

## Literatur

**Annual Review of Phytopathology, Vol. 56**, 2018. Eds.: Jan E. LEACH, Steven LINDOW. Palo Alto, Calif., USA, Annual Reviews, 677 S., ISBN 978-0-8243-1356-2, ISSN 0066-4286.

Band 56 des „Annual Review of Phytopathology“ beginnt mit einem Artikel von Giuliano BONANOMI, Matteo LORITO, Francesco VINALE, Sheridan L. WOO mit dem Titel: „Organic Amendments, Beneficial Microbes, and Soil Microbiota: Toward a Unified Framework for Disease Suppression“.

Weitere Übersichtsartikel aus dem Gesamtgebiet der Phytopathologie schließen sich an:

The Genome Biology of Effector Gene Evolution in Filamentous Plant Pathogens (Andrea SÁNCHEZ-VALLET, Simone FOUCHÉ, Isabelle FUDAL, Fanny E. HARTMANN, Jessica L. SOYER, Aurélien TELLIER, Daniel CROLL); Seeing the Light: The Roles of Red- and Blue-Light Sensing in Plant Microbes (Gwyn A. BEATTIE, Bridget M. HATFIELD, Haili DONG, Regina S. McGRANE); Advances in Wheat and Pathogen Genomics: Implications for Disease Control (Beat KELLER, Thomas WICKER, Simon G. KRATTINGER); Joining the Crowd: Integrating Plant Virus Proteins into the Larger World of Pathogen Effectors (Scott M. LEISNER, James E. SCHOELZ); The Future of Nanotechnology in Plant Pathology (Wade ELMER, Jason C. WHITE); Mechanisms Underlying Establishment of Arbuscular Mycorrhizal Symbioses (Jeongmin CHOI, William SUMMERS, Uta PASZKOWSKI); Antibiotic Resistance in Plant-Pathogenic Bacteria (George W. SUNDIN, Nian WANG); *Xylella fastidiosa*: Insights into an Emerging Plant Pathogen (Anne SICARD, Adam R. ZEILINGER, Mathieu VANHOVE, Tyler E. SCHARTEL, Dylan J. BEAL, Matthew P. DAUGHERTY, Rodrigo P.P. ALMEIDA); The Barberry Eradication Program in Minnesota for Stern Rust Control: A Case Study (Paul D. PETERSON); Endosymbionts of Plant-Parasitic Nematodes (Amanda M.V. BROWN); Structural, Functional, and Genomic Diversity of Plant NLR Proteins: An Evolved Resource for Rational Engineering of Plant Immunity (Freddy MONTEIRO, Marc T. NISHIMURA); The Changing Face of Bacterial Soft-Rot Diseases (Amy O. CHARKOWSKI); Biology of Fungi and Their Bacterial Endosymbionts (Teresa E. PAWLOWSKA, Maria L. GASPAS, Olga A. LASTOVETSKY, Stephen J. MONDO, Imperio REAL-RAMIREZ, Evaniya SHAKYA, Paola BONFANTE); *Sclerotinia sclerotiorum*: An Evaluation of Virulence Theories (Liangsheng XU, Guoqing LI, Daohong JIANG, Weidong CHEN); Fitness Penalties in the Evolution of Fungicide Resistance (N.J. HAWKINS, B.A. FRAALJE); Multifaceted Impacts of Bacteriophages in the Plant Microbiome (Britt KOSKELLA, Tiffany B. TAYLOR); Plant-Parasitic Nematodes and Food Security in Sub-Saharan Africa (Danny L. COYNE, Laura CORTADA, Johnathan J. DALZELL, Abiodun O. CLAUDIUS-COLE, Solveig HAUKELAND, Nessie LUAMBANO, Herbert TALWANA); The Rise and Rise of *Nicotiana benthamiana*: A Plant for All Reasons (Julia BALLY, Hyungtaek JUNG, Cara MORTIMER, Fatima NAIM, Joshua G. PHILIPS, Roger HELLENS, Aureliano BOMBARELY, Michael M. GOODIN, Peter M. WATERHOUSE); Wheat Blast: Past, Present, and Future (Paulo Cezar CERESINI, Vanina LILLIÁN CASTROAGUDÍN, Fabrício Ávila RODRIGUES, Jonas Alberto RIOS, Carlos Eduardo AUCIQUE-PÉREZ, Silvino Intra MOREIRA, Eduardo ALVES, Daniel CROLL, João Leodato Nunes MACIEL); Lessons from the Incursion of Myrtle Rust in Australia (Angus J. CARNEGIE, Geoff S. PEGG); CRISPR Crops: Plant Genome Editing Toward Disease Resistance (Thorsten LANGNER, Sophien KAMOUN, Khaoula BELHAJ); Understanding Cytoskeletal Dynamics During the Plant Immune Response (Jiejie LI, Christopher J. STAIGER); Hyperspectral Sensors and Imaging Technologies in Phytopathology: State

