

BULLETIN DES SOMMAIRES DES PERIODIQUES SCIENTIFIQUES



Septembre/Octobre 2016



Avis aux Lecteurs

Le présent bulletin des sommaires concerne le sommaire des périodiques reçus au Service de Documentation de l'INRA.

La consultation du sommaire des périodiques est rendue facile grâce à la liste alphabétique des titres des périodiques ci-jointe. Cette liste renvoie aux pages des sommaires dans ce bulletin, ainsi les articles qui vous intéressent peuvent être commandés auprès du service en respectant de mentionner les données suivantes :

- Le titre du périodique ;
- > Le volume et le numéro du périodique ;
- > La cote de rangement du périodique ;
- > Le titre de l'article et la page où est située l'article ;
- > Le numéro du bulletin des sommaires ;

Ex : bulletin des sommaires du mois de)



Titre du périodique	Volume	Neuméro	Finnée	cole	Page
Biometrics	72	3	2016	1131	1-2
Canadian Journal of Plant Science	96	3	2016	874	3-5
	96	4	2016	874	6-8
Canadian Journal of Soil Science	96	2	2016	660	9-10
Cereal Foods World	61	3	2016	1088	11
	61	4	2016	1088	12
Economie Rurale		355	2016	319	13
		356	2016	319	14-15
Fourrages		227	2016	321	16
Heridity	117	4	2016	416	17
	117	5	2016	416	18
Industrie des Céréales		199	2016	1141	19-20
Journal of Essential Oil Research	28	6	2016	1053	21
Journal of Food Science & Technology	30	3	2016	1084	22
Journal of Herbs, Spices & Medicinal Plants	22	4	2016	551	23
Molecular Plant-Microbe Interactions	29	7	2016	1086	24
Phytopathology	106	8	2016	908	25

Titre du périodique	Volume	Neméro	5-Amnée	cole	Page
Phytopathology	106	9	2016	908	26
Plant Disease	100	8	2016	1127	27-29
	100	9	2016	1127	30-31
	100	10	2016	1127	32-34
Raumforschung und Raumordnung	74	4	2016	1231	35
Recherche Agronomique Suisse		9	2016	1167	36
Revue Suisse de Viticulture Arboriculture Horticulture	48	4	2016	929	37
Scandinavian Journal of Statistics	43	4	2016	1137	38
Soil Science	181	6	2016	149	39
The Journal of Horticultural Science & Biotechnology	91	6	2016	924	40

Bon de Commande

Formulé par :	F	or	ml	lé	pa	r:
---------------	---	----	----	----	----	----

- ♣ Mme/Mr:
- ♣ Département/Service :
- Division/Centre:

Bulletin des sommaires du mois Septembre/Octobre 2016

Titre de la revue	Volume & Numéro	Cote de rangement	Titre de l'article	Page

Date: Signature:

A retourner à la : Division de l'Information et de la Communication

TABLE OF CONTENTS

BIOMETRIC METHODOLOGY	
An Information-Theoretic Approach for the Evaluation of Surrogate Endpoints Based on Causal Inference A. A	669
Spatial Regression with Covariate Measurement Error: A Semiparametric Approach	678
Mechanistic Spatio-Temporal Point Process Models for Marked Point Processes, with a View to Forest Stand Data	683
A Flexible Ratio Regression Approach for Zero-Truncated Capture–Recapture Counts	697
Flexible Link Functions in Nonparametric Binary Regression with Gaussian Process Priors	703
Robust Nonparametric Estimation of Monotone Regression Functions with Interval-Censored Observations	720
Model Selection and Inference for Censored Lifetime Medical Expenditures	73
Estimating Treatment Effect in a Proportional Hazards Model in Randomized Clinical Trials with All-or-Nothing Compliance	742
Sparse Estimation of Cox Proportional Hazards Models via Approximated Information Criteria	75
A Log-Rank-Type Test to Compare Net Survival Distributions N. Grafféo, F. Castell, A. Belot, and R. Giorgi	760
A New Flexible Dependence Measure for Semi-Competing Risks	770
Nonparametric Analysis of Bivariate Gap Time with Competing Risks CY. Huang, C. Wang, and MC. Wang	780
Estimation of Sparse Directed Acyclic Graphs for Multivariate Counts Data S. W. Han and H. Zhong	790
Modeling Overdispersion Heterogeneity in Differential Expression Analysis Using Mixtures	804
Sequential Model Selection-Based Segmentation to Detect DNA Copy Number Variation	
	815
The Latent Class Twin Method	820
The Interval Testing Procedure: A General Framework for Inference in Functional Data Analysis	835
Interpretable Functional Principal Component Analysis Z. Lin, L. Wang, and J. Cao	846
BIOMETRIC PRACTICE	
Model Assessment in Dynamic Treatment Regimen Estimation via Double Robustness	
	855
Estimating Optimal Shared-Parameter Dynamic Regimens with Application to a Multistage Depression Clinical Trial	865
A Predictive Enrichment Procedure to Identify Potential Responders to a New Therapy for Randomized,	
Comparative Controlled Clinical Studies	873
Unbiased Estimation of Biomarker Panel Performance When Combining Training and Testing Data in a Group Sequential Design	888
Addressing Issues Associated with Evaluating Prediction Models for Survival Endpoints Based on the Concordance Statistic	893
Joint Model for Left-Censored Longitudinal Data, Recurrent Events and Terminal Event: Predictive Abilities of Tumor Burden for Cancer Evolution with Application to the FFCD 2000–05 Trial	901
A Class of Joint Models for Multivariate Longitudinal Measurements and a Binary Event S. Kim and P. S. Albert	917
Global Rank Tests for Multiple, Possibly Censored, Outcomes	926
A Three-Groups Model for High-Throughput Survival Screens	
B A Shahy G Skibinski M Ando E S LaDow and S Finkheiner	936

A Novel Random Effect Model for GWAS Meta-Analysis and Its Application to Trans-Ethnic Meta-Analysis	945
Bayesian Inference for Latent Biologic Structure with Determinantal Point Processes (DPP)	955
An Efficient Design Strategy for Logistic Regression Using Outcome- and Covariate-Dependent Pooling of Biospecimens Prior to Assay	965
Estimation and Interpretation of Heterogeneous Vaccine Efficacy Against Recurrent Infections	970
Marginal Mean Models for Zero-Inflated Count Data D. Todem, K.M. Kim, and WW. Hsu	986
Boomerang: A Method for Recursive Reclassification S. M. Devlin, I. Ostrovnaya, and M. Gönen	995
READER REACTION	
Instrumental Variable Additive Hazards Models with Exposure-Dependent Censoring K. C. G. Chan	1003
BOOK REVIEWS	1000

Canadian Journal of Plant Science

VOLUME 96, NUMBER 3, JUNE 2016

Revue canadienne de phytotechnie

VOLUME 96, NUMÉRO 3, JUIN 2016

	Grain ARTICLE	
Shian Shen, Hongwei Hou, Chunbang Ding, Deng-Jin Bing, and Zhen-Xiang Lu	404–412	Protein content correlates with starch morphology, composition and physicochemical properties in field peas
*	Forage	
	ARTICLE	
Gilles Bélanger, Gaëtan F. Tremblay, Annick Bertrand, Danielle Mongrain, Gaétan Parent, Philippe Savoie, Daniel Massé, Yan Gilbert, and Daniel Babineau	413-422	Reed canarygrass crop biomass and silage as affected by harvest date and nitrogen fertilization
	Molecular Bio	logy
	ARTICLES	
Xiaomao Cheng, Shu Xia, Xihua Zeng, Jianxun Gu, Yuan Yang, Jinsong Xu, Chao Liu, Kede Liu, and Jiangsheng Wu	423–432	Identification of quantitative trait loci associated with oil content and development of near isogenic lines for stable <i>qOC-A10</i> in <i>Brasscia napus</i> L.
Haiyan Shi, Yujing Zhao, Xuemin An, and Yuxing Zhang	433–438	Molecular characterization of pear 14-3-3b gene regulated during fruit development
Yan-Qing Wu, Da-Qiu Zhao, Chen-Xia Han, and Jun Tao	474–484	Biochemical and molecular responses of herbaceous peony to high temperature stress
Hailin Liu, Wanxu Yang, Jing Hou, Nan Hu, Tongming Yin, Shuxian Li	494–502	Genetic identification of 43 elite clonal accessions of <i>Populus deltoides</i> by SSR fingerprinting

Continued on inside back cover / Suite au verso



Front cover: Oat field. Image credit: istockphoto.com/mashabuba

Page couverture : Champ d'avoine. Mention de source de l'image : istockphoto.com/mashabuba



Printed in Canada by | Imprimé au Canada par So-tek Graphics Inc.

Page production by | Mise en page par



	Fruit	
	ARTICLES	
J. Li, D. Percival, J. Hoyle, J. White, K. Head, and K. Pruski	329–338	Phenology and yield of native fruits cloudberry/bakeapple (Rubus chamaemorus L.) and lingonberry/partridgeberry (Vaccinium vitis-idaea L.) grown in Southern Labrador, Canada
Pat Bowen, Krista C. Shellie, Lynn Mills, Jim Willwerth, Carl Bogdanoff, and Markus Keller	347–359	Abscisic acid form, concentration, and application timing influence phenology and bud cold hardiness in Merlot grapevines
Ibrahim Bolat, Murat Dikilitas, Ali Ikinci, Sezai ERCISLI, Tahsin Tonkaz	485–493	Morphological, Physiological, Biochemical characteristics and bud success responses of Myrobolan 29 C plum rootstock subjected to water stress
	Ornamenta ARTICLES	I
Aung Htay Naing, Su Min Jeon, Jun Seong Park, Chang Kil Kim	503-510	Combined effects of supplementary light and CO2 on rose growth and the production of good quality cut flowers
Iftikhar Ahmad, Muhammad Saleem, John M. Dole	511-516	Postharvest performance of cut 'White Prosperity' gladiolus spikes in response to nano- and other silver sources
	Vegetable ARTICLE	
Vijay Bahadur, Vijay Yeshudas, and Om Prakash Meena	371–381	Nature and magnitude of genetic variability and diversity analysis of Indian turmeric accessions using agro-morphological descriptors
	Plant Patholo ARTICLE	ду
P. Lujan, S. Sanogo, N. Puppala, and J. Randall	461–473	Factors affecting mycelium pigmentation and pathogenicity of Sclerotinia sclerotiorum on Valencia peanut
	Weed Science ARTICLES	e e
Michael E. Foley	321–328	Germination of leafy spurge (<i>Euphorbia esula</i> L.) seeds under alternating temperatures: the effects of amplitude, midpoint, and imbibition in gibberellic acid
Robert E. Nurse, Kristen Obeid, and Eric R. Page	360–366	Optimal planting date, row width, and critical weed-free period for grain amaranth and quinoa grown in Ontario, Canada
Marie-Josée Simard and Camille Lambert-Beaudet	448-454	Weed seed survival in experimental mini-silos of corn and alfalfa
Nader Soltani, Robert E. Nurse, and Peter H. Sikkema	455-460	Biologically effective dose of glyphosate as influenced by weed size in corn
	SHORT COMMUNIC	CATION
Andrew J. Dillon, Paul Kron, Michael Walsh, and Mithila Jugulam	384–386	Transfer of 2,4-D-resistance from <i>Raphanus raphanistrum</i> into <i>Brassica napus</i> : production of F1 hybrids through embryo rescue
	Other ARTICLES	
E.G. Smith, T.K. Turkington, J.T. O'Donovan, M.J. Edney, P.E. Juskiw, R.H. McKenzie, K.N. Harker, G.W. Clayton, K. Xi, W.E. May, R.B. Irvine, S. Brandt, E.N. Johnson, and S. Perkavic	339–346	Influence of production systems on return and risk from malting barley production in western Canada

and S. Perkevic

Contents (concluded) / Table de matières (suite et fin)		*
Dilip K. Biswas and Bao-Luo Ma	392–403	Effect of nitrogen rate and fertilizer nitrogen source on physiology, yield, grain quality, and nitrogen use efficiency in corn
Farhad Karami, Omidali Akbarpour, and Abdolhos- sein Rezaei Nejad	439–447	Estimation of genotypic correlation and heritability of apricot traits, using restricted maximum likelihood in repeated measures data
	CORRIGEND	UM
Samir C. Debnath	382–383	Corrigendum: Bioreactors and molecular analysis in berry crop micropropagation — A review
	Cultivar Descri CULTIVAR DESCRI	9 ¹ ■ 040 = 0.000
Thin Meiw Choo, Allen G. Xue, and Richard A. Martin	367–370	AAC Vitality barley
Lana M. Reid, Xiaoyang Zhu, Constantin Voloaca, Jinhe Wu, Tsegaye Woldemariam, and Krishan Jindal	387–391	CO455 corn inbred line
Dean Spaner, Muhammad Iqbal, Alireza Navabi, Klaus Strenzke, Brian L Beres	517–524	Parata hard red spring wheat

Canadian Journal of Plant Science

VOLUME 96, NUMBER 4, AUGUST 2016

Revue canadienne de phytotechnie

VOLUME 96, NUMÉRO 4, AOÛT 2016

Grain

SHORT COMMUNICATION

N.H. Zelt and D.J. Schoen

525-529

Testing for heterosis in traits associated with seed yield in

Camelina sativa

Forage

ARTICLES

Y. Abu, J.T. Romo, Y. Bai, and B. Coulman

551-563

Priming seeds in aqueous smoke solutions to improve seed

germination and biomass production of perennial forage species

Vern S. Baron, Duane McCartney, A. Campbell Dick, Adele J. Ohama, John A. Basarab, and Raquel R. Doce 689-700

Swath-grazing oat or grazing stockpiled perennial grass compared

with a traditional winter feeding method for beef cows in central

Alberta

Molecular Biology

ARTICLE

Houcheng Zhou, Gang Li, and Xia Zhao

604-612

Comparative analysis of pectate lyase in relation to softening in

strawberry fruits

Fruit ARTICLE

Jennifer R. DeEll, Geoffrey B. Lum, and Behrouz Ehsani-Moghaddam

621-629

Effects of delayed controlled atmosphere storage on disorder

development in 'Honeycrisp' apples

Vegetable ARTICLE

Melissa Quinche Gonzalez, Annie Pellerin, and Léon E. Parent 670-676

Meta-analysis of lettuce (Lactuca sativa L.) response to added N in

organic soils

Continued on inside back cover / Suite au verso



Front cover: Glyphosate-resistant volunteer corn or hybrid's corn progeny (Zea mays L.) plants. Grown in the weed science green-house at the University of Nebraska-Lincoln for testing the effect of seed burial depth on germination and emergence. Photo taken on August 2013, courtesy of Parminder S. Chahal (PhD student with Dr. Amit Jhala).

Page couverture : Plants de maïs spontané tolérant au glyphosate ou de descendance de maïs hybride (Zea mays L.); semés dans la Weed Science Greenhouse de l'Université de Nebraska-Lincoln pour évaluer les effets de la profondeur d'enfouissement des graines sur la germination et la levée. Photo prise en août 2013, gracieuseté de Parminder S. Chahal (étudiant Ph. D. du Dr Amit Jhala).



Printed in Canada by | Imprimé au Canada par So-tek Graphics Inc.

