

THE AMERICAN
PHYTOPATHOLOGICAL
SOCIETY

POTOMAC DIVISION

54th Annual Meeting
March 18- 20, 1998

Hosted by:
Division of Plant & Soil Sciences
West Virginia University

Lakeview Conference Center
Morgantown, West Virginia

Wednesday, March 18th

2:00 - 7:00 Registration: Library
1:00 - 3:00 WVU Campus Tours Available

3:00 - 5:30 Open Forum.
Room Location: Chestnut A

"Extension / Industry Issues"

Discussion Leaders
Bob Mulrooney & Erik Stromberg

5:30 - 7:00 Dinner On Your Own

7:00 - 8:00 Welcome Social.
Room Location: Chestnut B

8:00 - 9:45 **Discussion Session.**
Room Location: Chestnut A
"New and Emerging Pathogens"

Norm Schaad, Presiding
Dan Panaccione, Assisting

Overview Speaker
**"Status and Projections for New and
Emerging Plant Diseases"**
Anne Vidaver

Topic & Discussion Leaders

Bacteria: Norm Schaad, Anne Vidaver
Diagnostics: Mary Ann Hansen, Seong
Hwan Kim, Erik Stromberg

Fungi: Morris Bonde

Germplasm: Suzanne Hurtt

Phytoplasmas: Robert Davis

Viroids: Ramon Jordan

Viruses: Vernon Damsteegt, Sue Tolin

9:45 Sing-a-long Jay Stipes, Presiding

Thursday, March 19th

7:15 - 8:00 Registration & Continental Break-
fast Room Location: Chestnut Foyer

8:00 **Welcome & Opening Remarks**
Room Location: Chestnut A

Rosemary Haggett, Dean
College of Agriculture, Forestry and
Consumer Sciences
West Virginia University

8:15 -11:30 **Graduate Student Papers**

Nikki O Neill, Presiding
Mannon Gallegly, Assisting

8:15 SERLEMITSOS K.* & BOLLERO G. &
GRYBAUSKAS A. Gray leaf spot de-
velopment in narrow-row corn.
(*University of Maryland, College Park,*
MD).

8:30 BROWN, E.W.*¹ & VAN DER ZWET
T² Phylogenetic analysis of the tribe
Erwiniae reveals evolutionary
polyphyly within the amylovora group:
Evidence for multiple evolutionary ori-
gins of the necrogenic Erwinias.
(¹*George Washington University,*
Washington, DC; ²*USDA-ARS,*
Kerneysville, WV).

8:45 VIVANCO J.M.* & FLORES H.E. Pu-
rification, characterization and biologi-
cal activity of two ribosome inactivation
proteins from *Mirabilis expansa*. (*The*
Penn State University, University Park,
PA).

9:00 SEDEGUI M.*¹, CARROLL R.B.¹,
HAMLEN R.A.², WHITTINGTON D.
P.¹ & POWER R.² Comparison of as-
says for measuring sensitivity of *Phy-*
tophthora infestans to fungicides.
(¹University of Delaware; ²E. I. DuPont
de Nemours, Newark, De

9:15 BALBALIAN C.J.*¹, MACDONALD
W.L.¹, HUBER D.H.² & FUL-
BRIGHT D.W.² Effects of *Cryphonec-*
tria parasitica vegetative compatibility
genes on the transmission of hy-
poviruses between strains on chestnut
trees. (1 West Virginia University,
Morgantown, WV; ²Michigan State
University, East Lansing, MI).

9:30 -10:00 Break
Assorted Beverages, Chestnut Foyer

10:00 DAVIS, R.M.¹ & VAN DER ZWET T²
Phenotypic disparity amidst phyloge-
netic association: analysis of the entero-
bacterial GAPDH gene from atypical
isolates of *Erwinia amylovora*, the fire
blight bacterium. (Hood College, Fre-
derick, MD; ²USDA-ARS, Kearneys-
ville, WV).

10:15 HEIST E.P.*¹, NESMITH W.C. &
SCHARDL C.L. Dual *Peronospora*
tabacina-*Nicotiana tabacum* tissue cul-
ture to study host-pathogen interaction.
(University of Kentucky, Lexington,
KY).

10:30 WANG J.*¹, PANACCIONE D.G.² &
SCHARDL C.L.¹ Ergot alkaloid bio-
synthesis genes in *Claviceps* and *Neo-*
typhodium species. (University of
Kentucky, Lexington, KY; ²West Vir-
ginia University Morgantown, WV).

