

Volume contents

Volume 109 No. 1 January 2003

Comparison of resistance to <i>Tomato leaf curl virus</i> (India) and <i>Tomato yellow leaf curl virus</i> (Israel) among <i>Lycopersicon</i> wild species, breeding lines and hybrids	1–11
M.N. Maruthi, H. Czosnek, F. Vidavski, S.-Y. Tarba, J. Milo, S. Leviatov, H.M. Venkatesh, A.S. Padmaja, R.S. Kulkarni and V. Muniyappa	
Effect of sexual recombination on pathotype frequencies in barley powdery mildew populations of artificially inoculated field plots	13–24
L. Bousset and C. de Vallavieille-Pope	
Barley powdery mildew populations on volunteers and changes in pathotype frequencies during summer on artificially inoculated field plots	25–33
L. Bousset and C. de Vallavieille-Pope	
Development of ZWIPERO, a model forecasting sporulation and infection periods of onion downy mildew based on meteorological data	35–45
S. Friedrich, G.M.E. Leinhos and F.-J. Löpmeier	
Further contributions to the development of a differential set of pea cultivars (<i>Pisum sativum</i>) to investigate the virulence of isolates of <i>Aphanomyces euteiches</i>	47–60
E. Wicker, A. Moussart, M. Duparque and F. Rouxel	
Direct and specific assessment of colonisation of wheat rhizoplane by <i>Pseudomonas fluorescens</i> Pf29A	61–70
A. Chapon, M. Boutin, D. Rimé, L. Delalande, A.-Y. Guillerm and A. Sarniguet	
<i>Uromyces viciae-fabae</i> haustorium formation in susceptible and resistant faba bean lines	71–73
D. Rubiales and J.C. Sillero	
Study of resistance to <i>Orobanche ramosa</i> in host (oilseed rape and carrot) and non-host (maize) plants	75–82
N. Zehhar, P. Labrousse, M.-C. Arnaud, C. Boulet, D. Bouya and A. Fer	
A <i>PAL1</i> gene promoter–green fluorescent protein reporter system to analyse defence responses in live cells of <i>Arabidopsis thaliana</i>	83–94
J.E. Rookes and D.M. Cahill	
Instructions to authors	95–99

Volume 109 No. 2 February 2003

Mini review

Agricultural genomics: An approach to plant protection	101–108
H. Koltai and H. Volpin	
Effect of fungicides on <i>Fusarium</i> head blight and deoxynivalenol content in durum wheat grain	109–115
A.M. Menniti, D. Pancaldi, M. Maccaferri and L. Casalini	

Polymorphism of 14α-demethylase gene (<i>CYP51</i>) in the cereal eyespot fungi <i>Tapesia acuformis</i> and <i>Tapesia yallundae</i> C. Albertini, M. Gredt and P. Leroux	117–128
Epidemics of aphid-transmitted viruses in melon crops in Spain J.L. Alonso-Prados, M. Luis-Arteaga, J.M. Alvarez, E. Moriones, A. Batlle, A. Laviña, F. García-Arenal and A. Fraile	129–138
The diagnosis of the tomato variant of pepino mosaic virus: An IC-RT-PCR approach C. Mansilla, F. Sánchez and F. Ponz	139–146
Development of Fusarium wilt-resistant genotypes in safflower (<i>Carthamus tinctorius</i>) R. Kalpana Sastry and C. Chattopadhyay	147–151
Identification of microsatellite markers for <i>Plasmopara viticola</i> and establishment of high throughput method for SSR analysis D. Gobbin, I. Pertot and C. Gessler	153–164
Phenotypic and genotypic characterization of <i>Xanthomonas campestris</i> pv. <i>zinniae</i> strains F. Sahin, R. Kotan, P.A. Abbasi and S.A. Miller	165–172
<i>In vitro</i> and <i>in vivo</i> activity of cyprodinil and pyrimethanil on <i>Botrytis cinerea</i> isolates resistant to other botryticides and selection for resistance to pyrimethanil in a greenhouse population in Greece N. Petsikos-Panayotarou, E. Markellou, A.E. Kalamarakis, D. Kyriakopoulou and N.E. Malathrakis	173–182
Host-specific genetic composition of <i>Melampsora larici-epitea</i> populations on two <i>Salix viminalis</i> varieties in a mixture trial B. Samils, A.R. McCracken, W.M. Dawson and U. Gullberg	183–190
Short communication	
Natural infection of wheat by the type strain of <i>Soil-borne wheat mosaic virus</i> in a field in Southern Germany R. Koenig and W. Huth	191–193