Page production by | Mise en page par Lumina Datamatics



0008-4220(201608)96:4;1-Z

8.0	Plant Patholo ARTICLES	
Kyungseok Park, Yong-Soon Park, Jamal Ahamed, Swarnalee Dutta, Hojin Ryu, Seo-Hyun Lee, Kotnala Balaraju, Maniruzzaman Manir, and Surk-Sik Moon	564–570	Elicitation of induced systemic resistance of chili pepper by iturin A analogs derived from <i>Bacillus vallismortis</i> EXTN-1
Mohamed Abdelhalim, Odd Arne Rognli, Ingerd Skow Hofgaard, Liv Østrem, and Anne Marte Tronsmo	579–589	Snow mould resistance under controlled conditions and winter survival in the field in populations of perennial ryegrass, meadow fescue, and Festulolium are partly dependent on ploidy level and degree of northern adaptation
	Weed Science ARTICLES	ce
Angela Hughes, Scott N. White, Nathan S. Boyd, Paul Hildebrand, and G. Christopher Cutler	590–596	Red sorrel management and potential effect of red sorrel pollen on <i>Botrytis cinerea</i> spore germination and infection of lowbush blueberry (<i>Vaccinium angustifolium</i> Ait.) flowers
Parminder S. Chahal and Amit J. Jhala	613–620	Factors affecting germination and emergence of glyphosate- resistant hybrid corn (Zea mays L.) and its progeny
K.J. Mahoney, K.E. McNaughton, and P.H. Sikkema	657–661	Herbicide tank mixtures to control co-existing glyphosate-resistant Canada fleabane and giant ragweed in soybean
S. Chakraborty, S.Z.H. Cici, J. Todd, C. Loucks, and R.C. Van Acker	677–688	Exploring the weed biology of two potentially novel oilseed crops: Euphorbia lagascae and Centrapalus pauciflorus
	Application of Tech ARTICLE	hnology
Ricki Rathwell, Mukund R. Shukla, A. Maxwell P. Jones, and Praveen K. Saxena	571-578	In vitro propagation of cherry birch (Betula lenta L.)
	Other ARTICLES	
Solange Ferreira da Silveira Silveira, Danyela de Cássia da Silva Oliveira, Daiana Doring Wolter, Henrique de Souza Luche, Victoria Freitas de Oliveira, Ricardo Figueiredo, Cristiano Stülp, Henrique Pasquetti Carbonari, Maraisa Crestani Hawerroth, Luis Carlos Gutkoski, Luciano Carlos da Maia, and Antônio Costa de Oliveira	530–538	Performance of white oat cultivars for grain chemical content
Li Mei Gao, Yong Feng Li, and Rong Han	539-550	The detoxification effects of He-Ne laser irradiation on cytotoxicity of cadmium sulfide nanoparticles (CdSNPs) in tall fescue seedlings
Silvia Pampana, Alessandro Masoni, and Iduna Arduini	597-603	Response of cool-season grain legumes to waterlogging at flowering
Hyunsuk Shin, Sewon Oh, Rajeev Arora, and Daeil Kim	630–638	Proline accumulation in response to high temperature in winter- acclimated shoots of <i>Prunus persica</i> : a response associated with growth resumption or heat stress?
Chathurika Wijewardana, W. Brien Henry, Matthew W. Hock, and K. Raja Reddy	639-656	Growth and physiological trait variation among corn hybrids for cold tolerance
Toktam Taghavi, Adam Dale, Becky Hughes, and John Zandstra	662–669	The performance of dayneutral strawberries differs between environments in Ontario

Contents (concluded) / Table de matières (suite et fin)		
Jiazheng Yuan, Agnes Murphy, David De Koeyer, Martin Lague, and Benoît Bizimungu	701–710	Effectiveness of the field selection parameters on potato yield in Atlantic Canada
	Cultivar Desci	
R.W. Duncan, P.B.E. Mcvetty, J.L. Duguid, S.L. Fox, W. Paulmann, O. Sass, W.G.D. Fernando, and G. Li	711–713	HYHEAR 2 Roundup Ready® high erucic acid, low glucosinolate hybrid summer rape
L.M. Reid, X. Zhu, C. Voloaca, J. Wu, T. Woldemariam, and K. Jindal	714–718	CO456 corn inbred line

719-725

A.K. Singh, R.M. DePauw, R.E. Knox, J.M. Clarke, T.N. McCaig, R.D. Cuthbert, and Y. Ruan AAC Durafield durum wheat

Canadian Journal of Soil Science

VOLUME 96, NUMBER 2, JUNE 2016

Revue canadienne de la science du sol

VOLUME 96, NUMÉRO 2, JUIN 2016

Composition and Chemical Processes

ARTICLE

Hakima Chelabi, Lotfi Khiari, Jacques Gallichand, and Claude-Alla Joseph

244-255

Soil sample preparation techniques on routine analyses in Quebec affect lime and fertilizer recommendations

Contamination and Environmental Stewardship

ARTICLES

W. Daniel Reynolds, Craig F. Drury, W. Parkin, John D. Lauzon, Joseph K. Saso, Tiequan Zhang, Kui Liu, Tom W. Welacky, Xueming Yang, Chin S. Tan, Wayne Calder, Tom O. Oloya, and D. Keith Reid 105-121-

Solute dynamics and the Ontario nitrogen index: I. Chloride leach-

C.F. Drury, W.D. Reynolds, G.W. Parkin, J.D. Lauzon, J.K. Saso, T.Q. Zhang, X.M. Yang, C.S. Tan, K. Liu, W. Calder, T.O. Oloya,

and W.D. Willms

and Kevin Sedivec

122-135

Solute dynamics and the Ontario nitrogen index: II. Nitrate leach-

T.W. Welacky, and D.K. Reid J.J. Miller, T. Curtis, D.S. Chanasyk, S. Reedyk,

154-168

Effectiveness of soil in vegetated buffers to retain nutrients and sediment transported by concentrated runoff through deep gullies

Aaron Klaustermeier, Hannah Tomlinson, Aaron L.M. Daigh, Ryan Limb, Thomas DeSutter,

233-243

Comparison of soil-to-water suspension ratios for determining electrical conductivity of oil-production-water-contaminated soils

Continued on inside back cover / Suite au verso



Page couverture : Érosion. Mention de source de l'image : iStock.com/PenelopeB



Printed in Canada by | Imprimé au Canada pa So-tek Graphics Inc.

Page production by | Mise en page par Lumina Datamatics



0008-4271(201606)96:2;1-R

Ecology, Biological Processes, and Plant Interactions

ARTICLES

Yichao Shi, Noura Ziadi, Aimé J. Messiga, and Roger Lalande	136–144	Nongrowing season soil surface nitrate and phosphate dynamics in a corn-soybean rotation in eastern Canada: in situ evaluation using anionic exchange membranes
Tamihisa Ohta and Tsutom Hiura	199-206	Root exudation of low-molecular-mass-organic acids by six tree species alters the dynamics of calcium and magnesium in soil
Bernard Gagnon, Noura Ziadi, Philippe Rochette, Martin H. Chantigny, Denis A. Angers, Normand Bertrand, and Ward N. Smith	219–232	Soil-surface carbon dioxide emission following nitrogen fertilization in corn

Normand Bertrand, and Ward N. Smith			
Genesis, Lands	cape Process	es, and Relationships	
ARTICLE			
PY. Gasser, C.A.S. Smith, J.A. Brierley, P.H. Schut, D. Neilsen, and E.A. Kenney	256–269	The use of the land suitability rating system to assess climate change impacts on corn production in the lower Fraser Valley of British Columbia	
Management for A	Agricultural, F	Forestry, and Urban Uses	
	ARTICLES		
Muhammad Adnan, Zahir Shah, Muhammad Arif, Muhammad Jamal Khan, Ishaq Ahmad Mian, Muhammad Sharif, Mukhtar Alam, Abdul Basir, Hidayat Ullah, Inayat-ur-Rahman, and Nouman Saleem	169–176	Impact of rhizobial inoculum and inorganic fertilizers on nutrients (NPK) availability and uptake in wheat crop	
Francis J. Larney, Lingling Li, H. Henry Janzen, Denis A. Angers, and Barry M. Olson	177–190	Soil quality attributes, soil resilience, and legacy effects following topsoil removal and one-time amendments	
M.A. Ribey and I.P. O'Halloran	191–198	Consequences of Ontario P index recommendations for reduced manure and fertilizer phosphorus applications on corn yields and soil phosphorus	
Joshua J. Puhlick, Ivan J. Fernandez, and Aaron R. Weiskittel	207–218	Evaluation of forest management effects on the mineral soil carbon pool of a lowland, mixed-species forest in Maine, USA	

Physical Processes and Interfaces

ARTICLE

Theresa Adesanya, Olalekan Akinremi, and Francis Zvomuya	145-153	Physical properties of an Orthic Black Chernozem after 5 years of liquid and solid pig manure application to annual and perennial crops
---	---------	---

Cereal Foods World® • Volume 61, Number 3 • Health & Nutrition

Feature ———	Navigating Noodle Texture: Taking the Rheological Route
CFW Reports	CIMMYT Series on Carbohydrates, Wheat, Grains, and Health: Carbohydrates, Grains, and Whole Grains and Disease Prevention. Part I. Body Weight and Obesity
	CIMMYT Series on Carbohydrates, Wheat, Grains, and Health: Carbohydrates, Grains, and Whole Grains and Disease Prevention. Part II. Blood Pressure, Metabolic Syndrome, and Diabetes
AACCI Reports ————	AACCI Annual Meeting Highlights124
	Getting to Know AACCI: Interview with Alessandra Marti 126
Columns ————	Overpromising and Underdelivering—Why Nutrition Science Has Fallen on Hard Times
	Embrace Our Food Industry (R)evolution 130 D. Best
In Every Issue —————	AACCI Corporate Members
	NEXT ISSUE — Processing

Cover Graphic: @ ddsign@Shutterstock.com

AACC International, Inc. ■ An International Society Since 1915

Cereal Foods World® • Volume 61, Number 4 • Processing

Feature ————	Machine Vision Combined with Near-Infrared Spectroscopy to Guarantee Food Safety
CFW Report	CIMMYT Series on Carbohydrates, Wheat, Grains, and Health: Carbohydrates and Their Grain Sources: A Review on Their Relationships to Brain Health
AACCI Reports	Getting to Know AACCI: Interview with Moses Khamis 157
	Environmental Monitoring Programs
	AACCI Annual Meeting Preview 160
CFW Report	European Young Cereal Scientists Gather in Bergamo, Italy
Columns	Shipping and Receiving: Expanding What You Do to Ensure Compliance
	Food Processing Is Not All Bad News
In Every Issue	AACCI Corporate Members
	NEXT ISSUE — Grains & Pulses

Cover Graphic: © Doggygraph@Shutterstock.com

AACC International, Inc. ■ An International Society Since 1915

Agricultures - Alimentations - Territoires

355 • Septembre-Octobre 2016

RECHERCHE

Pierre NAVES	3
L'encadrement des circuits courts Du secteur agricole aux territoires ?	
Elsa MARTIN, Jaune VAITKEVICIUTE2 Mesure de l'impact du changement climatique sur l'agriculture de Côte-d'Or	1
Fateh MAMINE, Étienne MONTAIGNE, Jean-Pierre BOUTONNET4 Perception de la qualité des produits laitiers et comportement du consommateur algérien	9
Abdelmohssin EL MOKADDEM, Sylvie MORARDET, Caroline LEJARS, Mohammed Rachid DOUKKALI, Fayçal BENCHEKROUN6 Conception d'un paiement pour services environnementaux en pâturages collectifs. Une expérimentation des choix	7
Cheikh Ahmadou Bamba NGOM, Felwine SARR, Amadou Abdoulaye FALL9 Mesure de l'efficacité technique des riziculteurs du bassin du fleuve Sénégal	1

NOTE DE LECTURE

Thierry POUCH à propos de l'ouvrage de Sébastien ABIS......106 Géopolitique du blé. Un produit vital pour la sécurité mondiale



ÉDITORIAL

Pierre Labarthe et Aude Ridier

RECHERCHE

Anne MUSSON, Damien ROUSSELIÈRE	<u>9</u>
Ronan LE VELLY, Ivan DUFEU, Laurent LE GREL Les systèmes alimentaires alternatifs peuvent-ils se développer commercialement sans perdre leur âme ? Analyse de trois agencements marchands	31
Danielle GALLIANO, Simon NADEL Les processus sectoriels de l'innovation environnementale : les spécificités des firmes agroalimentaires françaises	47
Frédérick CLERSON, Annie ROYER, Érick DUCHESNE Des quotas aux contrats : perceptions de la filière laitière suisse et analyse contractuelle	69
FAITS ET CHIFFRES	
Éric PERRET, Nadine TURPIN Territoires et exploitations équines en France	85
Magali AUBERT, Geoffroy ENJOLRASAnalyse financière des exploitations fruitières et maraîchères françaises qui vendent au détail	99



Gilles ALLAIRE à propos de l'ouvrage de Corinne MARACHE	
et Philippe MEYZIE	115
Les produits de terroir. L'empreinte de la ville	

fourrages

N°227 Septembre 2016



Les légumineuses fourragères et prairiales : quoi de neuf ?

(2e partie)*

La valorisation des légumineuses fourragères et prairiales dans les systèmes de production animale

157 A. ULITTEWAAL, S. CHAPUIS, G. CROCO, P. LÉPÉE Quoi de neuf en matière de récolte et conservation des légumineuses fourragères ?

Advances in methods for harvesting and storing forage legumes

167 D. KNODEN, M. HAUTOT, C. DECAMPS

Essais multilocaux en Belgique sur les potentialités de production et de valeur alimentaire des assoclations graminées - luzerne

Multisite experiments in Belgium examining the production potential and nutritrional value of grass-lucerne associations

171 R. BAUMONT, D. BASTIEN, A. FÉRARD,

G. MAXIN, V. NIDERKORN

Les intérêts multiples des légumineuses fourragères pour l'allmentation des ruminants The multiple advantages of using forage legumes

to feed ruminants

181

189

B. ROULLE, L. DELABY, R. DELAGARDE, D. CALLAUD, D. DÉSARMÉNIEN, B. DAVEAU, S. GUIBERT

Intérêt des légumineuses fourragères paturées ou récoltées dans l'alimentation des vaches laitières en France

Benefits of using legumes as forage or fodder to feed French dairy cattle

J.-P. COUTARD, J. FORTIN, L. MADELINE, C. EXPERTON Intérêt des légumineuses dans les systèmes de production de viande bovine conduits en agriculture biologique

Benefits of legumes for organic beef production systems

199 H. CAILLAT, N. BOSSIS, J. JOST, P. PIERRE,

J. LEGARTO, Y. LEFRILEUX, R. DELAGARDE

Les légumineuses dans les systèmes caprins : quelles espèces pour quelles valorisations ? Making effective use of legumes in dairy goat

eveteme

2. Economie et politiques publiques

207 N. Bossis, J. Jost, J. Pavie, S. Minette,

S. BOUDET, A. DUMONTIFR

Approches économiques du développement des légumineuses fourragères dans les exploitations françaises

The economics of forage legume use on French farms

215 T. GARCÍA AZCÁRATE, E. GUILLEMOT

Les politiques publiques pour soulenir le développement des légumineuses fourragères : hier, aujourd'hui et demain

Past, present, and future public policies promoting forage legume use

3. Synthèse et perspectives

223 | M. Dunu

Les légumineuses « en action » : une lecture sociotechnique des enjeux et des verrous

Moving from talk to action: a socio-technical discussion of the key issues and hurdles related to legumo use

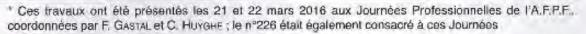
Actualités fourragères

22 | - Nouvelles de la recherche

232 - Actualités

Vient de paraître

Current events in forages







Heredity



Volume 117 • Number 4 • October 2016

Special Issue on Effective Population Sizes in Ecology and Evolution

S

(\$)

(8)

Contents

Editorial				
191	Effective population size in ecology and evolution			
	M Husemann, FE Zachos, RJ Paxton and			

JC Habel

Review

193 Prediction and estimation of effective population size J Wang, E Santiago and A Caballero (§)

Original Articles

Technical and Theoretical Advances

- 207 A method for detecting recent changes in contemporary effective population size from linkage disequilibrium at linked and unlinked loci CM Hollenbeck, DS Portnoy and JR Gold §
- 217 Improved confidence intervals for the linkage disequilibrium method for estimating effective population size AT Jones, JR Ovenden and Y-G Wang
- 224 The effect of neighborhood size on effective population size in theory and in practice L Nunney

233 Estimating contemporary effective population size in non-model species using linkage disequilibrium across thousands of loci
RK Waples, WA Larson and RS Waples

(S)

241 Life-history traits and effective population size in species with overlapping generations revisited: the importance of adult mortality RS Waples
(§)

Applied Studies

- 251 Sex change and effective population size: implications for population genetic studies in marine fish I Coscia, J Chopelet, RS Waples, BQ Mann and S Mariani
- 259 A longitudinal genetic survey identifies temporal shifts in the population structure of Dutch house sparrows L Cousseau, M Husemann, R Foppen, C Vangestel and L Lens
- 268 Making sense of the relationships between Ne, Nb and Nc towards defining conservation thresholds in Atlantic salmon (Salmo salar)