of the Art (A.-K. MAHLEIN, M.T. KUSKA, J. BEHMANN, G. POLDER, A. WALTER); Network Analysis: A Systems Framework to Address Grand Challenges in Plant Pathology (K.A. GARRETT, R.I. AKALÁ-BRISÉÑO, K.F. ANDERSEN, C.E. BUDDENHAGEN, R.A. CHOUDHURY, J.C. FULTON, J.F. Hernandez NOPSA, R. POUDEL, Y. XING); RNA Interference Mechanisms and Applications in Plant Pathology (Cristina ROSA, Yen-Wen KUO, Hada WURIYANGHAN, Bryce W. FALK); Multiple-Disease System in Coffee: From Crop Loss Assessment to Sustainable Management (Jacques AVELINO, Clémentine ALLINNE, Rolando CERDA, Laetitia WILLOCQUET, Serge SAVARY); World Management of Geminiviruses (Maria R. ROJAS, Monica A. MACEDO, Minor R. MALIANO, Maria SOTO-AGUILAR, Juliana O. SOUZA, Rob W. BRIDDON, Lawrence KENYON, Rafael F. Rivera BUSTAMANTE, F. Murilo ZERBINI, Scott ADKINS, James P. LEGG, Anders KVARNHEDEN, William M. WINTERMANTEL, Mysore R. SUDARSHANA, Michel PETERSCHMITT, Moshe LAPIDOT, Darren P. MARTIN, Enrique MORIONES, Alice K. INOUE-NAGATA, Robert L. GILBERTSON).

Weiterhin wird auf fachlich verwandte Beiträge in anderen „Annual Reviews“ verwiesen, beispielsweise im Annual Review of Entomology, Volume 63 (2018), Insect-Borne Plant Pathogens and Their Vectors: Ecology, Evolution, and Complex Interactions (Sanford D. EIGENBRODE, Nilsa A. BOSQUE-PÉREZ, Thomas S. DAVIS); Annual Review of Genetics, Volume 51 (2017), Integration of Agrobacterium T-DNA into the Plant Genome (Stanton B. GELVIN); The Genetics of Plant Metabolism (Alisdair R. FERNIE, Takayuki TOHGE); Annual Review of Microbiology, Volume 71 (2017), Early Diverging Fungi: Diversity and Impact at the Dawn of Terrestrial Life (Mary L. BERBEE, Timothy Y. JAMES, Christine STRULLU-DERRIEN); Regulating Bacterial Virulence with RNA (Juan J. QUEREDA, Pascale COSSART); Lessons from the Environmental Antibiotic Resistome (Matthew D. SURETTE, Gerard D. WRIGHT); Annual Review of Plant Biology, Volume 69 (2018), Reactive Oxygen Species in Plant Signaling (Cezary WASZCZAK, Melanie CARMODY, Jaakko KANGASJÄRVI); Receptor-Like Cytoplasmic Kinases: Central Players in Plant Receptor Kinase-Mediated Signaling (Xiangxiu LIANG, Jian-Min ZHOU); Modularity in Jasmonate Signaling for Multistress Resilience (Gregg A. HOWE, Ian T. MAJOR, Abraham J. KOO); Strategies for Enhanced Crop Resistance to Insect Pests (Angela E. DOUGLAS); The Physiological Basis of Drought Tolerance in Crop Plants: A Scenario-Dependent Probabilistic Approach (François TARDIEU, Thierry SIMONNEAU, Bertrand MULLER).

