the Triticeae Tribe*—Yinghui Li, Liubov Govta, Yi-Chang Sung, Gitta Coaker and Tzion Fahima

*Challenges to Wheat Disease Resistance and Current Global Strategies*—Ravi P. Singh, David P. Hodson, Pawan K. Singh, Caixia Lan, Xinyao He, Evans S. Lagudah, Philomin Julian, Michael Alyiffe, Sridhar Bhavani, Diane G.O. Saunders and Julio Huerta-Espino

*Susceptibility Genes in Bacterial Diseases of Plants*—Shivranjani Baruah, Mathilde Hutin and Adam J. Bogdanove

*Pathogen-Informed Strategies for Durable Resistance in Rice: Lessons from Bacterial Blight*—Jagjeet S. Lore, Dale Pinili, D. Bhatia, Lemuel Ray Balloyan, Ian Paul Navea, Mandeep S. Hunjan, Gurjot S. Mangat, Ram Singh, John Damien Platten, Bing Yang, Jan E. Leach, Frank F. White, Casiana M. Vera Cruz and Van Schepler-Luu

*Contrasting Mechanisms of Defense Against Biotrophic and Necrotrophic Pathogens, 20 Years Later: What Has Changed?*—Tesfaye Mengiste and Chao-Jan Liao

*Mechanisms of Enterobacterales Plant Necrotrophy and Host Specificity: Two Types of Bacterial Necrotroph*—Brian H. Kvittko, Amy O. Charkowski and Janak R. Joshi

*Function, Evolution, and Ecology of Type VI Secretion Systems of Plant-Associated Bacteria*—Jovana Mijatović Scouten, Shan-Chi Hsieh, Li-Kang Sung, Yung-Hui Victoria Wen, Chih-Horng Kuo, Erh-Min Lai and Jeff H. Chang

*Seed Gall Nematodes and Their Association with Toxicogenic Bacteria*—Timothy D. Murray, Aida Duarte, Douglas G. Luster, Simon J. McKirdy, Elizabeth E. Rogers, Brenda K. Schroeder and Sergei A. Subbotin

*Neuronal Basis of Host-Finding and Feeding in Plant-Parasitic Nematodes*—Jaeyeong Han and Nathan E. Schroeder

*Molecular Insights into Migratory Plant-Parasitic Nematodes*—Margarida Espada, Cláudia S.L. Vicente and Paulo Vieira

*Symptom Development in Plant Viral Diseases: What, How, and Why?*—Man Gao and Rosa Lozano-Durán

*Replication Organelles of Plant Positive-Strand RNA Viruses: A Boost in Knowledge Following New Imaging Approaches*—Qianshen Zhang, Kun Zhang, Dawei Li, Xiaofeng Wang and Yongliang Zhang

*Guns 'N' Roses: Fungal Volatile Warfare in Postharvest Disease Control*—Safa Oufensou, Zahoor Ul-Hassan, Kareem Badr, Virgilio Balmas, Samir Jaoua and Quirico Miglioli

*Biological Control of Postharvest Diseases: The Evolution of New Concepts and Perspectives*—Samir Drobby, Michael Wisniewski, V. Yeka Zhimo, Vijay Kumar-Sharma and Shiri Freilich

*Genome Biology of Rust Fungi*—Eva C. Henningsen, Camilla Langlands-Perry, Eric A. Stone, Peter N. Dodds, Melania Figueroa and Jana Sperschneider

*Cryptonectriaceae: Biodiverse and Threatening Tree Pathogens in the Tropics and Southern Hemisphere*—Michael J. Wingfield, Nam Q. Pham, Seonju Marincowitz and Brenda D. Wingfield

*Fungal Trunk Diseases: A Global Threat to Grapevines*—Florence Fontaine, Florent P. Trouillas, Josep Armengol and Akif Eskalen

*Clubroot Disease: 145 Years Post-Discovery, Challenges, and Opportunities*—Dinesh Adhikary, Abir Ul Islam, Sabina Adhikari, Venkat Chapara, William Truman and Jutta Ludwig-Müller

*Phytonanitary Challenges and Solutions for Roots and Tuberous in the Tropics*—Jorge L. Andrade-Piedra, Kalpana Sharma, Jürgen Kroschel, Kwame Ogero, Jan Kreuze, James P. Legg, P. Lava Kumar, David J. Spielman, Israel Navarrete, Willmer Perez, Elly Atieno and Karen A. Garrett