 A-L Ferchaud, C Perrier, J April, C Hernandez, M Dionne and L Bernatchez

Heredity

Volume 117 • Number 5 • November 2016

Contents

Original Articles

- 301 Diet adaptation in dog reflects spread of prehistoric agriculture
 M Arendt, KM Cairns, JWO Ballard,
 P Savolainen and E Axelsson OPEN
- 307 Secondary contact and asymmetrical gene flow in a cosmopolitan marine fish across the Benguela upwelling zone K Reid, TB Hoareau, JE Graves, WM Potts, SMR dos Santos, AW Klopper and P Bloomer
- 316 Genome-wide SNP data suggest complex ancestry of sympatric North Pacific killer whale ecotypes AD Foote and PA Morin
- 326 Complementary sex determination, inbreeding depression and inbreeding avoidance in a gregarious sawfly KE Harper, RK Bagley, KL Thompson and CR Linnen
- 336 Effects of complex life cycles on genetic diversity: cyclical parthenogenesis
 R Rouger, K Reichel, F Malrieu, JP Masson and S Stoeckel

- 348 Demographic history, current expansion and future management challenges of wild boar populations in the Balkans and Europe
 N Veličković, E Ferreira, M Djan, M Ernst, D Obreht Vidaković, A Monaco and C Fonseca
- 358 Origin of a cryptic lineage in a threatened reptile through isolation and historical hybridization MG Sovic, AC Fries and HL Gibbs
- 367 Reduced fine-scale spatial genetic structure in grazed populations of *Dianthus carthusianorum* Y Rico and HH Wagner
- 375 Commercial chicken breeds exhibit highly divergent patterns of linkage disequilibrium RJ Pengelly, AA Gheyas, R Kuo, E Mossotto, EG Seaby, DW Burt, S Ennis and A Collins
- 383 Relaxed selective constraints drove functional modifications in peripheral photoreception of the cavefish *P. andruzzii* and provide insight into the time of cave colonization

 L Calderoni, O Rota-Stabelli, E Frigato,
 A Panziera, S Kirchner, NS Foulkes,
 L Kruckenhauser, C Bertolucci and
 S Fuselli

Cover image 'A killer whale lies beneath the surface of the sea', copyright [Andy Foote / Harriet Bolt], used with kind permission [Andy Foote]

SPRINGER NATURE

Copyright © 2016 Macmillan Publishers Limited, part of Springer Nature. Subscribing organisations are encouraged to copy and distribute

this table of contents for internal, non-commercial purposes

This issue is now available at www.nature.com/hdy



This journal is a member of, and subscribes to the principles of, the Committee on Publication Ethics (COPE) www.publicationethics.org

sommaire









AGENDA

PROCESS & MARCHÉS

- 8 Le Maïs français
- 10 L'optimisation du stockage à l'étude
- 14 Osiris, des séchoirs/refroidisseurs de grains pour optimiser la facture énergétique et la qualité des produits

Dossier

- 16 Popcom et cornflakes, des niches de valeur pour le maïs
- 22 La campagne atypique souligne la pertinence du nouveau terminal portuaire de Beuzelin
- 26 A la découverte d'un pain ivoirien?
- 30 Produits, Matériels, Services
- 32 Produits, Matériels, Services / Retour du Space

SCIENCE & TECHNOLOGIE

- 36 Dans les coulisses du pain sans gluten
- 40 Mieux cerner les propriétés élongationnelles et fermentaires de pâtes de farine de blé
- 44 La farine de pois chiche décortiqué, ou cicerette : riche en protéines et fibres naturelles

MÉTIERS

- 50 Jouer la transparence et créer du lien en ouvrant les portes de son usine
- 53 InVivo NSA révolutionne sa dynamique d'innovation
- 55 Audits et formations, les autres expertises du LEMPA
- 57 Vers des meuniers connectés ?
- 60 Une moisson de blé tendre difficile à gérer pour les transformateurs
- 64 François Cholat, nouveau président du Snia « Nous devons mettre en avant nos actions et notre savoir-faire »
- 66 Responsable R&D, un pilier de la stratégie industrielle
- 68 Une filière en mouvement
- 70 Des géants faits de paille et de foin
- 73 Les 67^{es} JTIC reflet des préoccupations de l'année
- 74 Actualités



Journal of Essential Oil Research

Volume 28 Number 6 December 2016

CONTENTS

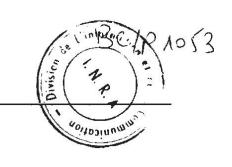
Articles



Effects of N, P and K on polygodial leaf extract of *Tasmannia lanceolata* (Poir.) A.C. Smith
 Matthew D. Wilson, Robert C. Menary and Dugald C. Close Antibacterial activity against methicillin-resistant
 Staphylococcus aureus of five essential oils from Algerian medicinal plants (Lamiaceae)
 Fahima Bekka-Hadji, Isabelle Bombarda and Abdelaziz Touati

Abdollah Ghasemi Pirbalouti and Zaynab Gholipour

at two phenological stages



528 Investigating the effects of microwave-assisted hydrodistillation on antioxidant and antifungal activities of Tanacetum polycephalum and Artemisia chamaemelifolia essential oils

Marzieh Eblaghi, Nastaran Khajehie, Mohammad-Taghi Golmakani and Mohammad Hadi Eskandari

Post harvest storage effect on essential oil content and composition of Cymbopogon distans (Nees ex Steud.) Wats. Amit Chauhan, Ram S. Verma, Rajendra C. Padalia, Rakesh K. Upadhyay and Janak R. Bahl

545 Essential oil composition of walnut tree (*Juglans regia* L.)' leaves from Tunisia *Ikram Bou Abdallah, Olfa Baatour, Kaouther Mechrgui, Wahid Herchi, Ali Albouchi, Abdelkader Chalghoum and Sadok Boukhchina*

551 Essential oil composition of bark and leaves of *Cinammoum* verum Bertch. & Presl from Mizoram, North East India Lydia Malsawmtluangi, Bhagwati P. Nautiyal, Tridip Hazarika, Rajendra S. Chauhan and Aldo Tava

557 Chemical-profile variations in essential oils isolated from lemongrass (Cymbopogon flexuosus) biomass and condensate wastewater by re-distillation and solvent extraction techniques Bhaskaruni R. Rajeswara Rao, Ganjigunta Adinarayana, Arigari Niranjan Kumar, Dharmendra K. Rajput and Kodakandla V. Syamasundar

Contents





Food chain mailters

EDITOR Melanie Brown

MEDIA AND COMMUNICATION COORDINATOR Alexandra Enamuel i

ADVISORY PANEL

- Craig I sadley ICampoien BRII.
- Helen Munday (Food and Drink Sederation, London).
- * Professor Tim Benton (Leads University)
- Derek Croucher (Marning Foods)

FOOD SCIENCE & TECHNOLOGY IS THE QUARTERLY JOURNAL OF THE INSTITUTE OF FOOD SCIENCE & TECHNOLOGY:

5 Cambridge Court, 210 Shepherd's Bush Road London We 7NJ, UK Tel: +44 (0)20 7603 6316 Fax: 144 (0)20 7602 9936 Email: lean@ fat.org Web: www.ifst.org

ALL ENQUIRIES CONCERNING SUBSCRIPTIONS IMEMBERS AND NON-MEMBERS! AND BACK ISSUES SHOULD BE MADE TO THE IFST AT THE ABOVE ADDRESS

PUBLISHED ON BEHALF OF THE IFST BY:

Excel Publishing Company Ltd Sixth Floor, Manchester Onz, 53 Portland Street Manchester M1 3/ D, UK Tel: +44 (0)161 236 2782 Fax: +44 (0)161 236 2783 Email: info@excelpublishing.co.uk Web: www.excelpublishing.co.uk

ADVERTISING SALES: +44 (0)161 236 2782

Sales Executive: Paula Mointosh Email: paula.mointosh@excelpublishing.co.uk

PRINTED BY: Buxton Press

CONTRIBUTIONS AND EDITORIAL CORRESPONDENCE SHOULD BE ADDRESSED TO:

The Editor, Food Science & Technology 30 Frewin Road, London SW18 3LP, UK. Tel/Fex: +44 (01208 874 9411 Email: mb@biophase.co.uk

SUBSCRIPTION RATES 2016:

Subscription rates for the full volume [4 issues] are: W/EU £107 or £130 nc £17 postage/handling charge [surface molt]. Rest of World £112 or £135 or US\$19a re £22 postage/handling charges (airmail).

DEADLINES FOR 2016-17

Editorial and Advertising copy: 4 November, 3 February, 5 May, 4 August





Institute of Food Science and Technology. Registered Charity No.1121681 and company limited by guarantee, registered in England and Wales, number 80930776. President: Professor Maureen Edmondson Chief Executive: Jon Pools

© 2016 Institute of Fond Science & Technology

ISSN 1475 3324.









- Food system resilience Tim Benton and Catherine Thompson explore the problems of food supply in a changing world and identify the need for multi-metric analysis to estimate risk and embed sustainability and resilience in food supply chains.
- Resilience and fair trade Bob Doherty investigates the resilience of agricultural supply chains and the extent to which ethical initiatives can contribute to resilience.
- 20 Managing food supply chains Michiko Shima of BSI describes strategies and tools for improving the management of food supply chains to enhance their resilience and sustainability.
- Sustainable sourcing Chris Brown of ASDA describes the changing conditions affecting the sourcing of raw materials and their impact on supply chain resilience.
- Uncharted water Tom Hollands explores strategies for enhancing the sustainability of food systems.
- Reducing energy demand and emissions Professor Savvas Tassou discusses technologies to effect significant reduction in energy consumption and resource use in the UK food chain.
- 34 Cleaning up biocides legislation As the European Commission reviews its biocide legislation and sets Maximum Residue Levels for dual use biocides, Kaarin Goodburn explains why biocides are vital to assure food hygiene and safety.
- Advances in packaging fresh produce Eva Almena and Christopher Wilson review progress in the development and uptake of modified atmosphere packaging, active packaging and intelligent packaging to extend the shelf life of fresh produce.
- Introducing konfer Dr Joe Marshall of the National Centre for Universities and Business explains the ambitions of konfer, a new tool for enhancing university-industry collaboration.

Regulars

- **Editorial**
- International and Home News
- **IFST News**
- 45 Careers and training in the food and drink sector
- Book review



Articles are welcomed. "Notes for Authors" are available from the Editor. All automitted material is edited but not refereed, Publication of unso, icited material is not guaranteed.

The Institute of Food Science and Technology excepts no responsibility for statements made by contributors. Mention of commercial products and services in Food Science & Technology does not imply endorsement of these products or services by the IFST.

No part of this publication may be reproduced in a refrictable system or transmitted in any form or by any means; electronic electrostatic, magnetic tape, mechanical, photocoping, recording or otherwise, without permission in writing from the Copyright helder.

Journal of Herbs, Spices & Medicinal Plants

CONTENTS

Volume 22 Number 4 2016

ARTICLES

Essential Oil Yield, Chemical Composition, and Total Citral Content of Nine Cultivars of Cymbopogon Species from Western India Virendra S. Rana, Manish Das, and M. A. Blazgeuz	289
Screening of Enhydra fluctuans for Phytochemical Composition and Broad-Spectrum Antibacterial Activity against Clinical Bacterial Isolates Upasana Sarma, Vedant V. Borah, Kandarpa Kr. Saikia, and N. K. Hazarika	300
An Improved in Vitro Propagation Protocol of Nyctanthus arbor-tristis Mahipal S. Shekhawat, M. Manokari, and C. P. Ravindran	309
Alpha-amylase Inhibition and Brine Shrimp Lethality Activities of Nine Medicinal Plant Extracts from South-West Nigerian Ethnomedicine Omonike Oluyemisi Ogbole, Latifat Olabimpe Aliu, Oyindamola Olajumoke Abiodun, and Edith Oriabure Ajaiyeoba	319
Physico-chemical Properties and Antioxidant Potential of Papaya (Carica papaya) Seon-Yeong Im, Ka-Hee Jang, Muhammad Farooq, and Dong-Jin Lee	327
GC-MS Determination of Bioactive Compounds and Nutrient Composition of Myristica fragrans Seeds Myristica fragrans Seeds Adaora O. Asika, Olaoluwa T. Adeyemi, God'swill N. Anyasor, Olusola Gisarin, and Odutola Osilesi	337
In Vitro Antioxidant and Anthelmintic Activity on Luffa cylindrica Leaf Extracts	3/10

Annual Contents Listing



VOLUME 29, NUMBER 7

JULY 2016

RESEARCH

- 527 Characterization of Brown Streak Virus-Resistant Cassava
 - R. B. Anjanappa, D. Mehta, M. N. Maruthi, E. Kanju, W. Gruissem, and H. Vanderschuren
- 535 Blocking the Transmission of a Noncirculative Vector-Borne Plant Pathogenic Bacterium F. Labroussaa, A. R. Zeilinger, and R. P. P. Almeida
- 545 VdThit, a Thiamine Transport Protein, Is Required for Pathogenicity of the Vascular Pathogen Verticillium dahliae
 X. Qi, X. Su, H. Guo, J. Qi, and H. Cheng

- 560 Poplar-Root Knot Nematode Interaction: A Model for Perennial Woody Species
 - F. Baldacci-Cresp, P.-Y. Sacré, L. Twyffels, A. Mol, M. Vermeersch, E. Ziemons, P. Hubert, D. Pérez-Morga, M. El Jaziri, J. A. Engler, and M. Baucher
- 573 Sequencing of the Litchi Downy Blight Pathogen Reveals It Is a *Phytophthora* Species With Downy Mildew-Like Characteristics
 - W. Ye, Y. Wang, D. Shen, D. Li, T. Pu, Z. Jiang, Z. Zhang, X. Zheng, B. M. Tyler, and Y. Wang
- 584 A Dicarboxylate Transporter, LjALMT4, Mainly Expressed in Nodules of Lotus japonicus
 - K. Takanashi, T. Sasaki, T. Kan, Y. Saida, A. Sugiyama, Y. Yamamoto, and K. Yazaki

On the cover: The cover image illustrates the presence of Meloidogyne incognita within a gall (in red) on infected poplar root. The illustrated nematode is at the J3 developmental stage (in blue, width $68~\mu m$). The picture was taken by scanning electron microscopy and is artificially colored. For the article by Baldacci-Cresp et al., see page 560.

Subscription price per year (2016): \$994 U.S.A.; \$1087 elsewhere (includes expedited delivery outside the U.S.A.). Canadian subscribers add 5% GST/HST to the elsewhere price (Canadian GST #R129888129). For complete information about online subscriptions and purchases of a single issue or a single article, go to http://apsjournals.apsnet.org/loi/mpmi. MPMI research is freely accessible 12 months after publication. APS retains full copyright to any article that is purchased or retrieved with or without payment and all copyright laws apply to any subsequent usage. Payment information: Send payments to APS Headquarters in the U.S.A. All prices shown are US\$ and payments must be made in U.S. funds through a member bank of the U.S. Federal Reserve System. VISA, MasterCard, and American Express are also accepted. Change of address: Provide APS Office with current mailing label and forwarding address 6 weeks before change. Personal subscriptions are available to APS and IS-MPMI members at a discount. Order at any time by contacting Denise Kessler: dkessler@scisoc.org or by phone 1.800.481.2698 or +1.651.454.7250.

Molecular Plant-Microbe Interactions® (ISSN 0894-0282) is published twelve times per year by APS PRESS, 3340 Pilot Knob Road, St. Paul, MN 55121. Periodicals postage paid at St. Paul, MN, and additional mailing offices. USPS 001963. POSTMASTER: Send address changes to Molecular Plant-Microbe Interactions, 3340 Pilot Knob Road, St. Paul, MN 55121 U.S.A.

No endorsement of any statements or claim made in advertisements is assumed by Molecular Plant-Microbe Interactions or by the publisher.