Der vorliegende Band ist unter <http://phyto.annualreviews.org> auch online recherchierbar. Ebenso wie vorher erschienene Bände, ist Band 56 der Reihe „Annual Review of Phytopathology“ eine äußerst wertvolle Informationsquelle phytopathologischer Forschungsergebnisse bzw. aktueller Literatur.

Die Redaktion

**Annual Review of Microbiology, Vol. 72**, 2018. Eds.: Susan GOTTESMAN, Caroline S. HARWOOD, Olaf SCHNEEWIND, Palo Alto, Calif., USA, Annual Reviews, 553 S., ISBN 978-0-8243-1172-8, ISSN 0066-4227.

Nach einer Einleitung der Herausgeberin Susan GOTTESMAN beginnt Band 72 mit einem Artikel von Volkmar Braun mit dem Titel „The Outer Membrane Took Center Stage“.

Weitere Übersichtsartikel aus dem Gesamtgebiet der Mikrobiologie schließen sich an:

Control of Specialized Metabolism by Signaling and Transcriptional Regulation: Opportunities for New Platforms for Drug Discovery? (M. DANIEL-IVAD, S. PIMENTEL-ELARDO, J.R. NODWELL); Above and Beyond Watson and Crick: Guanine Quadruplex

Structures and Microbes (H. Steven SEIFERT); The Clash of Macromolecular Titans: Replication-Transcription Conflicts in Bacteria (Kevin S. LANG, Houra MERRIKH); Eco-evolutionary Dynamics Linked to Horizontal Gene Transfer in Vibrios (Frédérique LE ROUX, Melanie BLOKESCH); The Complex Rcs Regulatory Cascade (Erin WALL, Nadim MAJDALANI, Susan GOTTESMAN); Broadening the Definition of Bacterial Small RNAs: Characteristics and Mechanisms of Action (Marie-Claude CARRIER, David LALAOUNA, Brie MASSÉ); Transcriptional Responses to ppGpp and DksA (Richard L. GOURSE, Albert Y. CHEN, Saumya GOPALKRISHNAN, Patricia SANCHEZ-VAZQUEZ, Angela MYERS, Wilma ROSS); Context-Specific Action of Ribosomal Antibiotics (Nora VÁZQUEZ-LASLOP, Alexander S. MANKIN); Antibiotic-Induced Genetic Variation: How It Arises and How It Can Be Prevented (Jesús BLÁZQUEZ, Jerónimo RODRÍGUEZ-BELTRÁN, Ivan MATIC); Using Cryo-EM to Investigate Bacterial Secretion Systems (Chiara RAPISARDA, Matteo TASSINARI, Francesca GUBELLINI, Rémi FRONZES); A New Lens for RNA Localization: Liquid-Liquid Phase Separation (Erin M. LANGDON, Amy S. GLADFELTER); The Promise of a Malaria Vaccine – Are We Closer? (Matthew B. LAURENS); Spo11-Independent Meiosis in Social Amoebae (Gareth BLOOMFIELD); The Glyoxylate Shunt, 60 Years On (Stephen K. DOLAN, Martin WELCH); Electron Bifurcation: A Long-Hidden Energy-Coupling Mechanism (Volker MÜLLER, Nilanjan Pal CHOWDHURY, Mirko BASEN); Epigenetic Variation and Regulation in Malaria Parasites (Manoj T. DURAISINGH, Kristen M. SKILLMAN); Interspecific Gene Exchange as a Driver of Adaptive Evolution in Fungi (Alice FEURTEY, Eva H. STUKENBROCK); Communication Between the Microbiota and Mammalian Immunity (Kyla S. OST, June L. ROUND); Ebola: Lessons on Vaccine Development (Heinz FELDMANN, Friederike FELDMANN, Andrea MARZI); Detection of Microbial Infections Through Innate Immune Sensing of Nucleic Acids (Xiaojun TAN, Lijun SUN, Jueqi CHEN, Zhijian J. CHEN); The Epigenome, Cell Cycle, and Development in *Toxoplasma* (Kami KIM); Regulation of Sexual Commitment and Gametocytogenesis in Malaria Parasites (Gabrielle A. JOSLING, Kim C. WILLIAMSON, Manuel LINÁS); Pneumococcal Vaccines: Host Interactions, Population Dynamics, and Design Principles (Nicholas J. CROUCHER, Alessandra LØCHEN, Stephen D. BENTLEY).