Volume 109 No. 3 March 2003

Mini review

Plant viruses transmitted by whiteflies D.R. Jones	195–219
Control of citrus green and blue molds with garlic extracts J. Obagwu and L. Korsten	221–225
Genetic and phenotypic diversity in the graminaceous cyst nematode complex, inferred from PCR-RFLP of ribosomal DNA and morphometric analysis R. Rivoal, S. Valette, S. Bekal, J.-P. Gauthier and A. Yahyaoui	227–241
Activity of the new fungicide benthiavalicarb against <i>Plasmopara viticola</i> and its efficacy in controlling downy mildew in grapevines M. Reuveni	243–251

The occurrence of <i>Mycosphaerella graminicola</i> and its anamorph <i>Septoria tritici</i> in winter wheat during the growing season	253–259
L. Eriksen and L. Munk	
Occurrence of Mirafiori lettuce virus and <i>Lettuce big-vein virus</i> in relation to development of big-vein symptoms in lettuce crops	261–267
P. Roggero, H. Lot, S. Souche, R. Lenzi and R.G. Milne	
Quantitative inoculations of poplars with <i>Melampsora larici-populina</i>	269–276
M.H. Pei, C. Ruiz, J. Harris and T. Hunter	
<i>Short communications</i>	
Characteristics of <i>Phytophthora infestans</i> isolates from Uruguay	277–281
K.L. Deahl, M.C. Pagani, F.L. Vilaro, F.M. Perez, B. Moravec and L.R. Cooke	
Differentiation of <i>Xanthomonas</i> species pathogenic to sugarcane by PCR-RFLP analysis	283–288
S.A.L. Destéfano, I.M.G. Almeida, J. Rodrigues Neto, M. Ferreira and D.M. Balani	
<i>Book review</i>	
Mechanisms of resistance to plant diseases. Edited by A.J. Slusarenko, R.S.S. Fraser and L.C. Van Loon	289
U. Conrath	

Volume 109 No. 4 May 2003

Physiological, biochemical and molecular analyses of an Italian collection of <i>Agrobacterium tumefaciens</i> strains	291–300
R. Peluso, A. Raio, F. Morra and A. Zoina	
Relationships between weather variables, airborne spore concentrations and severity of leaf blight of garlic caused by <i>Stemphylium vesicarium</i> in Spain	301–310
A.M. Prados-Ligero, J.M. Melero-Vara, C. Corpas-Hervías and M.J. Basallote-Ureba	
Studies on the inherent resistance risk to fenhexamid in <i>Botrytis cinerea</i>	311–317
B.N. Ziogas, A.N. Markoglou and A.A. Malandrakis	
Susceptibility of European pear cultivars to <i>Pseudomonas syringae</i> pv. <i>syringae</i> using immature fruit and detached leaf assays	319–326
C. Moragrega, I. Llorente, C. Manceau and E. Montesinos	
Screening for differential gene expression in <i>Atropa belladonna</i> leafy gall induced following <i>Rhodococcus fascians</i> infection	327–330
E.H. Nouar, D. Vereecke, K. Goethals, M. Jaziri and M. Baucher	
Natural occurrence and distribution of <i>Fusarium</i> toxins in contaminated barley cultivars	331–339
J. Perkowski, I. Kiecana and Z. Kaczmarek	
Integrated control of apple postharvest pathogens and survival of biocontrol yeasts in semi-commercial conditions	341–349
G. Lima, F. De Curtis, R. Castoria and V. De Cicco	

Ultrastructural changes and production of a xanthan-like polysaccharide associated with scald of sugarcane leaves caused by <i>Xanthomonas albilineans</i>	351–359
M.T. Solas, D. Piñón, R. Acevedo, B. Fontaniella, M.E. Legaz and C. Vicente	
Estimation of genetic variation among <i>Verticillium</i> isolates using AFLP analysis	361–371
J. Fahleson, U. Lagercrantz, Q. Hu, L.A. Steventon and C. Dixelius	
<i>Nigerian tobacco latent virus: a new Tobamovirus from tobacco in Nigeria</i>	373–379
J.L. Ladipo, R. Koenig and D.-E. Lesemann	
Tracking <i>Agrobacterium</i> strains by a RAPD system to identify single colonies from plant tumours	381–389
P. Llop, B. Lastra, H. Marsal, J. Murillo and M.M. López	
<i>Short communications</i>	
Identification of <i>Rhizoctonia solani</i> AG 1-IB in lettuce, AG 4 HG-I in tomato and melon, and AG 4 HG-III in broccoli and spinach, in Brazil	391–395
E.E. Kuramae, A.L. Buzeto, M.B. Ciampi and N.L. Souza	
Identification of divergent variants of <i>Grapevine virus A</i>	397–403
D.E. Goszczynski and A.E.C. Jooste	
Book review	405–406