APS PRESS

3340 Pilot Knob Road, St. Paul, MN 55121 U.S.A. Telephone: +1.651.454.7250; Fax: +1.651.454.0766 E-mail: pubdept@scisoc.org; http://apsjournals.apsnet.org

Phytopathology

VOLUME 106, NUMBER 8 AUGUST 2016

REVIEW

792 Statistical Models and Methods for Network Meta-Analysis L. V. Madden, H.-P. Piepho, and P. A. Paul

DISEASE CONTROL AND PEST MANAGEMENT

- 807 Mechanism of Action of the Benzimidazole Fungicide on Fusarium graminearum: Interfering with Polymerization of Monomeric Tubulin But Not Polymerized Microtubule Y. Zhou, J. Xu, Y. Zhu, Y. Duan, and M. Zhou
- 814 Profitability of Integrated Management of Fusarium Head Blight in North Carolina Winter Wheat C. Cowger, R. Weisz, C. Arellano, and P. Murphy

ECOLOGY AND EPIDEMIOLOGY

- The Temperature Response and Aggressiveness of Peyronellaea pinodes Isolates Originating from Wild and Domesticated Pisum sp. in Israel M. Golani, S. Abbo, A. Sherman, O. Frenkel, and D. Shtienberg
- 833 Prevalence, Development, and Significance of Ascochyta Blight Caused by Peyronellaea pinodes in Pisum elatius Populations Growing in Natural Ecosystems M. Golani, O. Frenkel, M. Bornstein, R. Shulhani, S. Abbo, and D. Shtienberg
- Assessing Field-Specific Risk of Soybean Sudden Death Syndrome Using Satellite Imagery in Iowa S. Yang, X. Li, C. Chen, P. Kyveryga, and X. B. Yang

ETIOLOGY

Variations in Zebra Chip Disease Expression and Tuber
 Biochemistry in Response to Vector Density A. Rashed,
 C. M. Wallis, F. Workneh, L. Paetzold, and C. M. Rush

GENETICS AND RESISTANCE

- 861 Differentiation Among Blumeria graminis f. sp. tritici Isolates Originating from Wild Versus Domesticated Triticum Species in Israel R. Ben-David, R. Parks, A. Dinoor, E. Kosman, T. Wicker, B. Keller, and C. Cowger
- 871 Identification of a *Pi9*-Containing Rice Germplasm with a Newly Developed Robust Marker K. K. Scheuermann and Y. Jia

- Nongenetic Inheritance of Induced Resistance in a Wild Annual Plant Å. Lankinen, K. B. Abreha, E. Alexandersson, S. Andersson, and E. Andreasson
- 884 Reduced Virulence of Azoxystrobin-Resistant

 Zymoseptoria tritici Populations in Greenhouse

 Assays C. H. Hagerty and C. C. Mundt

MYCOLOGY

Wariation in Growth, Colonization of Maize, and Metabolic Parameters of GFP- and DsRed-Labeled Fusarium verticillioides Strains L. Wu, R. L. Conner, X. Wang, R. Xu, and H. Li

POPULATION BIOLOGY

900 Spatial Genetic Structure and Population Dynamics of Gummy Stem Blight Fungi Within and Among Watermelon Fields in the Southeastern United States H.-X. Li and M. T. Brewer

POSTHARVEST PATHOLOGY AND MYCOTOXINS

- 909 Etiology and Epidemiological Conditions Promoting Fusarium Root Rot in Sweetpotato A. C. Scruggs and L. M. Quesada-Ocampo
- 920 Susceptibility of Maize to Stalk Rot Caused by Fusarium graminearum Deoxynivalenol and Zearalenone
 Mutants L. M. Quesada-Ocampo, J. Al-Haddad,
 A. C. Scruggs, C. R. Buell, and F. Trail

TECHNIQUES

928 Plasmid Vectors for Xylella fastidiosa Utilizing a Toxin-Antitoxin System for Stability in the Absence of Antibiotic Selection L. P. Burbank and D. C. Stenger

VIROLOGY

937 Geographical and Genetic Divergence Among
Papaya ringspot virus Populations Within Hainan
Province, China H. Zhao, R. Z. Jia, Y.-L. Zhang,
Y. J. Zhu, H.-C. Zeng, H. Kong, H. McCafferty, A.-P. Guo,
and M. Peng

Cover: Mapping the carbendazim binding sites on α/β -tubulins of Fusarium graminearum caused Fusarium head blight on wheat. Top left and right panels show superposition of homology structures of F. graminearum α_1 -tubulin (yellow)/ β_2 -tubulins (red) dimer and α_2 -tubulin (yellow)/ β_2 -tubulins (red) dimer on the crystal structure of Saccharomyces cerevisiae alpha-1 tubulin (blue)/beta tubulin (green) dimer, respectively. Bottom left panel shows carbendazim binding pocket (cyans) and β_2 - α_1 -tubulin interface (blue) on F. graminearum β_2 -tubulins. Bottom right panel shows carbendazim binding pocket (cyans) and β_2 - α_2 -tubulin interface (blue) on F. graminearum β_2 -tubulins (red). (Zhou et al., page 807)

Phytopathology

VOLUME 106, NUMBER 9 SEPTEMBER 2016

REVIEW

948 How Knowledge of Pathogen Population Biology Informs
Management of Septoria Tritici Blotch B. A. McDonald
and C. C. Mundt

BACTERIOLOGY

956 Interactions Between Frankliniella fusca and Pantoea ananatis in the Center Rot Epidemic of Onion (Allium cepa) B. Dutta, R. Gitaitis, A. Barman, U. Avci, K. Marasigan, and R. Srinivasan

BIOLOGICAL CONTROL

- 963 Biocontrol of Potato Common Scab is Associated with High Pseudomonas fluorescens LBUM223 Populations and Phenazine-1-Carboxylic Acid Biosynthetic Transcript Accumulation in the Potato Geocaulosphere T. Arseneault, C. Goyer, and M. Filion
- 971 Direct Regulation of Extracellular Chitinase Production by the Transcription Factor LeClp in Lysobacter enzymogenes OH11 H. Xu, H. Chen, Y. Shen, L. Du, S.-H. Chou, H. Liu, G. Qian, and F. Liu

DISEASE CONTROL AND PEST MANAGEMENT

- 978 β1 Tubulin Rather Than β2 Tubulin Is the Preferred Binding Target for Carbendazim in Fusarium graminearum Y. Zhou, Y. Zhu, Y. Li, Y. Duan, R. Zhang, and M. Zhou
- 986 Exogenous Abscisic Acid and Gibberellic Acid Elicit Opposing Effects on Fusarium graminearum Infection in Wheat L. M. Buhrow, D. Cram, D. Tulpan, N. A. Foroud, and M. C. Loewen

Fitness and Competitive Ability of Botrytis cinerea
 Isolates with Resistance to Multiple Chemical Classes of
 Fungicides S. N. Chen, C. X. Luo, M. J. Hu, and G. Schnabel

ECOLOGY AND EPIDEMIOLOGY

- Genetic Analysis of Phytophthora nicotianae
 Populations from Different Hosts Using Microsatellite
 Markers A. Biasi, F. N. Martin, S. O. Cacciola,
 G. M. di San Lio, N. J. Grünwald, and L. Schena
- 1015 Carbon Source-Dependent Effects of Anaerobic Soil Disinfestation on Soil Microbiome and Suppression of Rhizoctonia solani AG-5 and Pratylenchus penetrans S. S. Hewavitharana and M. Mazzola

GENETICS AND RESISTANCE

1029 Isolate Specificity and Polygenic Inheritance of Resistance in Barley to the Heterologous Rust Pathogen *Puccinia graminis* f. sp. avenae P. M. Dracatos, M. Nansamba, A. Berlin, R. F. Park, and R. E. Niks

POPULATION BIOLOGY

1038 Clonal Expansion and Migration of a Highly Virulent, Defoliating Lineage of Verticillium dahliae M. G. Milgroom, M. del Mar Jiménez-Gasco, C. Olivares-García, and R. M. Jiménez-Díaz

TECHNIQUES

- 1047 Effect of Sugar Beet Variety and Nonhost Plant on Rhizoctonia solani AG2-2HIB Soil Inoculum Potential Measured in Soil DNA Extracts S. Schulze, H.-J. Koch, B. Märländer, and M. Varrelmann
- Identification and Differentiation of Monilinia
 Species Causing Brown Rot of Pome and Stone Fruit
 using High-Resolution Melting (HRM) Analysis
 A. Papavasileiou, P. B. Madesis, and G. S. Karaoglanidis

Cover: Infection response of SusPtrit barley inoculated with Swedish single pustule-derived Puccinia graminis f. sp. avenae isolates Evertsholm, Ingeberga, Pattala, and Alfred out control in response to the Evertsholm isolate (from left to right). (Dracatos et al., page 1029)

plant disease

RESEARCH

- 1521 Cercosporin From Pseudocercosporella capsellae und its Critical Role in White Leaf Spot Development, N. Gunasinghe, M. P. You, G. R. Cawthray, and M. J. Barbetti
- 1532 Cultural, Chemical, and Alternative Control Strategies for Rhizopus Soft Rot of Sweetpotato. A. C. Scruggs and L. M. Quesada-Occumpo
- 1541 Characterization of a Segregation Distortion Locus with Powdery Mildew Resistance in a Wheat-Thinopyrum intermedium Introgression Line WE99, P. Ma. H. Xu, G. Han, Q. Luo, Y. Xu, X. Zhang, D. An, L. Li, and Y. San
- 1548 Geographic Differentiation and Population Genetic Structure of Monillophthora roreri in the Principal Cocoa Production Areas in Colombia. Y. Y. Jaimes. C. Gonzalez, J. Rojas, O. E. Cornejo, M. F. Mideros, S. Restrepo, C. Cilas, and E. L. Furtado
- 1559 Advances in the Interpretation of Tomographic Images as an Early Detection Method of Oil Palm Affected by Basal Stem Rot in Colombia. M. Arango, G. Martínez, and G. Torres
- 1564 Effect of Verticillium dahtiac Soil Inoculum Levels on Spinuch Seed Infection. R. Sapkoto, M. H. Olesen, L. C. Deleuran. B. Boelt, and M. Nicolaisen
- 1571 An Evaluation of the Flora Adjacent to Wine Grape Vineyards for the Presence of Alternative Host Plants of Grapevine red blotch-associated virus. B. W. Bohder, F. G. Zalom, and M. R. Sudarshana
- 1575 Blueberry necrotic ring blotch virus in Southern Highbush Blueberry: Insights into In Planta and In-Field Movement. T. S. Robinson, H. Scherm, P. M. Brannen, R. Allen, and C. M. Deom
- 1580 RT-PCR Differentiation, Molecular and Pathological Characterization of Andean and Ordinary Strains of Potato virus S in Potatoes in China. J. Wang, F. Meng, R. Chen, J. Liu, X. Nie, and B. Nie
- 1586 Characterization of Beet curly top virus Strains Circulating in Beet Leafhoppers (Hemiptera: Cicadellidae) in Northeastern Oregon. S. I. Rondon, M. S. Roster, L. L. Hamlin, K. J. Green, A. V. Karasev. and J. M. Crosstin
- 1591 Characterization of Rhizoctonia solani Associated with Black Scurf in Cyprus. L. Kanetis, D. Tsimouris, and M. Christoforcu
- 1599 Hop Powdery Mildew Control Through Alteration of Spring Pruning Practices. C. Probst, M. E. Nelson. G. G. Grove, M. C. Twomey, and D. H. Gent
- 1606 Seasonal and Cross-Seasonal Timing of Fungicide Trunk Injections in Apple Trees to Optimize Management of Apple Scab. S. G. Asimović, A. H. VanWoerkom, T. Garavaglia, C. Vandervoort, G. W. Sundin, and J. C. Wise
- 1617 Rootstock Effects on Ahmond Leaf Scorch Disease Incidence and Severity. R. Krugner and C. A. Ledbener
- 1622 Use of Mycelium and Detached Leaves in Bioassays for Assessing Resistance to Boxwood Blight. F. Guo, R. T. Olsen, M. Kramer, and M. Pooler
- 1627 Development of a Greenhouse Screening Method for Adult Plant Response in Wheat to Stem Rust. C. M. Bender, R. Prins, and Z. A. Pretorius

- 1634 Overexpression of OsOSM1 Enhances Resistance to Rice Sheath Blight, X. Xue, Z. X. Cao, X. T. Zhang, Y. Wang, Y. F. Zhang, Z. X. Chen, X. B. Pan, and S. M. Zuo
- 1643 Suppression of Powdery Mildews by UV-B: Application Frequency and Timing, Dose, Reflectance, and Automation. A. Suthaparon, K. A. Solhang, N. Bjugstad, H. R. Gislerød, D. M. Gadoury, and A. Stensvand
- 1651 Seasonal Susceptibility of Grapevine Pruning Wounds and Cane Colonization in Catalonia, Spain Following Artificial Infection with Diplodia seriata and Phaeomoniella chlamydospora. G. Elena and J. Luque
- 1660 A Multiplex Real-Time PCR Assay Differentiates Four Xanthomonas Species Associated with Bacterial Spot of Tomato. A. L. Strayer, A. Jeyaprukash, G. V. Minsavage, S. Timilsina. G. E. Vallad, J. B. Jones, and M. L. Parer
- 1669 Optimization and Application of a Quantitative Polymerase Chain Reaction Assay to Detect Diaporthe Species in Soybean Plant Tissue, B. Kontz, S. Adhakari, S. Subramanian, and F. M. Mathew
- 1677 Detection of Dual Heterodera avenue Resistance plus Tolerance Traits in Spring Wheat. R. W. Smiley and J. M. Marshall
- 1686 Population Genetic Structure of QoI-Resistant Pestaloliopsis longiseta Isolates Causing Tea Gray Blight. K. Yamada, R. Sonoda, and K. Ishikawa
- 1692 Rapid Quantification of Sollborne Pathogen Communities in Wheat-Based Long-Term Field Experiments. R. W. Smiley. S. Machado, K. E. L. Rhinhori, C. L. Reardon, and S. B. Waest
- 1709 Molecular Characterization of the sdhB Gene and Baseline Sensitivity to Penthiopyrad, Fluopyram, and Benzavindiflupyr in Venturia inaequalis, S. M. Villani, K. Ayer, and K. D. Cox
- 1717 Molecular Mapping of the Stripe Rust Resistance Gene Yr69 on Wheat Chromosome 2AS, L. Hou, J. Jia, X. Zhang, X. Li, Z. Yang, J. Ma, H. Guo, H. Zhon, L. Qiao, and Z. Chang
- 1725 Morphological, Biometrical, Biochemical, and Molecular Characterization of the Coffee Root-Knot Nematode Meloidogyne megadora, C. M. Maleita, A. M. S. F. de Almeida, N. Vovlas, and I. Abrantes
- 1735 Effect of Planting Date, Seed Treatment, and Cultivar on Plant Population, Sudden Death Syndrome, and Yield of Soybean. Y. R. Kondel, K. A. Wise, C. A. Bradley, A. U. Tenuta, and D. S. Mueller
- 1744 Race Characterization of Puccinia striiformis f. sp. tritici, the Cause of Wheat Stripe Rust, in Saskatchewan and Southern Alberta, Canada and Virulence Comparison with Races from the United States. G. S. Brar and H. R. Kutcher
- 1754 Genotypes and Characteristics of Phenamacrit-Resistant Mutants in Fusarium asiaticum. B. Li, Z. Zheng, X. Liu, Y. Cai, X. Mao. and M. Zhou

SPECIAL REPORTS

1762 Population Dynamics of Released Potato Psyllids and their Bacterliferous Status in Relation to Zebra Chip Incidence in Caged Field Plots, F. Workneh, L. Pacrenid, A. Rushed, and C. M. Rush 1768 Physiologic Specialization of Pucciala triticina on Wheat in the United States in 2014. J. A. Kolmer and M. E. Hughes