Im Anschluss an das Inhaltsverzeichnis wird auf fachlich verwandte Beiträge in anderen „Annual Reviews“ verwiesen: z. B. im **Annual Review of Biochemistry**, Volume 87 (2018); Lesion Bypass and the Reactivation of Stalled Replication Forks (Kenneth J. MARIANS); Translesion and Repair DNA Polymerases: Diverse Structure and Mechanism (Wei YANG, Yang GAO); Ribosome-Targeting Antibiotics: Modes of Action, Mechanisms of Resistance, and Implications for Drug Design (Jinzhong LIN, Dejian ZHOU, Thomas A. STEITZ, Yury S. POLIKANOV, Matthieu G. GAGNON); Regulated Proteolysis in Bacteria (Samar A. MAHMOUD, Peter CHIEN); Imaging Bacterial Cell Wall Biosynthesis (Atanas D. RADKOV, Yen-Pang HSU, Garrett BOOHER, Michael S. VANNIEUWENHZE).

Im **Annual Review of Biophysics**, Volume 47 (2018); Modeling Cell Size Regulation: From Single-Cell-Level Statistics to Molecular Mechanisms and Population-Level Effects (Po-Yi HO, Jie LIN, Ariel AMIR); Understanding Biological Regulation Through Synthetic Biology (Caleb J. BASHOR, James J. COLLINS); Dynamics of Bacterial Gene Regulatory Networks (David L. SHIS, Matthew R. BENNETT, Oleg A. IGOSHIN); Single-Molecule View of Small RNA-Guided Target Search and Recognition (Viktorija GLOBYTE, Sung Hyun KIM, Chirlmin JOO); Behavioral Variability and Phenotypic Diversity in Bacterial Chemotaxis (Adam James WAITE, Nicholas W. FRANKEL, Thierry EMONET).

Im **Annual Review of Genetics**, Volume 51 (2017); Origin and Evolution of the Universal Genetic Code (Eugene V. KOONIN, Artem S. NOVOZHILOV); Transcriptional Regulation in Archaea: From Individual Genes to Global Regulatory Networks (Mar MARTINEZ-PASTOR, Peter D. TONNER, Cynthia L. DARNELL, Amy K. SCHMID); Genetic and Structural Analyses of RRNPP Intercellular Peptide Signaling of Gram-Positive Bacteria (Matthew B. NEIDITCH, Glenn C. CAPODAGLI, Gerd PREHNA, Michael J. FEDERLE); Big Lessons from Little Yeast: Budding and Fission Yeast Centrosome Structure, Duplication, and Function (Ann M. CAVANAUGH, Sue L. JASPERSEN); The Relationship Between the Human Genome and Microbiome Comes into View (Julia K. GOODRICH, Emily R. DAVENPORT, Andrew G. CLARK, Ruth E. LEY).