10:45 ARMSTRONG S.D.*¹, STIPES R.J.,
MCNAIR H.M. & WARREN H.L.
Microwave-assisted extraction versus
thermal desorption GC-ECD-MS of
propiconazole from elm wood.
(Virginia Tech, Blacksburg, VA).

11:00 CHALOUX P.*¹, LIU Y-C², MIL-
GROOM M.G.² & MACDONALD
W.L.¹. The effects of dsRNAs on
growth and sporulation of *Cryphonec-*
tria parasitica isolates recovered from
previous hypovirus introduction sites.
(²West Virginia University, Morgan-
town WV; ²Cornell University, Ithaca,
NY).

11:45 - 2:00 **Lunch and Business
Meeting**
Room Location: University Hall

2:00 - 4:00 **Symposium.**
Room Location: Chestnut A
**"Twenty Years of Biocontrol Re-
search: Prospects and Reality"**
James Locke, Presiding
Joseph Morton, Assisting

Speakers

William Bruckhart - *Biocontrol of Weeds Re-
search at the Foreign Disease-Weed
Science Research Unit"*

Wojciech Janisiewicz - *Development of a Bio-
control Product for Postharvest Appli-
cation on Apples and Pears.*

Robert Lumsden - *Biological Control of
Soilborne Diseases: The Past and Next
Twenty Years"*

Susan Meyer - *Potential Management Agents
for Plant-Parasitic Nematodes: Prob-
lems Realizing the Potential"*

4:00 - 4:30 Break
Assorted Beverages, Chestnut Foyer

4:30 - 6:00 Poster Session.
Room Location: Chestnut B
Nancy Arnold & Betsy Kurnik, Assisting

RAWN C.D. Differential rapid effects of ci-
trin in on *Sclerotium rolfsii* hyphae.
(Seton Hall University, South Orange,
AU).

- ELSON M.D., SCHISLER D.A. & JACKSON M.A. Influence of carbon-to-nitrogen ratio, carbon concentration, and amino acid composition of growth media on conidiation of *Helminthosporium solani*. (USDA-ARS, Peoria, IL).
- BOWERS J.H. & LOCKE J.C. Effect of botanical extracts on the population density of *Verticillium dahliae* in soil. (USDA-ARS, Beltsville, MD).
- GOLEY E.D.¹, SMITH O.R.¹, LUSTER D.G.² & DAMSTEEGT V.D.² Sub-cloning portions of the yellowing strain of the soybean dwarf luteovirus readthrough protein for expression in *E. coli*. (¹Hood College; ²USDA-ARS, Frederick, MD).
- SCHWARCZINGER I.¹, VAJNA L.¹ & BRUCKHART W.L.² Pathogenicity of *Sclerostagonospora (Hendersonia) salsoe* on *Salsola kali*. (¹Hungarian Academy of Sciences, Budapest, Hungary; ²USDA-ARS, Frederick, MD).
- TOOLEY P.W., SCOTT D.L. & CARRAS M.M. Molecular characterization of *Claviceps africana* causing sorghum ergot in the U.S. (USDA-ARS, Frederick, MD).
- WELCH A.L.¹, SMITH O.P.¹, LUSTER D.G.² & DAMSTEEGT V.D.² Sequence determination of the 5 terminus of the yellowing strain of soybean dwarf luteovirus. (Hood College; ²USDA-ARS, Frederick, MD).
- EVERTS K.L. Effect of host resistance and fungicides on yield and quality of spinach in Maryland. (University of Maryland, Salisbury, MD).
- VAN DER ZWET T & MILLER S.S. First recording of autumnal shoot blight on apple in West Virginia. (USDA-ARS, Kearneysville, WV)
- PANACCIONE D.G.¹, WANG J.², SCHARDL C.L.², ANNIS S. L.¹ & DAMRONGKOOL P.¹ Association of a *Claviceps purpurea* peptide synthetase gene with ergotamine biosynthesis. (¹West Virginia University, Morgantown WV; ²University of Kentucky, Lexington, KY).
- SOSNOSKIE L.M., CARROLL R.B., VANGESSEL M.J. & WHITTINGTON D.P. Kernel rot in irrigated and nonirrigated corn as related to common lambsquarters densities. (University of Delaware, Newark, DE).
- SNETSELAAR K, JOHNSON J., XIONG Y. & MCCANN M. Mating-impaired mutants of *Ustilago maydis*. (St Joseph's University, Philadelphia, PA).
- BAUDOIN A. Effect of interruption of wet periods on infection of grape leaves by *Guignardia bidwellii*. (Virginia Tech, Blacksburg, VA).
- GLAZENER J.A. & CARR R.V. Market analysis of postharvest pesticide use on food crops. (The Kevric Company, Silver Spring, MD).
- DEAHL K.L.¹, YOUNG R J.² & GALLEGLY M.E.² Genetic and phenotypic variation in various isolates of *Phytophthora infestans* from tomatoes grown in the northeast. (¹USDA-ARS, Beltsville, MD; ²West Virginia University, Morgantown, WV).
- 6:00 - 7:00 **Social Hour**
Room Location: University Hall
 Cash Bar
- 7:00 - 9:00 **Banquet**
Room Location: University Hall
 Ethel Dutky, President
 Potomac Division
- Speaker
 Lee Campbell, APS President