DISEASE NOTES

Diseases Caused by Bacteria and Phytoplasmas

- 1774 Association of 16SrII-D Phytoplasma With Phyllody Disease in Sesame (Sesamum indicum) in Telangana From Southern India. I. Pamel and R. Makandar
- 1774 Fire Blight of Apple, Caused by Erwinia amylovora, a New Disease in Korea. 1.-S. Myung, J.-Y. Lee, M.-J. Yun, Y.-H. Lee, Y.-K. Lee, D. H. Park, and C.-S. Oh
- 1774 First Report of Bacterial Canker in Mulberry Caused by Citrobacter froundii in Iran. T. Allahverdi, H. Rahimian, and A. Ravaniou
- 1775 First Report of 'Candidatus Phytoplasma solam' Associated With Potatu Stolbur Disease in Montenegro. S. Radonjić, S. Hrněřé, A. Kosovac. O. Kestić, M. Mitrović, J. Jović, and I. Toševski
- 1775 Bacterial Wilt of Tomato (Solanum lycopersicum) in Louisiana is Caused by Phylotype II, Biovar I and 3 strains of Ralstonia solanacearum. A. Jimenez Mudrid, J. K. Sidhu, and M. L. Lewis Ivey
- 1776 First Report of a New 'Candidatus Phytoplasma pini'-Related Strain Associated with Witches'-Broom of Pinus spp. in Maryland, S. Costanzo, J. Ruscoe, Y. Zhuo, R. E. Davis, and M. K. Nakhla
- 1776 First Report of Pectobacterium caratovurum subsp. carotovorum and P. caratovorum subsp. odoriferum Causing Bacterlal Soft Rot of Sweetpotato in China. B. Gao, R. Y. Wang, S. L. Chen, J. Ma, and X. H. Li

Diseases Caused by Fungi and Fungus-Like Organisms

- 1776 First Report of Cadophora malorum Associated With Cordon Dieback in Kiwi Plants in Chile, G. A. Diaz, M. Lolas, E. E. Ferrada, B. A. Latorre, and J. P. Zoffoli
- 1777 First Report of a Leaf Spot Caused by Boeremia exigua vat. linicola on Autumn Sage (Salvia greggii) in Italy and Worldwide. A. Garibaldi, G. Gilardi, S. Franco Ortega, and M. L. Gullino
- 1777 First Report of Powdery Mildew Caused by Erysiphe quercicola on Mandarin in Vietnam, L. T. T. Tam, P. N. Dung, and N. V. Liem
- 1778 First Report of Neofusicoccum nanquaesitum Causing Branch Canker and Dicback of Avocado in California. J. D. Carrillo, A. Eskalen, S. Rooney-Latham, and H. J. Scheck
- 1778 First Report of Fruit Decay on Pepper Caused by Diaporthe actinidiae in China. C. Zhang, W. Z. Wang, Y. Z. Diao, and X. L. Liu
- 1778 First Report of Penicillium biourgeianum causing Post-Harvest Fruit Rot of Apple in Pakistan. M. Azam, A. A. Shahid, R. A. Majeed, M. Ali, N. Ahmad, and M. S. Haider
- 1779 First Report of Fludioxonil Resistance in Botrytis cinerea, the Causal Agent of Gray Mold, From Strawberry Fields in Spain. D. Fernández-Ortuño, J. A. Torés, A. Pérez-García, and A. de Vicente
- 1779 First Report of Shell Soft Rot of Bael (Aegle marmelos) Caused by Syncephalastrum racemosum in North India, A. K. Misru, N. Garg, and K. K. Yadav
- 1780 First Report of Curvularia australiensis Causing Leaf Spot on Maize (Zea mays) in China. J. Y. Chang, H. J. Zhang, J. Shi, N. Guo, Q. Y. Hu, H. X. Ma, and S. Yang
- 1780 Trichothecium roseum Causes Fruit Rot of Potygonatum egrtonemu in China, Y. J. Liu, L. J. Zhou, L. S. Chen, H. B. Zhou, S. W. Xu, and H. Zhuo

- 1780 First Report of Fusarium Head Blight, Caused by Fasarium graminearum, on Annual Canarygrass (Phalaris canariensis) in Saskatchewan, Canada. L. P. Cholango-Martinez, X. M. Zhang. P. J. Hucl, and H. R. Kutcher
- 1781 Inflorescence Oversprouting and Vascular and Rachis Necrosis Caused by Fusarium decemcellulare in Anacardium occidentals in Brazil, K. S. Matos, L. B. de Almeida, A. R. Nascimento, R. E. Hanada, and G. F. da Silva
- 1781 First Report of Southern Leaf Blight Caused by Cochlisholux heterostrophus on Corn (Zea mays) in Fujian Province, China. Y. L. Dai, X. J. Yang, L. Gan, F. R. Chen, H. C. Ruan, Y. X. Du. N. N. Shi, and Z. M. Gao
- 1782 First Report of Trunk Rut Caused by Ceratocystis paradoxa on Triangle Palm (Dypsis decaryi) in Hainan, China. F. Y. Yu. X. Q. Niu, Q. H. Tang, H. Zhu, W. W. Song, W. Q. Qin, and S. X. Zhang
- 1782 First Report of Alternaria alternata Causing Leaf Spot on Sorghum in China. Y.-Q. Zhao, K. Shi, L.-J. Zhang, D.-M. Zhang, X.-Y. Yu, Y.-Y. Dong, W.-B. Bi, and H.-R. Yu
- 1782 First Report of Glycyrrhiza glabra Root Rot and Collar Rot Caused by Binucleate Rhizoctonia (BNR) AG-A From India. A. Saroj, R. Maurya, A. K. Srivastava, A. Samad, and C. S. Chanotiya
- 1783 First Report of Neofusicoccum parvum Causing Shoot Blight and Stem Cankers on Pomegranate in Florida. A. N. KC and G. E. Vallad
- 1783 First Report of Cylindrocladiella lageniformis and C. peruviana as Grapevine Pathogens in California. S. T. Koike, L. J. Beniga, T. T. Nguyen, and W. D. Gubler
- 1784 First Report of Alternaria mali Causing Core Rot of Apple in Pakistan. S. Hanif, T. Anjum, R. Hafeez, W. Akram, A. Ali, and F. Hassan
- 1784 First Report of Lotus Rout Disease Caused by Fusarium tricinctum in China. H. Li, J. Li, J. Zhang, S. L. Yan, and Q. Z. Wong
- 1784 First Report of a New Lineage in the Fusarium solani Species Complex Causing Root Rot on Sunn Hemp in Brazil. M. P. Melo, J. E. A. Beserra Jr, K. S. Matos, C. S. Lima, and O. L. Pereira
- 1785 First Report of Fusarium oxysporum Isolate gx3 Causing Sugarcane Pokkah Boeng in Guangxi of China. Y. X. Bao, H. J. Sun. Y. F. Li, Z. Z. Duan, P. H. McCord, Y. P. Cui, and M. Q. Zhang
- 1785 First Report of Powdery Mildew Caused by Podosphaera zanthii on Coreopsis verticillata in Korea. S. E. Cho, M. J. Park, K. S. Han, T. T. Zhao, and H. D. Shin
- 1786 First Report of Rust Disease Caused by Coleosporium apocynaceum on Amsonia 'Blue Ice' in Indiana. M. Abbasi, M. C. Aime, T. C. Creswell, and G. E. Ruhi
- 1786 First Report of Dry Rot of Sweetpotato (Ipomoea batalas) Caused by Diaporthe batalas in Korea, Y. J. Lee, M. Mannaa, J.-J. Jeong, H.-U. Lee, W. Kim, and K. D. Kim
- 1786 First Report of Leaf Spot of Spinach (Spinacia oleracea) Caused by Myrothecium verrucaria in Italy. A. Garibaldi, G. Gilardi, S. Franco-Ortego, and M. L. Gullino
- 1787 First Report of Neonectria candida Causing Postharvest Decay on 'Conference' Pears in the Netherlands. M. Wenneker, K. T. K. Pham, M. E. C. Lemmers, F. A. de Boer, A. M. van der Lans, P. J. van Leeuwen, T. C. Hollinger, and B. P. H. J. Thomma
- 1787 First Report of Resistance of Peronospora belbahrii, Causal Agent of Downy Mildew of Basil, to Mefenoxam in Italy. M. Collina, M. Merighi, C. Turan, A. Pirondi, G. Minuto, and A. Branelli
- 1788 First Report of Gray Mold on Crepe Myrtle (Lagerstroemia indica) Caused by Botrytis cinerea in Korea, T. Afroz, M. Aktaruzzaman, B. S. Kim, G. S. Han, and H. D. Shin

- 1788 First Report of Rubber Tree Gummosis Disease Caused by Fusarium solani in China. G. X. Huang, X. M. Zhou, X. B. Liu, J. M. Cai, and B. X. Li
- 1788 First Report of Brown Leaf Spot Caused by Fusarium avenaceum on Hosta (Hosta 'Undulata Erromena') in Ontario, Canada. Z. X. Sun and T. Hsiang
- 1789 First Report of Anthracnose Disease Caused by Colletotrichum acutatum on Lupinus albus in Italy. S. Frisullo, S. M. Mang. H. S. Elshafie, and I. Camele
- 1789 First Report of Sclerotinia sclerotiorum on Periwinkle (Catharanthus roseus) in Ontario, Canada. Z. X. Sun and T. Hsiang
- 1790 First Report of Leaf Spot Caused by Phoma sorghina on Tobacco in China. G. Q. Yuan, T. Liao, H. W. Tan, Q. Q. Li and W. Lin
- 1790 First Report of Colletotrichum theobromicola Causing Leaf Spot of Cyclamen persicum in Israel. G. Sharma, M. Maymon, and S. Freeman
- 1790 First Report of Fusarium meridionale Causing Fusarium Head Blight of Wheat in Mexico. M. Ceron-Bustamante, V. Ayala-Escobar, C. Nava-Diaz T. J. Ward G. Leyva-Mir, and H. E. Villasenor-Mir
- 1791 First Report of Curvularia tuberculata Causing Brown Leaf Spot of Rice in Punjab, Pakistan. R. A. Majeed, A. A. Shahid, M. Z. Saleem, M. Asif, M. A. Zahid, and M. S. Haider
- 1791 First Report of Fusarium oxysporum f. sp. radicis-cucumerinum Causing Wilt on Cucumber (Cucumis sativus) in Italy. A. Garibaldi, G. Gilardi, G. Ortu, and M. L. Gullino
- 1792 Occurrence of Verticillium Wilt Caused by Verticillium dahliae on Mung Bean in Northern China. F.-F. Sun, S.-L. Sun, and Z.-D. Zhu
- 1792 First Report of Anthracnose and Stem End Rot Diseases Caused by Colletotrichum gloeosporioides and Neofusicoccum australe on Avocado Fruits in Turkey. D. S. Akgül, Q. N. Awan, P. G. Güler, and N. Önelge
- 1792 First Report of Reddish-brown Spot Disease on Pitaya Caused by Nigrospora sphaerica in China. F. Liu, J.-B. Wu, R.-L. Zhan, and X.-C. Ou
- 1793 First Report of *Phaeobotryon cupressi* Causing Canker of *Calocedrus decurrens* (Incense-Cedar) in Oregon. J. E. Weiland, R. A. Sniezko, M. S. Wiseman, M. Serdani, and M. L. Putnam
- 1793 First Report of Colletotrichum fructicola Causing Anthracnose on Mango in Korea. J. H. Joa, C. K. Lim, I. Y. Choi, M. J. Park, and H. D. Shin

Diseases Caused by Nematodes

- 1794 First Report of Dry Rot Disease of Yam Caused by Scutellonema bradys in East Africa. D. L. Coyne, Y. A. Kolombia, G. Kariuki, N. Luambano, and W. Bert
- 1794 First Report of the Pale Potato Cyst Nematode, Globodera pallida, on Potato in Japan. T. Narabu, T. Ohki, K. Onodera, T. Fujimoto, K. Itou, and T. Maoka

1794 First Report of the Root-lesion Nematode Pratylenchus neglectus on Wheat (Triticum aestivum) in North Dakota. G. P. Yan, A. Plaisance, D. Huang, Z. Liu, V. Chapara, and Z. A. Handoo

Diseases Caused by Oomycetes

- 1795 First Report of Crown Rot Caused by *Phytophthora parsiana* on Pistachio in the Southern San Joaquin Valley, California.

 E. J. Fichtner, C. E. Kallsen, and C. L. Blomquist
- 1795 First Report of Pythium myriotylum Causing Basal Rot on Echeveria in the United States. S. N. Suarez, G. Sanahuja. P. Lopez, and A. J. Palmateer
- 1795 First Report of *Phytophthora cinnamomi* Causing Basal Stem Blight and Root Rot of *Hypericum formosum* in Taiwan. J. N. Tsai, P. J. Ann, I. T. Wang, and H. C. Huang
- 1796 First Report of *Phytophthora chlamydospora* Causing Root and Crown Rot on Almond (*Prunus dulcis*) Trees in Turkey. §. Türkölmez, S. Derviş, O. Çifiçi, and Ç. Ulubaş Serçe
- 1796 First Report of Phytophthora tropicalis Causing Wilt of Cyclamen persicum in Mexico. S. G. Leyva-Mir, J. M. Tovar-Pedraza, M. Camacho-Tapia, A. Almaraz-Sánchez, and M. S. Silva
- 1797 First Report of Cladode and Foot Rots Caused by Pythium aphanidermatum on Cactus (Nopalea cochenillifera). F. M. Feijó, R. Ramos-Sobrinho, M. J. S. Silva, L. F. Barbosa, D. B. Pinho, I. P. Assunção, and G. S. A. Lima
- 1797 First Report of Late Blight Caused by *Phytophthora infestans* Clonal Lineage US-23 Variant on Potato in Michigan, USA. S. Dangi, N. Rosenzweig, L. Steere, and W. W. Kirk

Diseases Caused by Viruses

- 1797 First Report of the Natural Occurrence of Tomato chlorotic spot virus in Peanuts in Halti. R. O. Adegbola, A. M. Fulmer, B. Williams, T. B. Brenneman, R. C. Kemerait, W. Sheard, J. E. Woodward, S. Adkins, and R. A. Naidu
- 1798 First Report of Tomato leaf curl Patna virus Infecting Cassia tora in India, S. S. Sohrab
- 1798 First Report of Sugarcane yellow leaf virus Infecting Grain Sorghum (Sorghum bicolor) in the United States. C. Wei, M. Hincapie, N. Larsen, G. Nuessly, and P. Rott
- 1799 First Report of Necrotic Streaking of Asiatic Lilies Caused by Plantago asiatica mosaic virus in Chile. A. K. Vidal, R. Camps, and X. Besoain
- 1799 First Report of Cucumber mosaic virus Infecting Wisteria sinensis in Serbia. K. Milojević, N. Radović, I. Stanković, A. Vučurović, D. Nikolić, A. Bulajić, and B. Krstić
- 1799 First Report of Schlumbergera virus X in Prickly Pear (Opuntia ficus-indica) in Mexico. R. De La Torre-Almaráz. H. Salgado-Ortíz, M. Salazar-Segura, V. Pallás, J. A. Sánchez-Navarro, and R. A. Valverde

COVER IMAGES

Gray mold caused by *Botrytis cinerea* on crepc myrtle (*Lagerstroemia indica*) (courtesy T. Afroz et al., see page 1788); storage rot caused by *Neonectria candida* on 'Conference' pear (courtesy M. Wenneker et al., see page 1787).