Im **Annual Review of Immunology**, Volume 36 (2018); Host Control of Fungal Infections: Lessons from Basic Studies and Human Cohorts (Michail S. LIONAKIS, Stuart M. LEVITZ); Immune Responses to Retroviruses (Asier SÁEZ-CIRIÓN, Nicolas MANEL); Immune Response to Dengue and Zika (Annie Elong NGONO, Suján SHRESTA); IgA Function in Relation to the Intestinal Microbiota (Andrew J. MACPHERSON, Bahtiyar YILMAZ, Julien P. LIMENITAKIS, Stephanie C. GANAL-VONARBURG); The Immune Response to *Mycobacterium tuberculosis* in HIV-1-Coinfected Persons (Hanif ESMail, Catherine RIOU, Elsa DU BRUYN, Rachel Pei-Jen LAI, Yolande X.R. HARLEY, Graeme MEINTJES, Katalin A. WILKINSON, Robert J. WILKINSON).

Im **Annual Review of Medicine**, Volume 69 (2018); New Molecular Diagnostic Approaches to Bacterial Infections and Antibacterial Resistance (Ephraim L. TSALIK, Robert A. BONOMO, Vance G. FOWLER JR.); Zika, Chikungunya, and Other Emerging Vector-Borne Viral Diseases (Scott C. WEAVER, Caroline CHARLIER, Nikos VASILAKIS, Marc LECUIT).

Im **Annual Review of Phytopathology**, Volume 56 (2018); *Xylella fastidiosa*: Insights into an Emerging Plant Pathogen (Anne SICARD, Adam R. ZEILINGER, Mathieu VANHOVE, Tyler E. SCHARTEL, Dylan J. BEAL, Matthew P. DAUGHERTY, Rodrigo P.P. ALMEIDA); Antibiotic Resistance in Plant-Pathogenic Bacteria (George W. SUNDIN, Nian WANG); Biology of Fungi and Their Bacterial Endosymbionts (Teresa E. PAWLOWSKA, Maria L. GASPARI, Olga A. LASTOVETSKY, Stephen J. MONDO, Imperio REAL-RAMIREZ, Evaniya SHAKYA, Paola BONFANTE); Seeing the Light: The Roles of Red- and Blue-Light Sensing in Plant Microbes (Gwyn A. BEATTIE, Bridget M. HATFIELD, Haili DONG, Regina S. MCGRANE); Multifaceted Impacts of Bacteriophages in the Plant Microbiome (Britt KOSKELLA, Tiffany B. TAYLOR).

Im **Annual Review of Plant Biology**, Volume 69 (2018); Diversity of Chlorophototrophic Bacteria Revealed in the Omics Era (Vera THIEL, Marcus TANK, Donald A. BRYANT).

Im **Annual Review of Statistics and Its Application**, Volume 5 (2018); Toward Integrative Bayesian Analysis in Molecular Biology (Katja ICKSTADT, Martin SCHÄFER, Manuela ZUCKNICK).

Im **Annual Review of Virology**, Volume 4 (2017); The Discovery, Mechanisms, and Evolutionary Impact of Anti-CRISPRs (Adair L. BORGES, Alan R. DAVIDSON, Joseph BONDY-DENOMY); The Distribution, Evolution, and Roles of Gene Transfer Agents in Prokaryotic Genetic Exchange (Andrew S. LANG, Alexander B. WESTBYE, J. Thomas BEATTY); Phage Tail-Like Bacteriocins (Dean SCHOLL).

Ein Autorenindex der Bände 68 bis 72 ergänzt den vorliegenden Band 72 des Annual Review of Microbiology. Somit ist der Band 72 – wie die vorhergehenden – eine umfassende Informationsquelle mikrobiologischer Literatur. Außerdem ist der Band online unter <http://micro.annualreviews.org> recherchierbar.

Die Redaktion