Volume 109 No. 5 June 2003

Mini review

The application of flow cytometry and fluorescent probe technology for detection and assessment of viability of plant pathogenic bacteria	407–417
L.G. Chitarra and R.W. van den Bulk	
High similarity between tomato isolates of <i>Pepino mosaic virus</i> suggests a common origin	419–425
J.Th.J. Verhoeven, R.A.A. van der Vlugt and J.W. Roenhorst	
Effect on resistance to <i>Tylenchulus semipenetrans</i> of hybrid citrus rootstocks subjected to continuous exposure to high population densities of the nematode	427–433
S. Verdejo-Lucas, M. Galeano, F.J. Sorribas, J.B. Forner and A. Alcaide	
Yield reduction in wheat in relation to leaf disease from yellow (tan) spot and septoria nodorum blotch	435–443
J.S. Bhathal, R. Loughman and J. Speijers	
Aerial contamination of sugarcane in Guadeloupe by two strains of <i>Xanthomonas albilineans</i>	445–458
J.H. Daugrois, V. Dumont, P. Champoiseau, L. Costet, R. Boisne-Noc and P. Rott	
Impact of <i>Sugarcane yellow leaf virus</i> on sugarcane yield and juice quality in Réunion Island	459–466
L. Rassaby, J.-C. Girard, P. Letourmy, J. Chaume, M.S. Irely, B.E.L. Lockhart, H. Kodja and P. Rott	
Association of a geminivirus with a leaf curl disease of sunn hemp (<i>Crotalaria juncea</i>) in India	467–470
S.K. Raj, R. Singh, S.K. Pandey and B.P. Singh	
Evidence that a leaf-disk test allows assessment of isolate-specific resistance in <i>Brassica oleracea</i> crops against downy mildew (<i>Peronospora parasitica</i>)	471–478
B. Agnola, S. Boury, C. Monot, A. Quillévéré, Y. Hervé and D. Silué	

Phenotypic differences between <i>vacuina</i> and <i>transposa</i> subpopulations of <i>Botrytis cinerea</i>	479–488
F. Martinez, D. Blancard, P. Lecomte, C. Levis, B. Dubos and M. Fermaud	
Quantitative aspects of infection of <i>Sclerotinia sclerotiorum</i> sclerotia by <i>Coniothyrium minitans</i> – timing of application, concentration and quality of conidial suspension of the mycoparasite	489–502
M. Gerlagh, H.M. Goossen-van de Geijn, A.E. Hoogland and P.F.G. Vereijken	
Development and validation of a fast PCR-based detection method for pathogenic isolates of the citrus black spot fungus, <i>Guignardia citricarpa</i>	503–513
P.J.M. Bonants, G.C. Carroll, M. de Weerd, I.R. van Brouwershaven and R.P. Baayen	
Comparison of RAPD and AFLP marker analysis as a means to study the genetic structure of <i>Botrytis cinerea</i> populations	515–522
C. Moyano, C. Alfonso, J. Gallego, R. Raposo and P. Melgarejo	

Volume 109 No. 6 July 2003

Mini review

Quality of methods to quantify microsclerotia of <i>Verticillium dahliae</i> in soil	523–534
J.C. Goud and A.J. Termorshuizen	
Pathogenicity of <i>Aphanomyces</i> spp. from different leguminous crops in Sweden	535–543
J.P. Levenfors, M. Wikström, L. Persson and B. Gerhardson	
Inoculation of mature pedunculate oaks (<i>Quercus robur</i>) with the root rot fungus <i>Collybia fusipes</i>: Relationships with tree vigour and soil factors	545–553
C. Camy, C. Delatour, O. Caël and B. Marçais	
Differential responses to pea bacterial blight in stems, leaves and pods under glasshouse and field conditions	555–564
M. Elvira-Recueno, J.R. Bevan and J.D. Taylor	
<i>Pseudomonas syringae</i> pv. <i>avii</i> (pv. nov.), the causal agent of bacterial canker of wild cherries (<i>Prunus avium</i>) in France	565–576
M. Ménard, L. Sutra, J. Luisetti, J.P. Prunier and L. Gardan	
Studies on <i>in vitro</i> growth and pathogenicity of European <i>Fusarium</i> fungi	577–587
J.M. Brennan, B. Fagan, A. van Maanen, B.M. Cooke and F.M. Doohan	
Detection and quantification of <i>Spongospora subterranea</i> in soil, water and plant tissue samples using real-time PCR	589–597
P. van de Graaf, A.K. Lees, D.W. Cullen and J.M. Duncan	
Extracellular matrix, esterase and the phytotoxin prehelinthosporol in infection of barley leaves by <i>Bipolaris sorokiniana</i>	599–605
H.-B. Jansson and H. Åkesson	
Use of nitrate non-utilising (Nit) mutants to determine vegetative compatibility in <i>Botryotinia fuckeliana</i> (<i>Botrytis cinerea</i>)	607–613
R.E. Beever and S.L. Parkes	
Biological control of <i>Sclerotinia pseudotuberosa</i> and other fungi during moist storage of <i>Quercus robur</i> seeds	615–624
W.E. Finch-Savage, H.A. Clay, S.P. Budge, K.C. Dent, J.P. Clarkson and J.M. Whipps	