Copyright © 2016 The American Phytopathological Society 3340 Pilot Knob Road, St. Paul, MN 55121 +1.651.454.7250 http://apsjournals.apsnet.org

September 2016

plant disease

RESEARCH

- 1804 Detection of Colletotrichum acutatum Sensu Lato on Strawberry by Loop-Mediated Isothermal Amplification. X. Thang, T. C. Harrington, J. C. Botzer, R. Kubota, N. A. Peres, and M. L. Gleason
- 1813 Charcoal Canker of Pear, Plum, and Quince Trees Caused by Biscogniauxia rosacearum sp. nov. in Southern Italy. M. L. Raimondo, F. Lups, and A. Carlacci
- 1823 Temporal and Spatial Development of Cercospora Leaf Spot of Faba Bean Influenced by In Situ Inoculum. R. B. E. Kimber. J. G. Paull, E. S. Scott, C. B. Dyson, and J. A. Davidson
- 1831 Field Evaluation of a Competitive Lateral-Flow Assay for Detection of Alternaria brassicae in Vegetable Brassica Crops. A. J. Wakeham, G. Keane, and R. Kennedy
- 1840 Development of SCAR Markers and an SYBR Green Assay to Detect Puccinia striiformis f. sp. tritici in Infected Wheat Leaves. L. Goo, H. X. Yu, X. H. Kang, H. M. Shen, C. Li, T. G. Liu, B. Liu, and W. Q. Chen
- 1848 Spatial and Temporal Sensitivity of Alternaria Species Associated With Potato Foliar Diseases to Demethylation Inhibiting and Anilino-Pyrimidine Fungicides. D. L. Fonseka and N. C. Guilmestad
- 1858 Long-Term Field Evaluation Reveals Huanglongbing Resistance in Citrus Relatives. C. Ramadugu, M. L. Keremane, S. F. Halbert, Y. P. Duan, M. L. Roose, E. Stover, and R. F. Lee*
- 1870 Characterization of Pythium spp. Associated with Asymptomatic Soybean in Southeastern Pennsylvania. L. S. Coffua, S. T. Veterano, S. J. Clipmon, J. I. Mena-Ali, and J. E. Blair
- 1880 The Effect of Short Irrigation Frequencies on the Development of Verticillium Wilt in the Susceptible Olive Cultivar 'Picual' under Field Conditions. M. Pérez-Rodríguez N. Serrano, O. Arquero, F. Orgaz, J. Moral, and F. J. López-Escudero
- 1889 Use of Immune Crops as Barrier in the Management of Cacao Swollen Shoot Virus Disease (CSSVD)—Long-Term Assessment, O. Domfeh, G. A. Ameyaw, H. K. Dzahini-Oblatey, L. A. A. Ollennu, K. Osei-Bonsu, K. Acheampang, F. Aneani, and F. Owusu-Ansah
- 1894 Integrated Control of Apple Scab and Powdery Mildew in an Organic Apple Orchard by Combining Potassium Carbonates with Wettable Sulfur, Pruning, and Cultivar Susceptibility. L. J. Holb and S. Kunz
- 1906 Susceptibility of Lenticels within the Stem Depression of Tomato Fruit to Bacterial Soft Rot. J. A. Barn, D. J. Huber. S. L. Stahl, J. H. Lee, D. Spiceland, and M. T. Elkahky
- 1910 Factors Associated with Leguminous Green Manure Incorporation and Fusarium Wilt Suppression in Watermelon. J. Himmelstein, J. E. Maul, Y. Balci, and K. L. Everts
 - Public summary is available in the online version of PLAM Desase at: http://apajournals.apsnet.org/loi/pd/s

- 1921 Suppression of Bacterial Blight on Mustard Greens with Host Plant Resistance and Acibenzolar-S-Methyl. A. P. Keinath, W. P. Wechter, and M. W. Farnham
- 1927 Virulence Analysis of Wheat Powdery Mildew (Blumeria graminis f. sp. tritici) and Effective Genes in Middle Delta, Egypt, M. M. El-Shany, H. M. Emara, and M. E. Mohamed
- 1931 Translocation of Oxathiapiprolin in Bell Pepper Plants and Systemic Protection of Plants Against Phytophthora Blight. T. Qu. T. L. Grey, A. S. Csinos, and P. Ji
- 1937 Scab Susceptibility of a Provenance Collection of Pecan in Three Different Seasons in the Southeastern United States. C. H. Bock, L. J. Grauke, P. Conner, S. L. Burrell, M. W. Hotchkiss, D. Baykin, and B. W. Wood

DISEASE NOTES

Diseases Caused by Bacteria and Phytoplasmas

- 1946 First Report of Xanthomonas citri pv. citri Pathotype A Causing Asiatic Citrus Canker in Martinique, France. D. Richard, C. Boyer. S. Javegny, K. Boyer, P. Grygiel, O. Pravost, A. L. Rioualec, V. Rakotobe, J. Iotti, R. Picard, C. Vernière, C. Audusseau, C. François, V. Olivier, A. Moreau, and A. Chabirand
- 1946 First Report of Fire Riight Disease on Asian Pear Caused by Erwinia amylovora in Korea. D. H. Park, J.-G. Yu, E.-J. Oh, K.-S. Han, M. C. Yea, S. J. Lee, L.-S. Myung, H. S. Shim, and C.-S. Oh
- 1946 First Report of Bacterial Leaf Spot Caused by Xanthomonas axonopodis Infecting Fragrant Sumse in Teanessee. F. Baysal-Gurel, T. Simmons, M. N. Kabir, and P. Liyanapathiranage

Diseases Caused by Fungi and Fungus-Like Organisms

- 1947 First Report of Leaf Spot of Campanula medium Caused by Alternaria alternata in Italy. A. Guribaldi, S. F. Ortega, G. Gilardi, and M. L. Guilino
- 1947 First Report of Alternaria alternata Causing Leaf Spot on Sweetpotato in China. H. W. Qian, M. Y. Chi, P. C. Xu, Y. Zhao, W. X. Liang, and J. G. Huang
- 1948 First Report of Lasiadipludia theobromae Causing a Stem Canker on Sweetpotato in China, L. F. Huang, B. P. Fang, K. M. Li, S. J. Ye, J. Y. Chen, Z. X. Luo, and Z. Y. Wang
- 1948 First Report of Diaparthe nobilis Causing Fruit Decay of Pepper in China. C. Zhang, W. Z. Wang, Y. Z. Diao, and X. L. Liu
- 1948 First Report of Fruit Rot of Strawberry Caused by Geotrichum candidum in Pakistan. M. Hussain, M. I. Hamid, M. U. Ghazanfor, N. Akhtar, and M. Raza
- 1949 First Report of Leaf Rust Caused by Thekopsora minima on Northern Highbush Blueberry in Oregon. M. S. Wiseman, M. I. Gordon, and M. L. Putnam
- 1949 First Report of Brown Rot (Monilinia fructicola) on apple (Malus × domestica). J. Beckerman, N. Albright, and C. Abbott
- 1949 First Report of Erysiphe sp. as a Causal Agent of Powdery Mildew on Punica granatum in Italy, S. Pollastro, D. Gerin, S. Marullo, R. M. D. M. Angelini, and F. Faretra

- 1950 First Report of Fusarium avenaceum Causing Postharvest Decay on 'Conference' Pears in the Netherlands. M. Wenneker, K. T. K. Pham, M. E. C. Lemmers, F. A. de Boer, A. M. van der Lans, P. J. van Leeuwen, T. C. Hollinger, and B. P. H. J. Thomma
- 1950 First Report of Alternaria Brown Spot on Golden Vicary Privet Caused by A. alternata in China. T. Wang, A. L. Tao, F. H. Pang, and S. L. Huang
- 1951 Aspergillus niger Causes Fruit Rot of Lemon and Grapefruit in Pakistan. F. Liaquat, S. Arif, M. Ashraf, H. J. Chaudhary, M. F. H. Munis, and A. B. U. Farooq
- 1951 First Report of Diaporthe rudis in Chile Causing Stem-End Rot on 'Hass' Avocado Fruit Imported From California.
 C. Torres, R. Camps, R. Aguirre, and X. Besoain
- 1951 First Report of Stem Canker of Interspecific Impatiens
 Hybrids Caused by Macrophomina phaseolina in the United
 States. S. R. Broderick, C. J. Balbalian, and M. Tomaso-Peterson
- 1952 First Report of Fusarium sambucinum sensu stricto Causing Postharvest Fruit Rot of Tomato in Argentina. C. A. Mourelos, I. Malbrán, G. A. Lori, and G. M. Dal Bello
- 1952 First Report of Black Heart of Pomegranate Caused by Alternaria alternata in Spain. A. Vicent, J. L. Mira, J. Bartual, V. Beltrán, V. Taberner, and L. Palou
- 1952 First Report of Sclerotinia nivalis Causing Sclerotinia Rot on Hardy Kiwifruit (Actinidia arguta) in China. C. W. Wang, J. Ai, H. Y. Qin, Y. M. Yang, S. T. Fan, Y. X. Liu, Y. Zhao, P. L. Xu, X. Y. Li, and Z. X. Wang
- 1953 First Report of Choanephora Flower Blight Caused by Choanephora cucurbitarum on Althaea officinalis in Korea. I. Y. Choi, J. H. Kim, J. H. Park, S. E. Cho, and H. D. Shin
- 1953 First Record of Cercospora apii sensu lato Causing Leaf Spots on Yellow Guinea Yam in Brazil. A. G. Torres, W. S. Lisboa, A. S. Colmán, and R. W. Barreto
- 1954 First Report of Powdery Mildew Caused by Erysiphe trifoliorum on Indigofera amblyantha in Korea. S. E. Cho, T. T. Zhao, I. Y. Choi, Y. J. Choi, and H. D. Shin

Diseases Caused by Nematodes

1954 First Report of the Root-Knot Nematode Meloidogyne enterolobii Parasitizing African Nightshades in Kenya. O. Chitambo, S. Haukeland, K. K. M. Fiaboe, G. M. Kariuki, and F. M. W. Grundler

Diseases Caused by Parasitic Plants

1954 First Report of Dodder (Cuscuta australis) on Niuxi (Achyranthes bidentata) in China. C. Q. Chen, L. Pan, J. Gao, Y. Jiang, and S. L. Liu

Diseases Caused by Viruses

- 1955 First Report of a Natural Infection of Eggplant mottled dwarf virus in Podranea ricasoliana Showing Leaf Intervenial Yellowing. A. Alfaro-Fernández, M. I. Font-San-Ambrosio, D. Hernández-Llopis, L. Galipienso, and L. Rubio
- 1955 First Report of Maize chlorotic mottle virus Naturally Infecting Sorghum and Coix Seed in China. J. Huang, G. S. Wen, M. J. Li, C. C. Sun, Y. Sun, M. F. Zhao, and Y. Q. He
- 1955 First Report of Prunus necrotic ringspot virus Infection of Apple in China. G. J. Hu, Y. F. Dong, Z. P. Zhang, X. D. Fan, F. Ren, Z. N. Li, and J. Zhou
- 1956 First Report of Hop latent viroid in Belgian Hops. K. De Jonghe, N. Van Bogaert, S. Vandierendonck, G. Smagghe, and M. Maes
- 1956 First Molecular Evidence of Tomato chlorotic spot virus Infecting Tomatoes in Cuba. Y. Martinez-Zubiaur, L. Chang Sidorchuk, H. González Alvarez, N. Barboza Vargas, and G. González Arias
- 1956 Molecular Identification of Cactus virus X Infecting Hylocereus polyrhizus (Cactaceae) in Hainan Island, China. C. Peng, N. T. Yu, Z. W. Luo, H. Y. Fan, F. He, X. H. Li, Z. L. Zhang, and Z. X. Liu
- 1957 Bidens pilosa is a Natural Host of Tomato spotted wilt virus in Yunnan Province, China. C. J. Huang, Y. Liu, H. Q. Yu, B. Z. Liu, and L. Qing
- 1957 First Report of Grapevine red blotch-associated virus on Grapevine in Korea, S. Lim, D. Igori, F. Zhao, J. S. Moon, I.-S. Cho and G.-S. Choi
- 1958 First Report of Shallot virus X in Allium caeruleum in Poland.
 M. Bereda and E. Paduch-Cichal
- 1958 First Report of *Papaya leaf curl virus* in Papayas in Korea and Recovery of its Symptoms. H.-S. Byun, E.-J. Kil, H. Seo, S.-S. Suh T.-K. Lee, J.-H. Lee, J.-K. Kim, K.-Y. Lee, S.-J. Ko, G.-S. Lee, H.-S. Choi, C.-S. Kim, and S. Lee
- 1958 First Report of Tomato yellow leaf curl virus Infecting Tomatoes in Trinidad. C. Chinnaraja, A. Ramkissoon, A. Ramsubhag, and J. Jayaraj
- 1959 First Report of Papaya (Carica papaya) Naturally Infected With the Introduced Tomato yellow leaf curl virus-Israel.

 O. J. Alabi, M. Al Rwahnih, J. K. Brown, A. M. Idris, L. Gregg, E. Kmieciak, M. Sétamou, J. L. Jifon

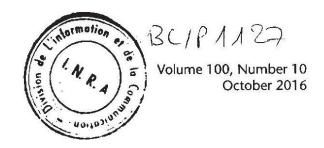
COVER IMAGES

Charcoal canker caused by *Biscogniauxia rosucearum* (courtesy M. L. Raimondo et al.; see page 1813); symptoms of *Maize chlorotic mottle virus* on sorghum (courtesy J. Huang et al.; see page 1955).



Copyright © 2016 The American Phytopathological Society 3340 Pilot Knob Road, St. Paul, MN 55121 +1.651.454.7250 http://apsjournals.apsnet.org An International Journal of Applied Plant Pathology

plant disease



FEATURE

1965 Identifying and Managing Root Rot of Pulses on the Northern Great Plains. B. D. Gossen, R. L. Conner, K.-F. Chang, J. S. Pasche, D. L. McLaren, M. A. Henriquez, S. Chatterton, and S.-F. Hwang

RESEARCH

- 1979 Climate Suitability for Magnaporthe oryzae Triticum
 Pathotype in the United States. C. D. Cruz, R. D. Magarey,
 D. N. Christie, G. A. Fowler, J. M. Fernandes, W. W. Bockus,
 B. Valent, and J. P. Stack
- 1988 Sources and Genetics of Spot Blotch Resistance to a New Pathotype of Cochliobolus sativus in the USDA National Small Grains Collection. Y. Leng, R. Wang, S. Ali, M. Zhao, and S. Zhong
- 1994 Evaluation of Resistance to Asiatic Citrus Canker among Selections of Pêra Sweet Orange (Citrus sinensis).
 A. M. O. Gonçalves-Zuliani, D. S. Y. Nanami, B. R. Barbieri, T. A. Guedes, C. A. Zanutto, C. H. Bock, and W. M. C. Nunes
- 2001 Refinement of the Taxonomic Structure of 16SrXI and 16SrXIV Phytoplasmas of Gramineous Plants using Multilocus Sequence Typing. S. Abeysinghe, P. D. Abeysinghe, C. Kanatiwela-de Silva, P. Udagama, K. Warawichanee, N. Aljafar, P. Kawicha, and M. Dickinson
- 2011 Geographical Distribution of Cacao swollen shoot virus Molecular Variability in Ghana. F. Abrokwah, H. Dzahini-Obiatey, I. Galyuon, F. Osae-Awuku, and E. Muller
- 2018 The Effect of Different Temperatures and Moisture Levels on Survival of *Calonectria pseudonaviculata* in Boxwood Leaves and Twigs and as Microsclerotia Produced in Culture, N. Shishkoff and M. J. Camp**
- 2025 Diversity and Distribution of Rice Blast (Pyricularia oryzae Cavara) Races in Bangladesh. M. A. I. Khan, M. A. Ali, M. A. Monsur, A. Kawasaki-Tanaka, N. Hayashi, S. Yanagihara, M. Obara, M. A. T. Mia, M. A. Latif, and Y. Fukuta
- 2034 Impact of Growing Environment on Anthracnose Severity of Switchgrass Cultivars and Clones. L. Hoffman, L. M. Chaves, E. N. Weihel, H. S. Mayton, and S. A. Bonos
- 2043 Transmission of *Tomato chlorosis virus* (ToCV) by *Bemisia tabaci* Biotype Q and Evaluation of Four Weed Species as Viral Sources. C. G. Orfanidou, P. G. Pappi, K. E. Efthimiou, N. I. Katis, and V. I. Maliogka
- 2050 Resistance in Strawberry Isolates of Colletotrichum acutatum from Florida to Quinone-Outside Inhibitor Fungicides. B. B. Forcelini, T. E. Seijo, A. Amiri, and N. A. Peres
- 2057 Characterization of Botrytis cinerea Isolates from Strawberry with Reduced Sensitivity to Polyoxin D Zinc Salt.
 M. E. Dowling, M.-J. Hu, L. T. Schmitz, J. R. Wilson, and G. Schnabel
- 2062 Stalk Rot Fungi Affect Leaf Greenness (SPAD) of Grain Sorghum in a Genotype- and Growth-Stage-Specific Manner. Y. M. A. Y. Bandara, D. K. Weerasooriya, T. T. Tesso, and C. R. Little
 - Public summary is available in the online version of PLANT DISEASE at: http://apsjournals.apsnet.org/loi/pdis