Friday, March 20th

7:30 - 8:15 Registration & Continental
Breakfast

Room Location: Chestnut Foyer

8:15-9:45 Contributed Papers

Room Location: Chestnut A

Alan Biggs, Presiding

Paul Chaloux, Assisting

8:15 LIKINS TM. Tissue proliferation of the Ericaceae in Virginia. (*VA Department of Agriculture and Consumer Services, Richmond, VA*).

8:30 ALEXANDER S.A.* & WALDEN-MAIER C.M. Reduction of lesion nematode populations using marigolds as a sequential crop in rotation with tomato and potato. (*Virginia Tech, Painter, VA*).

8:45 DAVIS R.E.¹ JOMANTIENE R.*¹, DALLY E.L.¹ & WOLF TK² Intricacies in the identification of phytoplasmas associated with grapevine yellows disease in Virginia. (*USDA-ARS, Beltsville, MD*; ²*Virginia Tech, Winchester, VA*).

9:00 SEDEGUI M.*¹, CARROLL R.B.¹, MOREHART A.L.¹ & KIM S.H.² Characterization of *Phytophthora infestans* isolates from potato and tomato in Morocco. (*University of Delaware, Newark, DE*; ²*Pennsylvania Department of Agriculture, Harrisburg, PA*).

9:15 DARHOWER H.I., MICKEY K.D.* & TRAVIS J.W. Susceptibility of peach and nectarine fruit at different developmental stages to *Monilinia fructicola*. (*The Penn State University, University Park, PA*).

9:30 PETERSON G.L.*¹, BONDE M.R.¹, SCHAAD N.W.¹ & PHILLIPS J G² Development and utilization of size selective sieving for rapid detection of teliospores of *Tilletia indica*, the causal agent of karnal bunt of wheat. (¹*USDA-ARS, Frederick, MD*; ²*USDA-ARS, Wymoor, PA*).

9:45 -10:15 Break

Assorted Beverages, Chestnut Foyer

10:15 -12:15 **Symposium.**

"New Technologies for Disease Management"

Room Location: Chestnut A

Hei-ti Hsu, Presiding

James Kotcon, Assisting

Speakers

Robert Larkin - *Role of Induced Resistance in the Biological Control of Plant Diseases by Fusarium spp.*

Donald Nuss - *Engineering Viruses to Understand and Manage Fungal Pathogens*

Robert Scorza - *Plum Pox Control via Genetic Engineering*

Eric Tedford - *Using Nature's Ideas - Fungicide Development for the Future*

POTOMAC DIVISION OFFICERS

E.M. Dutky, President
N.R. O'Neill, Vice President
A. Baudoin, Secretary/Treasurer
S.S. Hurtt, Councilor

1998 Committees

Local Arrangements

A. Biggs
M. Double*
M. Gallegly
S. Haynes
J. Kotcon
W. MacDonald*
J. Morton
D. Panaccione*
T. Pauley
T. van der Zwet

Nominations

E. Dutky*
A. Grybauskas
T. van der Zwet

Necrology

M. Benedict

Distinguished Service

T. Evans
A. Grybauskas
H. Hsu
J. Locke*
L. Moore
E. Stromberg
T. van der Zwet

Auditing

S. Rachdawong
D. Reaver

*Committee Chairs

Student Awards

S. Alexander
B. Bailey
D. Clement
K. Everts
M. Likins
B. Muirooney
N. O'Neill*
R Tooley

Industry Relations

A. Grybauskas*
E. Stromberg

Graduate Travel Award

E. Dutky*
J. Locke
N. O'Neill

Proaram Committee

A. Baudoin
D. Clement
V. Damsteegt
E. Dutky*
H. Hsu
S. Hurtt
J. Locke
W. MacDonald
B. Muirooney
N. O'Neill
N. Schaad
A. Sindermann
T. van der Zwet

Corporate Sponsors

Bayer
DuPont de Nemours
Novartis
Rohm & Haas
Zeneca