Relationships between angular leaf spot, healthy leaf area, effective leaf area and yield of <i>Phaseolus vulgaris</i>	625–632
W.C. Jesus Junior, F.X.R. Vale, R.R. Coelho, P.A. Paul, B. Hau, A.B. Filho, L. Zambolim and R.D. Berger	
<i>Short communications</i>	
Effect of chitin on biological control activity of <i>Bacillus</i> spp. and <i>Trichoderma harzianum</i> against root rot disease in pepper (<i>Capsicum annuum</i>) plants	633–637
A. Sid Ahmed, M. Ezziyyani, C.P. Sánchez and M.E. Candela	
The interaction of endochitinase, a synthetic peptide and resveratrol in controlling fungi <i>in vitro</i>	639–644
G.S. Ali, G.E. Harman and B.I. Reisch	

Volume 109 No. 7 September 2003

Foreword	vii
Epidemiology of toxigenic fungi and their associated mycotoxins for some Mediterranean crops	645–667
A. Logrieco, A. Bottalico, G. Mulé, A. Moretti and G. Perrone	
Modelling plant disease epidemics	669–682
A. van Maanen and X.-M. Xu	
Effects of environmental conditions on the development of <i>Fusarium</i> ear blight	683–689
X. Xu	
Molecular tools to study epidemiology and toxicology of fusarium head blight of cereals	691–703
P. Nicholson, E. Chandler, R.C. Draeger, N.E. Gosman, D.R. Simpson, M. Thomsett and A.H. Wilson	
Epidemiology of <i>Fusarium</i> diseases and their mycotoxins in maize ears	705–713
G.P. Munkvold	
Epidemiology of toxin-producing fungi and ochratoxin A occurrence in grape	715–722
P. Battilani, P. Giorni and A. Pietri	
Post-harvest fungal ecology: Impact of fungal growth and mycotoxin accumulation in stored grain	723–730
N. Magan, R. Hope, V. Cairns and D. Aldred	
Strategies for the control of <i>Fusarium</i> head blight in cereals	731–742
S.R. Pirgozliev, S.G. Edwards, M.C. Hare and P. Jenkinson	
Major changes in <i>Fusarium</i> spp. in wheat in the Netherlands	743–754
C. Waalwijk, P. Kastelein, I. de Vries, Z. Kerényi, T. van der Lee, T. Hesselink, J. Köhl and G. Kema	
Influence of climatic factors on <i>Fusarium</i> species pathogenic to cereals	755–768
F.M. Doohan, J. Brennan and B.M. Cooke	
Association of <i>Fusarium</i> species in the wheat stem rot complex	769–774
T. Pettitt, X. Xu and D. Parry	

Volume 109 No. 8 October 2003

Identification and characterisation of <i>Xanthomonas campestris</i> pv. <i>campestris</i> strains from Tanzania by pathogenicity tests, Biolog, rep-PCR and fatty acid methyl ester analysis	775–789
S.M.S. Massomo, H. Nielsen, R.B. Mabagala, K. Mansfeld-Giese, J. Hockenhull and C.N. Mortensen	