- 2069 Assessment and Management of Root Lesion Nematodes in Montana Wheat Production. D. B. May, W. A. Johnson, P. C. Zuck, C. C. Chen, and A. T. Dyer
- 2080 Effects of Temperature and Duration of Preconditioning Cold Treatment on Sclerotial Germination of Claviceps purpurea. S. S. Uppala, B. M. Wu, and S. C. Alderman
- 2087 Fungicide Resistance Profiling in *Botrytis cinerea* Populations from Blueberry in California and Washington and Their Impact on Control of Gray Mold. S. Saito, T. J. Michailides, and C. L. Xiao
- 2094 The Effect of Leaf Shredding on Apple Scab in South African Orchards. S. G. von Diest, J. C. Meitz-Hopkins, W. E. MacHardy, and C. L. Lennox
- 2099 Spraying of Leaf-Colonizing Bacillus amyloliquefaciens
 Protects Pepper from Cucumber mosaic virus. G. H. Lee and
 C.-M. Ryu
- 2106 Differences in Sensitivity to a Triazole Fungicide Among Stagonosporopsis Species Causing Gummy Stem Blight of Cucurbits. H.-X. Li, K. L. Stevenson, and M. T. Brewer
- 2113 Hormetic Effects of Trifloxystrobin on Aggressiveness of Sclerotinia sclerotiorum. Y.-L. Di, M.-L. Cong, R. Zhang, and F.-X. Zhu
- 2119 Sensitivity of *Phytophthora nicotianae* From Tobacco to Fluopicolide, Mandipropamid, and Oxathiapiprolin. *T. Qu, Y. Shao, A. S. Csinos, and P. Ji*
- 2126 Intervals and Number of Applications of Acibenzolar-S-Methyl for the Control of Bacterial Spot on Processing Tomato. N. C. Pontes, A. R. Nascimento, A. Golynski, L. A. Maffia, J. Rogério de Oliveira, and A. M. Quezado-Duval
- 2134 Multi-environment Evaluation of Maize Inbred Lines for Resistance to Fusarium Ear Rot and Fumonisins. L. J. Rose, M. Mouton, I. Beukes, B. C. Flett, C. van der Vyver, and A. Viljoen
- 2145 Avena sterilis L. Genotypes as a Potential Source of Resistance to Oat Powdery Mildew. S. Okoń, E. Paczos-Grzęda, T. Ociepa, A. Koroluk, S. Sowa, K. Kowalczyk, and M. Chrząstek
- 2152 Revisiting Planting Date and Cultivar Effects on Soybean Sudden Death Syndrome Development and Yield Loss. D. A. Marburger, D. L. Smith, and S. P. Conley

DISEASE NOTES

Diseases Caused by Bacteria and Phytoplasmas

- 2158 First Report of Aster Yellows Related Phytoplasma Affecting Sugar Beets in Poland. A. Zwolińska, N. Borodynko, K. Krawczyk, and H. Pospieszny
- 2158 First Report of Goss's Bacterial Wilt and Leaf Blight on Corn Caused by Clavibacter michiganensis subsp. nebraskensis in Missouri. P. K. Hosack, L. E. Sweets, G. L. Miller, M. J. Calcutt, and B. E. Arenz
- 2158 First Report of Xanthomonas hortorum pv. hederae Causing Bacterial Leaf Spot on Ivy in Greece. E. A. Trantas, P. F. Sarris, E. Mpalantinaki, M. Papadimitriou, F. Ververidis, and D. E. Goumas

- 2159 First Report of Bark Canker Disease of Poplar Caused by Lonsdalea quercina subp. populi in Spain. I. M. Berructe, M. A. Cambra. R. Collados, A. Monterde, M. M. López, J. Cubero, and A. Palacio-Bielsa
- 2159 First Report of Leaf Spot of Pumpkin Caused by Pseudomonas cichorii in Tennessee. E. A. Newberry, M. L. Paret, J. B. Jones, and S. C. Bost
- 2160 First Report of Field Decay of Sugar Beet Caused by Pectobacterium carotovorum subsp. brasiliense in North America. G. A. Secor, V. V. Rivera-Varas, R. S. Brueggeman, M. S. Metzger, J. Rengifo, and J. K. Richards
- 2160 First Report of Streptomyces turgidiscablel and S. stelliscablel Causing Potato Common Scab in Labore Punjab, Pakistan. A. Sarwar, Z. Latif, C. Cabaleiro, and C. R. Osorio

Diseases Caused by Fungi and Fungus-Like Organisms

- 2160 First Report of Lasiodiplodia theobromae Causing Maize Ear Rot in Hainan Province in Southern China, H. X. Ma, H. J. Zhang, J. Shi, J. J. Dang, J. Y. Chang, D. Chen, Q. Y. Hu, N. Guo, and H. L. Han
- 2161 First Report of Sclerotium rolfsii Causing Crown Rot on Globe Artichoke in Turkey. M. Aydoğdu, İ. Kurbetli, and S. Ozan
- 2161 First Report of Pestalotiopsis microspora Causing Postharvest Rot of Kiwifruit in Hubei Province, China. L. Li, H. Pan, M. Y. Chen, and C. H. Zhong
- 2162 First Report of Colletotrichum nigrum Causing Anthracnose Disease on Tomato Fruit in New Jersey. Y. Rivera, J. Stommel, J. Dumm, A. Ismaiel, C. A. Wyenandt, and J. A. Crouch
- 2162 First Report of Cadophora luteo-olivacea Causing Side Rot on 'Conference' Pears in the Netherlands. M. Wenneker, K. T. K. Pham, M. E. C. Lemmers, F. A. de Boer, P. J. van Leeuwen, T. C. Hollinger, B. H. Groenenboom-de Haas, and J. Köhl
- 2162 First Report of Setosphaeria rostrata Causing Brown Leuf Spot of Rice in Pakistan. R. A. Majeed, A. A. Shahid, G. A. Liaqat, K. Saleem, M. Asif, M. Shafiq, M. S. Haider, and M. Noreen
- 2163 First Report of Corynespora Leaf Spot on Sweet Potato Caused by Corynespora cassiicola in China. J. Xu, X. Qi. X. Zheng, Y. Cui, X. Chang, and G. Gong
- 2163 First Report of Puccinia hemerocallidis Causing Daylily Rust in Europe. E. Silva, R. Carvallio, N. Nunes, A. P. Ramos, and P. Talhinhas
- 2164 A Post-Harvest Pink Rot of Pepper Caused by Trichothecium roseum in China. S. H. Lin, J. H. Wang, and A. B. Wu
- 2164 First Report of Colletotrichum chlorophyti Causing Moringa oleifera Anthracnosc in China. Z. Y. Cai, Y. Yang, Y. X. Liu, Y. M. Zhang, J. M. Long, and H. Q. Li
- 2164 First Report of Powdery Mildew Caused by Erysiphe huhrii on Gypsophila oldhamiana in Korea, I. Y. Choi, C. H. Kang, Y. J. Song, S. E. Cho, and H. D. Shin
- 2165 First Report of Colletotrichum gloeosporioides Causing Anthracnose on Bauhinia blakeana. P. L. Li, D. Liu, X. J. Zheng, H. B. Chen, G. S. Gong, M. Zhang, and X. G. Wong
- 2165 Leaf Spot Disease of Field Bindweed (Convolvulus arvensis) Caused by Stemphylium solani in China. X. K. Zhang. H. Xi, K. J. Lin. Z. Liu, Y. Yu, J. Zhuo, and Y. Sun
- 2166 First Report of Diplodia quercivora Causing Dieback on Quercus suber and in Europe. H. Bragança, J. Neno. J. Henriques, E. Diogo, and A. Alves

- 2166 First Report of European Pear Rust (Pear Trellis Rust) Caused by Gymnosporangium sabinae on Ornamental Pear (Pyrus calleryana) in Virginia. M. A. Hansen. J. Demers, M. Sutphin, K. Yoder, E. Bush, and L. Castlebury
- 2166 Laurel Wilt, Caused by Raffaelea lauricola, is Detected for the First Time Outside the Southeastern United States. R. C. Ploetz, Y. Y. Thant, M. A. Hughes, T. J. Dreaden, J. L. Konkol, A. T. Kyaw, J. A. Smith, and C. L. Harmon
- 2167 First Report of Anthracnose Disease Caused by Colletotrichum fioriniae on Blueberry in Western Poland. A. Pszczółkowska, A. Okorski, Ł. Paukszto, and J. Jastrzebski
- 2167 A First Report of Rubber Tree Leaf Spot Caused by Exserohilum rostratum in China. Y. X. Liv, Y. P. Shi, and Z. Y. Cai
- 2168 First Report of Colletotrichum scovittei Causing Anthracnose Fruit Rot on Pepper in Anhul Province, China. W. Zhao. T. Wang, Q. Q. Chen, Y. K. Chi, T. M. Swe, and R. D. Qi
- 2168 First Report of Pleurostoma richardsiae Causing Grapevine Trunk Disease in Spain. C. Pintos Varela, V. Redondo Fernández, O. Aguín Casal, V. Ferreiroa Martinez, and J. P. Mansilla Vázquez.
- 2168 Powdery Mildew Caused by Golovinomyces biocellatus on Lemon Thyme (Thymus × citriodorus) 'Aureus' in Italy. A. Garibaldi, D. Bertetti, S. Franco Ortega, P. Martini, and M. L. Gullino
- 2169 First Report of Powdery Mildew Caused by Erysiphe herberidicola on Berberis koreana in Korea, H. B. Lee and T. T. T. Nguyen
- 2169 First Report of Rust Disease Caused by Puccinia liliacearum on Ornithogalum ambeliatum From Indiana and Maryland With Notes on the Spread of the Rust Fungus in the United States, M. Abbasi, J. F. Klimek, and M. C. Aime
- 2170 Atternaria alternata Causes Black Leaf Spot of Basella alba in Jilin Province, China. F. R. Mao, Y. N. Liu, Z. Y. Zhang, L. B. Wang, and Y. K. Cheng
- 2170 First Report of Powdery Mildew Caused by Erysiphe polygoni on Homalocladium platycladum in Korea, G. S. Han, B. S. Kim, L. Y. Choi, S. E. Cho, and H. D. Shin
- 2170 First Report of Fusarium avenaceum Causing Stalk and Root Rot in Commercial Potato Crops (Solanum tuberosum) in the Toluca Valley, Mexico. H. García-Núñez, A. R. Martínez-Campos. C. A. López-Onma, and J. M. Díaz-Mínguez
- 2171 A Root Rot of Chickpea Caused by Isolates of the Fusarium solani Species Complex in Brazil. C. S. Cobral, M. P. Melo, M. E. N. Fonseca, L. S. Boiteux, and A. Reis
- 2171 Anthracnose of Onion Caused by Colletotrichum coccodes in New York, F. S. Hay, D. Strickland, E. Maloney, C. Hoepting, and S. J. Pethybridge
- 2171 First Report of Colletotrichum tropicale Causing Anthracuose on the Wild Cassava Species Manihot dichotoma and M. epruinosa in Brazil. S. A. S. Oliveira, C. A. D. Bragança, and L. L. Silva
- 2172 First Report of Leaf Spot on Angelica japonica Caused by Septoria aegopodina in China. H. J. Xu, R. J. Zhou, J. F. Zhao, J. F. Fu, and N. Hao
- 2172 First Report of Ceratocystis fimbriata Causing Leaf Blight on Alocasia macrorrhiza in China, J. Li, J. Y. Yang, K. Ch. Xu, Y. X. Sun, and Q. Huang

2173 First Report of Alternaria alternata Causing Leaf Spot of Fennel (Foeniculum vulgare) in China. Y.-X. Shi, Y.-Y. Wang, H.-J. Wang, A.-L. Chai, and B.-J. Li

Diseases Caused by Nematodes

- 2173 First Report of Meloidogyne izalcoensis (Nematoda: Meloidogynidae) on Coffee, Cabbage, and Other Crops in Africa. A. S. Jorge Junior, J. E. Cares, V. S. Mattos, D. Coyne, M. F. A. dos Santos, and R. M. D. G. Carneiro
- 2173 First Report of Meloidogyne enterolobii Causing Tuber Galling Damage on White Yam (Dioscorea rotundata) in Nigeria. Y. A. Kolombia, P. Lava Kumar, A. O. Claudius-Cole, G. Karssen, N. Viaene, D. Coyne, and W. Bert
- 2174 First Report of Meloidogyne luci Parasitizing Glycine max in Brazil. C. Bellé, D. Brum, M. Z. Groth, D. R. Barros, T. E. Kaspary, J. T. Schafer, and C. B. Gomes

Diseases Caused by Oomycetes

2174 First Report of Phytophthora gonapodyides Causing Stem Canker on European Beech (Fagus sylvatica) in Southern Sweden. M. Cleary, M. Ghasemkhani, M. Blomquist, and J. Witzell

Diseases Caused by Viruses

- 2175 First Report of Grapevine asteroid mosaic-associated virus and Grapevine rupestris vein feathering virus in Grapevines in Canada. H. Xiao and B. Meng
- 2175 First Report of Brome mosaic virus in Wheat in Estonia.
 M. Sõmera, M. Gantsovski, E. Truve, and P. Sooväli
- 2176 First Detection of Tomato spotted wilt virus (TSWV) on Amaranthus thunbergii in South Africa. L. Kisten, V. Moodley, A. Gubba, and P. L. Mafongoya
- 2176 First Report of Potato virus Y Strain N-Wilga Affecting Potato in Jordan. G. Anfoka, M. Altaleb, and M. Abu-Obaida
- 2176 First Report of the Occurrence of Corchorus yellow vein Vietnam virus on Jute in China. W. Z. Lin, G. H. Xiong, P. Qiu, K. C. Wu, Z. G. Du, J. Zhang, and Z. J. Wu
- 2178 Erratum

COVER IMAGES

Infection responses of representative barley accessions to *Cochliobolus sativus* (courtesy Y, Q, Leng et al., see page 1988); root rot symptoms caused by *Pythium* spp. (courtesy B. D. Gossen et al., see page 1965); frothing of sugar beet due to infection by *Pectobacterium carotovorum* subsp. *brasilense* (courtesy G. A. Secor et al., 2160).



Copyright © 2016 The American Phytopathological Society 3340 Pilot Knob Road, St. Paul, MN 55121 +1.651.454.7250 http://apsjournals.apsnet.org

RAUMFORSCHUNG UND RAUMORDNUNG

Band 74 · Heft 4 · August 2016

EDITORIAL

Editorial

A. Klee · A. Krehl 291

WISSENSCHAFTLICHER BEITRAG

Regionsbildung im Schatten des Metropolendiskurses. Das Fallbeispiel der Region Südwestfalen

J. Balke - M. Reimer 293

Pkw-Nutzung im Wandel des Geschlechterverhältnisses – Trends über drei Jahrzehnte

K. Konrad - J. Scheiner - C. Holz-Rau 307

Räume unter Strom. Eine diskurstheoretische Analyse zu Aushandlungsprozessen im Zuge des Stromnetzausbaus F. Weber · O. Kühne 323

Regional Distribution of Ambulant Nursing Services in Germany. A GIS Accessibility Analysis

S. Neumeier 339

Gekommen, um zu bleiben? Der Verbleib internationaler Studierender in Deutschland aus einer Lebenslaufperspektive B. Glorius 361

REZENSION

Wille, Christian; Reckinger, Rachel; Kmec, Sonja; Hesse, Markus (Hrsg.) (2014): Räume und Identitäten in Grenzregionen. Politiken – Medien – Subjekte. Bielefeld: Transcript. 400 S., kart., zahlr. z. T. farb. Abb T. Chilla 373

Suitner, Johannes (2015): Imagineering Cultural Vienna.
On the Semiotic Regulation of Vienna's Culture-led Urban
Transformation. Bielefeld: Transcript Verlag. = Urban
Studies. 4 Tab., 18 Abb., 267
S. Platt 375

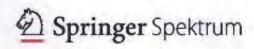
Ibert, Oliver; Müller, Felix C.; Stein, Axel (2014):
Produktive Differenzen. Eine dynamische
Netzwerkanalyse von Innovationsprozessen. Bielefeld:
Transcript. 230 S., 2 Tab., 5 Abb
C. Scheuplein 379

Leal Filho, Walter; Kotter, Richard (Hrsg.) (2015): E-Mobility in Europe – Trends and Good Practice. Cham: Springer International Publishing. 394 S. S. Wappelhorst 383

Weitere Artikel finden Sie auf www.springerlink.com

Abstracts publiziert in / Indexiert in FRANCIS, GeoRef, Google Scholar, INIS AtomIndex, International Bibliography of Book Reviews (IBR), International Bibliography of Periodical Literature (IBZ), OCLC, PAIS International, SCOPUS, Summon by Serial Solutions

Hinweise für Autoren für die Zeitschrift RuR finden sie auf http://www.springer.com/13147





Divers essais ont été conduits pour quantifier l'impact du milieu et des techniques culturales sur le rendement et la qualité du blé. Un concept de potentiel de protéines a été mis au point par des chercheurs-euses d'Agroscope, dans le hut de mieux comprendre les facteurs d'influence sur la teneur en protéines des blés, de déceler les variétés les plus stables, ainsi que les quantités en protéines qui restent à exploîter. (Photo: Carolo Parodi, Agroscope)

Impressum

Recherche Agronomique Susse/ Agrariorschung Schweiz est une publication des stations de recherche agronomique Agroscope et de leurs pertenaires. Cette publication peraili en allemand et en trançais. Elle s'acresse aux scientifiques, spécialistes du la recherche et de l'industrie, enveignants, organisations de conseil et de vuiçarisation, offices cantonaux et fédéraux, protogens, politiciens et autres personnes intéressées.

