

15TH TOMATO DISEASE WORKSHOP AND TOMATO BREEDERS
ROUNDTABLE

December 2-5, 1999

Doubletree Hotel, Detroit, Michigan

Registration

Dec. 1 7:00 pm - 9:00 pm

Dec. 2 7:30 am -8:00 am

Dec. 2 7:00 pm - 9:00 pm

Dec. 3 7:30 am - 8:00 pm

Session 1

8:00 AM Thursday, December 2

Welcome

Dr. Ron Pitblado

Ridgetown College University of Guelph, Ontario, Canada

Open Discussion of old and emerging tomato diseases (30 min)

Mark Ricker - moderator

H.J.Heinz Co. of Canada Ltd., Leamington, Ontario

A new bacterial canker disease of Burley Tobacco (15 min)

Is it caused by *Clavibacter michiganensis*?

Bill Nesmith, J.Beale, and S. Osborne

University of Kentucky.

8:45 AM Fungal Diseases

Overwintering and Epidemiology of Septoria Leaf Spot in Ontario. (20 min)

Mike Tu and V. Poysa

Agriculture and Agri-Food Canada

Greenhouse and Processing Crops Research Center, Harrow, Ontario

Powdery Mildew of Tomatoes in Ontario: Greenhouse and Field Aspects. (20 min)

Ray Cerkauskas

Agriculture and Agri-Food Canada,

Greenhouse and Processing Crops Research Center, Harrow, Ontario

Verticillium: Who's in the Field. (20 min)

Myrtle Harrington

OMAFRA, Ridgetown, Ontario

Coffee Break (9:45-10:15)

10:15 AM Second Session, Disease Management

Development of site specific weather information for Warning Systems. (30 min)

Jen Winter, and Ron Pitblado

Ridgetown College University of Guelph, Ontario

Bacterial spot control in tomatoes: the Actigard story (30 min)

Sally Miller, Diane Cupples, Frank Louws

Ohio State University

Lunch 12:00 - 1:00

1:00 PM Second Session (con't), Disease Management:

Update on FQPA, (20 min)

Pat Bolin

Michigan State University Extension

Genomic Fingerprinting of *Clavibacter michiganensis* subsp. *michiganensis*: a review (30 min)

Dennis Fulbright, Carmen Medina-Mora, and Mary Hausbeck

Michigan State University

Bacterial Canker of Peppers in Michigan - Its Significance to Tomatoes. (15 min)

Dennis Fulbright, Carmen Medina-Mora, and Mary Hausbeck

Michigan State University

"Managing bacterial canker - what have we learned?" (30 min)

Mary Hausbeck and Dennis Fulbright

Michigan State University

Break/Discussion

3:00 - 6:00. Third Session, Tomato Seed Quality Workshop:

Progress in developing improved seed assay for Cmm

-Moderator-Mark Gleason, Iowa State University

Progress towards a rapid seed assay for Cmm (30 min)

Anne Alvarez

University of Hawaii

Commercialization of new technologies for seed health testing (30 min)

Dan LaFlamme

STA Laboratories, Inc., Longmont, Colorado

Influence of extraction methods and bacterial antagonists on recovery of

Cmm from tomato seed lots (30 min)

Parmjit Randhawa

Seed and Plant Lab, Elvereta, CA

Developing a better seed assay for Cmm: the Campbell perspective (30 min)

Hasan Bolkan

Campbells Research and Development, Davis, CA.

Developing and Refining non-destructive seed assays for Cmm (30 min)

Mark Gleason

Iowa State University

7:00-9:00 Tomato Crop Advisory Committee

Dec. 3, 1999

8:00 AM Fourth Session: Phytophthora Workshop

"Phytophthora capsici - a problem in vine crops and a threat to tomatoes." Mary Hausbeck, MSU (30 Min)

Progress towards late blight resistance in Fresh Market tomato (Randy Gardner, NC STATE) (30 Min)

Progress towards late blight resistance in processing tomato (Martha Mutschler and MinJea Kim, Cornell University) (30 Min)

"QTL analysis of *L. pimpinellifolium* LA1269 tolerance to California isolates of late blight" (Elaine B. Graham, UC Davis) (30 Min)

Discussion

Break 10:15 AM

10:30 AM Fifth Session, Breeding for resistance

Fungal diseases:

New Sources of Anthracnose Resistance (R. W. Robinson, NY Ag Expt. Station) (20 min)

Tomato anthracnose resistance: Inheritance and QTLs (J. R. Stommel, USDA-ARS Vegetable Lab) (20 Min)

Bacterial diseases:

