

JOURNAL NOTICE

GWYN A. BEATTIE AND SOPHIEN 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, science@annualreviews.org). Price not given (Open Access subscription encouraged), 650 pp., 7½" × 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 Juliana, Michael Ayliffe, 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, Gurjit 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. Kvitko, 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 Toxigenic 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—Jaeyeon Han and Nathan E. Schroeder

Molecular Insights into Migratory Plant-Parasitic Nematodes—Margarida Espada, Clàudia 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 Migheli

Biological Control of Postharvest Diseases: The Evolution of New Concepts and Perspectives—Samir Droby, 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

Cryphonectriaceae: 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

Phytosanitary Challenges and Solutions for Roots and Tubers 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