Editeur

Agroscope

Partenaires

- Agroscope (Institut des sciences en production végétule IPV: Institut des sciences en production animale IPA: Institut des sciences en denrées alimentaires IDA; Institut des sciences en durabilité agronom que IDU), www.agroscopuch.
- Office fédéral de l'agriculture OFAG. Berne, www.ofag.ch
- Haute école des sciences agronomiques forestières et al mentaires HAFL, Zollikofen, vvvvi hall on
- Centrale de vuigarisation AGRIDEA, Lausanne et Lindau, www.agricea.ch
- Coole polytechnique fédérale de Zurich ETF Zünch, Département des Sciences des Systèmes de l'Environnement, www.usys.ethr.ah.
- Institut de recherche de l'agriculture biologique FIEL, www.fibl.org

Rédaction

Direction et rédaction germanophone

Andrea Leuenberger Minger, Reclienthe Agronomique Suissé/Agranforschung Schweiz, Agroscope, case postale 64, 1725 Posieux, tél. + 41 58 456 72 21, fax +41 58 466 73 00

Rédaction francophone

Shylle Will, Remembe Agronomique Suisse/Agrarforschung Schweiz. Agroscope, case postale 1017, 1250 Nyon 1, Idl. +41 58 460 41 57

Suppléance

Judith Aum, Berherche Agranomique Scisse / Agranforschung Schweiz. Agroscope, case postale 1012, 1260 Nyon 1, tél. +41 58 460 41 82

e mal: into@rechercheagronomiquesuisse.ch

Team de rédaction

Président: Jean-Philippe Mayor (Responsable Corporate Communication Agrascopé), Beglyne Fasnaulti, Erika Melli, Sibylle Willi et Regula Wolz (Agrascope), Carin Bovigny-Adkesmann (CRAG), Beat Huber-Eicher (HAFL), Esther Weiss (AGRIDI A), Brighte Dorn (ETH ZCrich), Triomas Affoldi (FiBL).

Abonnements

Tarifs

Revue; CHF 61,-... TVA et frais de port compris (étranger + CHF 20,--frais de port), en ligne/App; CHF 61 --"

"Tarils redults you: www.rechercheagronomiquesnisses in

Adressa

Simone Zaugg, Racherchin Agriniumique Suisser/Agranforschung Schweie Agroscope, case postale 64, 1725 Posinus a-mail: info@rechercheagronomiquesuisseich, lax +41,28,437,70,30

Changement d'adrosse

e-mail: verkauf,z vill@bbl.admin.ch, fax +41 31 325 50 58

Interne

www.rechercheagronomiquesuisseich www.agrarforschungschweizich

ISSN infos

ISSN 1663 – 7917 (imprimé) ISSN 1663 – 7925 (en ligne) Idre: Recherche Agronomique Suisse Tine abregé: fiech: Agron, Suisse

© Copyright Agruscope. Tous droits de reproduction et de traduction réservés. Toute reproduction ou traduction, partielle ou integrale, doit faire l'objet d'un accord avec la rédaction.

Indexé: Web of Science, CAB Abstracts, AGRIS

Sommaire

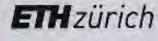
Septembre 2016 | Numéro 9

363	Editorial
364	Production végétale Potentiel de protéines de variétés de blé d'automne Lilia Levy Haner et al.
372	Production végétale Facteurs culturaux affectant les Fusarium spp. et les mycotoxines dans l'orge suisse Torsten Schirdewahn et al.
378	Production végétale Réglette azote colza®: adaptation pour la Suisse d'un outil d'aide à la fertilisation azotée du colza Arnaud Micheneau et al.
384	Production animale Digestibilité de l'ensilage de powermaïs distribué seul ou en rations mélangées Yves Arrigo et al.
390	Economie agricole La charge administrative dans l'agriculture Katja Heitkämper et al.
396	Environnement Le campagnol terrestre peut-il être maîtrisé à l'aide de barrières? Cornel J. Stutz et al.
404	Eclairage Lutte ciblée contre le campagnol terrestre soutenue par le «radar à campagnols» Cornel J. Stutz et al.
408	Eclairage Evaluation exhaustive et pratique de la durabilité des exploitations agricoles Andreas Roesch et al.
412	Portrait
413	Actualités
415	Manifestations
Encart	Fiche technique Souchet comestible Christian Bohren



Sprivetzensche Edgenossenschaft Confederation swase Confederatione Swazeria Confederation swazeria

Departement federal de Peconomic, de la formación et de la rache che DEFR Office federal de l'agriculture OFAG Acroscote







Photographie de couverture:

Les indésirables du vignoble n'ont qu'à bien se tenir; le 2º volume de la collection La Vigne, Ravageurs et auxiliaires, vient de sortir de pressel Ce superbe ouvrage de 400 pages contient tout ce qu'il faut savoir sur les espèces nuisibles, et aussi sur leurs ennemis naturels présents dans les parcelles. (Photo: Carole Parodi, Agroscope)

Cette revue est référencée dans les banques de données internationales. SCIE, Agricola, AGRIS, CAB, ELFIS et FSTA.

AMTRA (Association pour la mise en valeur des travaux de la recherche agronomique), CP 1006, 1260 Nyon 1, Suisse, www.revuevitiarbohorti.ch ISSN 0375-1430

Rédaction

Judith Auer (directrice et rédactrice en chef), Eliane Romer (rédactrice) Tél. +41 58 460 41 54, fax +41 22 362 13 25 E-mail: eliane.rchrer@agroscope.acmin.ch

Comité de lecture

L-Ph. Mayor (responsable IPV Agroscope), D. Viret (Agroscope), Ch. Carlen (Agroscope), R. Baur (Agroscope), U. Zürcher (Agroscope), L Bertschinger (Agrascope), Ch. Rey (Agrascope), C. Briguet (directeur CHANGINS), Ph. Droz (Agridea)

Inédit Fublications SA, Serge Bornand Avenue de Rumine 37, CP 900, 1001 Lausanno, né. +41 21 695 95 67

Prépresse

Inédit Fubrications SA, 1001 Lausanne.

Impression

Courvoisier Attinger Arts Graphicues SA

© Tous draits de reproduction et de traduction réservés. Toute reproduction ou traduction, partielle ou intégrale, doit faire l'objet d'un accord avec la rédaction.

Tarifs des abonnements

	Simple Imprimé/En ligne/App	Combiné Imprimé + En ligne Imprimé + App	Tout compris Imprimé + En ligne + Apa
Suisse	CBF 50-	CHF 60 -	CHF 60-
Etranger	CHF 57	CHF 67-	C IF 67 -

Abonnements et commandes

AMTRA, Antoinette Domartheory CP 1006, 1260 Nyon 1, Suisse Tél. +41 79 659 48 31, fax +41 22 362 13 25 F-mail: info@revuevitia/bohorti.co ou www.revuevit.arbohorti.ch

CCP 10-13759-2 ou UBS Nyon, compte CD-100951.0

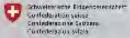
Commande de tirés à part

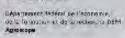
Tous nos tirés à part pouvent être commandés en ligne sur www.revuevibarbohorti.ch, publications

Sommaire

Juillet-Août 2016 | Vol. 48 | N° 4

217	Editorial
220	Protection des végétaux Etude et gestion de la punaise Liocoris tripustulatus, ravageur émergent des fraises Gaëtan Jaccard et Serge Fischer
230	Traitement à l'eau chaude contre l'enroulement chlorotique de l'abricotier Beatrix Buchmann, Santiago Schaerer, Danilo Christen et Markus Bünter
238	Viticulture Complémentation foliaire azotée du cépage Vitis vinifera Doral dans le canton de Vaud Thibaut Verdenal, Vivian Zufferey, Jean-Laurent Spring, Johannes Rösti, Ágnès Dienes-Nagy, Fabrice Lorenzini, Jean-Luc Wolfender, Jorge Spangenberg, Stéphane Burgos, Katia Gindro et Olivier Viret
248	Arboriculture Enjeux de la filière abricot en Valais: importance du prix au producteur pour la viabilité des exploitations Benjamin Rohrer, Danilo Christen et Dominique Barjolle
256	Effet du traitement au 1-MCP sur l'évolution de la qualité des poires durant l'entreposage et l'affinage Abel Ortiz, Marie Dufrechou, Dominique Le Meurlay et Emira Mehinagic
266	Evaluation de la technique d'exclusion par filets pour gérer les ravageurs en pomiculture Raphaël Haraz et Dominique Fleury
271	Portrait
273	La page de CHANGINS

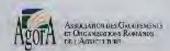












Contents:

Semiparametric Quantile Regression Analysis of Right-Censored and Length-Biased Failure Time Data with Partially Linear	
Varying Effects Xuerong Chen, Yeqian Liu, Janguo Sun & Yong Zhou	921
Parameter Estimation for Inhomogeneous Space-Time Shot-Noise Cox Point Processes Jiří Dvořák & Michaela Prokešová	930
Compositional Tables Analysis in Coordinates Kami a Fačevicová, Karel Hron, Valentin Todo-ov & Matthias Templ	962
Approaches to the Estimation of the Local Average Treatment Effect in a Regression Discontinuity Design Aidan G. O'Keeffe & Giank ca Baio	978
Unear Increments with Non-Monotone Missing Data and Measurement Error Shaun R. Seaman, Daniel Farewell & Jan R. White	996
Robust Inference in Two-Phase Sampling Designs with Application to Unit Nonresponse Cyril Favre-Martinoz, David Haziza & Jean-Frenco's Scaumon:	1019
Generic Identifiability of Linear Structural Equation Models by Ancestor Decomposition Mathias Drion & Luca Weins	1035
A Framework for Monte Carlo Based Multiple Testing Axel Gandy & Georg Hahn	1046
Bayesian Conditional Mean Estimation in Log-Normal Linear Regression Models with Finite Quadratic Expected Loss Enno Fabrizi & Carlo Trivisario	1064
Inference for Multi-Dimensional High-Frequency Data with an Application to Conditional Independence Testing Markus Bibinger & Per A. Mykland	1078
An Automatic Test for the Umbrella Alternatives Grzegorz Wyłupek	1103
Generalized Method of Moments for Additive Hazards Model with Clustered Dental Survival Data Hui Li, Xiaogang Duan & Guoshang Yin	1124
An Extended Single-Index Model with Missing Response at Random Gihua Wang, Tao Zhang & Wolfgang Karl Handle	1140
Visualization for Large-Scale Gaussian Updates Jonathan Rougier & Andrew Zammit Mangion.	1153
Restricted Most Powerful Bayesian Tests for Linear Models Scott D. Goddard & Valen E. Johnson	1162
Testing Parametric Models in Linear-Directional Regression Eduardo García Portugués, Ingrid Van Keilegon, Rosa M. Crujeiras & Wenceslao González-Manteiga	1178
Statistical Analysis of Mixture Vector Autoregressive Models Maddalera Cavicchioli	1192
Conditional Akaike Information Criteria for a Class of Poisson Mixture Models with Random Effects	1214

38

SOIL SCIENCE

An Interdisciplinary Approach to Soils Research

	JUNE 2016	CONTENTS	Vol. 181 No. 6	
	INTRODUCTION TO THE SPECIAL ISSU Encarnación V. Taguas and Emmanou	ie on Soil Hydrology: Part i		223
10 mm	STOCHASTIC MODELING OF AQUIFER LEVEL TEMPORAL FLUCTUATIONS BASED ON THE CONCEPTUAL BASIS OF THE SOIL-WATER BALANCE EQUATION Emmanouil A. Varouchakis, Katerina Spanoudaki, Dionissios T. Hristopulos, George P. Karatzas, and Gerald A. Corzo Perez		;	224
S 12	IS SOIL WATER POTENTIAL A RELIAB OF PEACH ORCHARDS?	DIE VARIABLE FOR IRRIGATION SCHEDULING IN THE CA	SE	232
See The	MODEL MODIFICATION AND APPLICA	THOUSE CULTIVATIONS UNDER A CHANGING CLIMATE ATION IN TIMPARI, CRETE		241
	Units Within an Irrigated Field	ROUGH EMI SURVEY TO DELINEATE SITE-SPECIFIC M radia, Simone Priori, Giovanni L'Abate, Davide Canon i, Mauro Mele, and Arianna Facchi		252
Mate	CLIMATE-INDUCED SHIFTS IN GLOBA Manolis G. Grillakis, Aristeidis G. K and Ioannis K. Tsanis	AL SOIL TEMPERATURE REGIMES	akopoulos,	264

THE JOURNAL OF

VOLUME 91 ISSUE 6 NOVEMBER 2016 ISSN 1462-0316

Horticultural Science Biotechnology

- 551 Genetic diversity and In vitro assessment of salt tolerance responses and associated changes in gene expression of male popular (Populus) trees. Salah Khattab and Hoda A. El-Garhy
- Nitrogenous compounds enhance the growth of petunia and reprogram biochemical changes against the adverse effect of salinity M. Arun, R. Radhakrishnan, T.N. Ai, A.H. Naing, I.J. Lee and C.K. Kim
- Floral fragrances of Hemerocallis L, (daylily) evaluated by headspace solid-phase microextraction with gas chromatography-mass spectrometry F. Jiao, Q. Liu, G.F. Sun, X.D. Li and J.Z. Zhang
- A coating composed of chitosan and Cymbopogon citratus (Dc. Ex Nees) essential oil to control Rhizopus soft rot and quality in tomato fruit stored at room temperature

 A.J.A.A. Alhayde, P.D.L. de Oliveira, I.C.D. Guerra, M.L. da Concelção, M.A.B. de Lima, N.M.O Arcanjo, M.S. Madruga, L.R.R. Berger and E.L. de Souza
- 592 Genome-wide identification and analysis of CKX genes in Poncinus trifoliata Yan-yan Ma, Li Zheng, Rangjin Xie, Shao-lan He and Lie Deng
- 603 Yield and quality of Corchorus olitorius baby leaf grown in a floating system Andrea Giro and Antonio Ferrante
- 61.1 Purification and characterization of a flavor-related enzyme, γ-glutamyl-transpeptidase, from Toona sinensis leaves Chang-Jin Liu, Jian-Ying Jia, Hao-Yu Wang, Li-Li Xue, Yu Kong and Fu-Xin Wang
- 619 Effects of nitrogen shock treatment on postharvest changes of Yali pears Jiaqi Yan, Jian Li, Yancong Xu, Liping Li and Yousheng Wang
- 625 Effect of RNAi-mediated gene silencing of starch phosphorylase L and starch-associated R1 on cold-induced sweetening in potato Morteza Kamrani, Bahram Baghban Kohnehrouz and Ashraf Gholizadeh
- Agronomic and nutritional quality, and fresh and processing attitude, of globe artichoke (Cymara cardunculus L., var. scolymus) cultivars and an Italian landrace Roberto Cappelletti, Francesca Balducci, Jacopo Diamanti, Luca Mazzoni, Franco Capocasa, Maurizio Battino and Bruno Mezzetti
- Association analysis of fruit traits in mulberry species (Morus L.)
 Jian Zhang, Tongyi Yang, Rong-Fang Li, Yu Zhou, Yun-Long Pang, Li Liu, Rong-Jun Fang,
 Qiao-Ling Zhao, Long Li and Wel-Guo Zhao