Bacterial Spot: Prospects for processing tomato varieties with resistance to multiple races of bacterial spot (David Francis, OSU) (20 min)

Two loci from *Lycopersicon hirsutum* confer resistance to strains of *Clavibacter michiganensis* subsp. *michiganensis*. (Eileen Kabelka, OSU). (20 min)

Lunch Break 12:00 - 1:00

1:00 Viral Diseases

Interaction of tomato mottle virus symptoms with tomato mosaic virus resistance, a forecast of "gene gridlock" for the next millenium. (John W. Scott, University of

FL) (30 min)

Tomato Breeding lines Resistant to TYLCV and to other Whitefly- Transmitted Geminiviruses (Favi Vidavski, Hebrew University of Jerusalem, Israel) (30 min)

Insect Resistance

Inheritance of insect repellency in *L. esculentum* X *L. hirsutum* hybrids (John Snyder, University of KY) (30 min)

Break

Sixth Session. Breeding Methodology: Old tricks for new traits & new tricks for old traits(3:15):

Optimizing the Genetic Gain Profile (Steve St. Martin, OSU) (30 min)

Pedigree Method (Randy Gardner, NC State) (30 min)

Recurrent Selection "What if the Hoky Poky is really what it's all about? A recurrent

selection approach overview." (Ira Stein, Campbell's Research) (30 min)

Poster Session 5:00 - 7:00

Banquett (7:00 PM)

Dec. 4, 1999

8:00 AM Seventh Session. Area Reports (5-10 min)

Great lakes summary David Francis (OSU)

North East summary Ken Martin (Furman's Foods)

South East summary Randy Gardner (NCSU)

Florida summary Wayne Fowler (Seminis Vegetable Seeds)

California summary

Processing Teresa Beck Bunn (Petoseed)

Fresh Market Cathy Thome (Asgrow)

Mediterranean, Europe, Asia, South America, Australia (as representatives are available)

(8:45) Tomato Breeding Work and Results in ALBANIA, (R. S. Kosturi, Tirana,

Albania) (15 min)

(9:00 AM) Eighth Session. Industrial Perspectives on Tomato Needs and Markets:
A vision for the 21st Century

Processing tomatoes

Steve Smith (Red Gold)

Steve Schroeder (Sunseeds)

Casey Garvey (Hunts)

Charles Rivara (CTRI)

Gary Campbell (Lipton)

Fresh Market tomatoes

Jay Scott (UFL)

Mark Barineau (Novartis)

Jeff Zischke (Sakata)

Bob Heisey (Asgrow)

Greenhouse tomatoes

Gretchen Raymond, DeRuiter

Shalin Khosla, OMAFRA

Butch Bard, Cropking

Denton Hoffman, Ontario Greenhouse Vegetable Growers (Not confirmed)

Vern Toews, Western Greenhouse Growers (Not confirmed)

Lunch 12:00 - 1:00

(1:00 PM) Ninth Session. Breeding for Quality

Lycopene and human health (Minhthy Nguyen & Steven Schwartz, OSU) (30 min)

Breeding for color and lycopene content in adapted germplasm (David Francis, OSU/OARDC) (30 min)

Break

(2:15 PM) Tenth Session. Emerging Technology (Biotechnology and Genomics)

Tomato Genome Project (Greg Martin, Boyce Thompson Res. Inst., Cornell University) (45 min)

Identification of Molecular Markers for Map-Based Cloning of Frl (crown rot resistance). (Matthew D. Robbins*, Mikel R. Stevens, and Gennaro Fazio). (30 min)

Development of Transgenic Tomato Plants Resistant to Tobacco Mosaic Virus (Suk-Woo Jang, Korea) (20 min)

Seed Technology for GMO's in the Midwest Grain Industry. Charlie Carr, The Andersons. (30 min)

Poster Session

(6:00 - 8:00 PM) [Genomics and Database Mining Workshop](#) (David Francis, OSU/OARDC)

Committee meetings

Space will be available, please contact D. Francis to reserve a room

Dec 5., 1999

Stock center reports

Davis

Geneva

Tomato Crop Advisory Committee Report

Business meeting & Closing comments

Our thanks to the companies and organizations that have provided funds and support for the meeting:

American Cyanimid

BHN

Campbell Research & Development

De Ruiters Seeds

Fremont Co.

Furman Foods, Inc.

H. J. Heinz Co.

Land O'Lakes, Inc.

Novartis Seeds, Inc.

Ohio Agricultural Research & Development Center

RedGold, Inc.

Ridgetown College, University of Guelph

Sakata Seed America, Inc.

Seminis Vegetable Seeds

Sunseeds, Co.

Zeneca