Intraspecific variation in <i>Phytophthora citrophthora</i> from citrus trees in Eastern Corsica	791–805
S. Cohen, V. Allasia, P. Venard, S. Notter, C. Vernière and F. Panabières	
Genetic variability and population structure of the wheat foot rot fungus, <i>Fusarium culmorum</i>, in Tunisia	807–815
S. Gargouri, L. Bernier, M.R. Hajlaoui and M. Marrakchi	
Characterisation of <i>Curtobacterium flaccumfaciens</i> pathovars by AFLP, rep-PCR and pulsed-field gel electrophoresis	817–825
P.M. Guimarães, J.J. Smith, S. Palmano and G.S. Saddler	
Vegetative compatibility groups in <i>Verticillium dahliae</i> isolates from the Netherlands as compared to VCG diversity in Europe and in the USA	827–839
J.A. Hiemstra and M. Rataj-Guranowska	
Eyespot of cereals revisited: ITS phylogeny reveals new species relationships	841–850
P.W. Crous, J.Z. Groenewald and W. Gams	
Metabolic diversity of <i>Xanthomonas axonopodis</i> pv. <i>vignicola</i>, causal agent of cowpea bacterial blight and pustule	851–860
G.B. Khatri-Chhetri, K. Wydra and K. Rudolph	
Development of specific PCR primers for identification and detection of <i>Rhizopycnis vagum</i>	861–870
S. Ghignone, G. Tamiatti and M. Girlanda	
A 10-year survey of populations of <i>Leptosphaeria maculans</i> in France indicates a rapid adaptation towards the <i>Rlm1</i> resistance gene of oilseed rape	871–881
T. Rouxel, A. Penaud, X. Pinochet, H. Brun, L. Gout, R. Delourme, J. Schmit and M.-H. Balesdent	
<i>Short communication</i>	
Electron microscopy and molecular characterization of phytoplasmas associated with strawflower yellows in the Czech Republic	883–887
J. Fránová, J. Příbylová, M. Šimková, M. Navrátil and P. Válová	
<i>Book review</i>	889–891

Volume 109 No. 9 November 2003

Mini review

Characterization of pectolytic erwinias as highly sophisticated pathogens of plants	893–899
S.H. De Boer	
Induction of resistance to <i>Penicillium digitatum</i> in grapefruit by β-aminobutyric acid	901–907
R. Porat, V. Vinokur, B. Weiss, L. Cohen, A. Daus, E.E. Goldschmidt and S. Droby	
Genetic structure and variation in aggressiveness in European and Australian populations of the grapevine dieback fungus, <i>Eutypa lata</i>	909–919
J.-P. Pérois and G. Berger	
Characterization of a new barley mild mosaic virus pathotype in France	921–928
D. Hariri, M. Meyer and H. Prud'homme	
Cross-resistance patterns among sterol biosynthesis inhibiting fungicides (SBIs) in <i>Cercospora beticola</i>	929–934
G.S. Karaoglaniadis and C.C. Thanassouloupoulos	

<i>Southern bean mosaic virus</i> the causal agent of a new disease of <i>Phaseolus vulgaris</i> beans in Spain	935–941
J.Th.J. Verhoeven, J.W. Roenhorst, D.-E. Lesemann, E. Segundo, L. Velasco, L. Ruiz, D. Janssen and I.M. Cuadrado	
Genetic and molecular characterization of <i>Verticillium dahliae</i> isolates from woody ornamentals in Belgian nurseries	943–952
A. Chandelier, F. Laurent, D. Dantinne, L. Mariage, M. Etienne and M. Cavelier	
A field investigation into delivery systems for agents to control <i>Moniliophthora roreri</i>	953–961
E. Hidalgo, R. Bateman, U. Krauss, M. ten Hoopen and A. Martínez	
Modes of action of <i>Pantoea agglomerans</i> CPA-2, an antagonist of postharvest pathogens on fruits	963–973
L. Poppe, S. Vanhoutte and M. Höfte	
New mealybug species vectoring Grapevine leafroll-associated viruses-1 and -3 (GLRaV-1 and -3)	975–981
R. Sforza, E. Boudon-Padieu and C. Greif	
Anastomosis groups, pathogenicity and sensitivity to fungicides of <i>Rhizoctonia solani</i> isolates collected on potato crops in France	983–992
C. Champion, C. Chatot, B. Perraton and D. Andrivon	
Low temperature–short duration steaming of soil kills soil-borne pathogens, nematode pests and weeds	993–1002
M.C.A. van Loenen, Y. Turbett, C.E. Mullins, N.E.H. Feilden, M.J. Wilson, C. Leifert and W.E. Seel	
Functional analysis of ABC transporter genes from <i>Botrytis cinerea</i> identifies BcatrB as a transporter of eugenol	1003–1011
H.-j. Schoonbeek, J.G.M. van Nistelrooy and M.A. de Waard	
Volume contents	1013–1020
Author index	1021–1023