

# Curriculum Vitae

## Daniel S. Egel

Department of Botany and Plant Pathology  
Purdue University  
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## Education

Ph.D., 1991. University of Florida, Gainesville, FL

Major: Plant Pathology (R.E. Stall & J.H. Graham)

Dissertation: Pathogenic and genomic characterization of strains of *Xanthomonas campestris* causing diseases of citrus. 132 p.

Graduate Assistant, University of California, Riverside, Department of Plant Pathology

M.S.F., 1983. Purdue University, West Lafayette, IN

Major: Forestry (P.E. Pope)

Thesis: The influence of available soil phosphorus on mycorrhizal and nonmycorrhizal green ash (*Fraxinus pennsylvanica* Marsh.) seedlings. 60 p.

B.S., 1980. Miami University, Oxford, OH

Major: Botany

## Work Experience

1985-1987, Biological Scientist II, Citrus Research and Education Center, Lake Alfred, FL.

January-October 1991, Postdoctoral Fellow with Dr. R.E. Stall, University, of Florida.

November 1991-January 1992, Postdoctoral Associate with Peter J. Cotty, U.S.D.A., New Orleans, LA.

January 1992-June 1995, Seed Pathologist with American Sunmelon, Hinton, OK.

July 1995-Present, Extension Specialist, Purdue University, Vincennes, IN.

## Professional Societies

Member American Phytopathological Society 1985-present

Member IPM committee 2002-2005

President IPM committee 2004

Section Editor Fungicide and Nematicide Tests 2001, 2002

Fungicide and Nematicide Tests is an international on-line journal that acts as a repository for concise reports of fungicide and nematicide trials.

Editor-In-Chief, Fungicide and Nematicide Tests 2003-2006

Editor-In-Chief, Plant Disease Management Reports 2007

Plant Disease Management Reports is an international on-line journal that merged Fungicide and Nematicide Tests with Biological and Cultural Tests.

## Awards

Dan was one of 5 individuals selected to the Hall of Honor for his high school, Fairborn High School in Fairborn, Ohio.

This award was presented to Dan at a ceremony in Fairborn in April 2007.

In October 2007, Dan was awarded the Sharvelle Award. This award is given annually to recognize the individual

Purdue University Extension Specialist who has demonstrated a high degree of proficiency and professionalism in the conduct of Extension programs over an extended period of time

## Teaching Experience

Teaching Assistant, Introduction to Plant Pathology  
(University of California, Riverside, under Dr. D.E. Munnecke)  
Teaching Assistant, Plant Bacteriology  
(University of Florida, under Dr. R.E. Stall)  
Plant Propagation, Vincennes University, 1997.

## Invited Presentations

The Pathology of Seedless Watermelon Production. 24 August 1994, Department of Plant Pathology, Oklahoma State University, Stillwater.  
Disease Management of Organically Grown Vegetables. 28 February 1998, Michael Fields Agricultural Institute, East Troy, WI.  
Pest Management of Watermelons in Indiana. 4 February 2000, UAP Richter Vegetable Growers Meeting, Delaware.  
Scouting for Diseases of Muskmelon and Watermelon. February 2004, UM Extension, Kennett, MO.  
Preventing Late Season Disease Losses in Pumpkin and Squash. February 2006. Ontario Vegetable Association.  
Watermelon Vine Decline. February 06, Lake Tahoe, NV. National Watermelon Promotion Board.  
Watermelon Vine Decline Panel Discussion. February 2006, Lake Tahoe, NV. National Watermelon Association.  
Four Years of Cucurbit Downy Mildew in Indiana: Field Trials and More. January 2007, Michigan State University, East Lansing, MI.  
Managing Diseases Organically. January 18, 2008, Champaign-Urbana Illinois. Midwest Organic Conference and Trade Show.  
Update on Disease Control in Cucurbits. January 9, 2009, St. Joseph, MO. Great Plains Vegetable Conference.  
Tomato Disease Integrated Pest Management. January 9, 2009, St. Joseph, MO. Great Plains Vegetable Conference.  
Disease Management. January 18, 2009, Indianapolis, IN. Midwest Organic and Marketing Conference.

## Extension publications

Editor of the ***Vegetable Crops Hotline***, 1998-2001 and 2007-Present. This Purdue University newsletter includes pest management information, fertility recommendations and meeting announcements biweekly during the growing season.

**Egel, D.S.** 2009. Muskmelon and Watermelon Fungicide Guide/Management Time Line for Indiana 2009. BP-134-W  
**Egel, D.S.** 2009. Pumpkin Fungicide Guide/Management Time Line for Indiana 2009. BP-135-W  
**Egel, D.S.** 2009. Tomato Fungicide Guide/Management Time Line for Indiana 2009. BP-136-W  
**Egel, D.S.** 2009. Downy Mildew of Pumpkin. BP-140-W  
**Egel, D.S.** 2009. Fusarium Wilt of Watermelon. BP-141-W  
**Egel, D.S.** 2009. Gummy Stem Blight of Muskmelon and Watermelon. BP-142-W

Lead Author of the ***Midwest Vegetable Production Guide for Commercial Growers*** (ID-56) (2003-Present). This is an annual extension publication with circulation in 6 states (Indiana, Illinois, Iowa, Kansas, Missouri, and Minnesota) and is available on the Internet as well as a hard copy (1,273 hard copies in 2009).

Editor of the ***MELCAST Update*** (1997-present). This newsletter (available on the Internet and as a hard copy) offers technical help to Indiana growers who use the Melcast weather-based disease-forecasting program. In 2008, the ***MELCAST Update*** had 15 issues and reached 152 individuals.

**Egel, D.S.** 1999. Preventing Seedling Diseases in the Greenhouse. BP-61  
**Egel, D.S.** 1999. Seed Germination and Health for Triploid (Seedless) Watermelons. BP-62  
Fred Whitford, **Dan Egel**, Richard Latin, Rick Foster, Steve Weller, Ralph Gann. 1999. Pest Control in Indiana Cantaloupe Production. PPP-100  
**Egel, D.S.** 1999. Pesticide Survey URL-Benefit Analysis of a Single use Fungicide for Muskmelons in Indiana. <http://www.btny.purdue.edu/PPP/SIPIAP/SingleUseFungicideMusk.pdf>  
**Egel D.S.** and Latin, R. Mature Watermelon Vine Decline and Similar Diseases of Cucurbits. BP-65-W  
Latin, Richard and **Egel**, Daniel S. 2000. MELCAST: Melon Disease Forecaster. BP-64-W  
Brust, G., **D. Egel**, E. Maynard. Organic Vegetable Production. ID-316. 2003  
**Egel, D.S.** and Latin, R. 2004. Foliar Disease Control Using MELCAST. BP-67

## Non-refereed Publications

- Egel, D.S., and P.E. Pope. 1982. Available Soil Phosphorus Influences Mycorrhizal Infection, Nutrient Content and Growth of Green Ash (*Fraxinus pennsylvanica* Marsh.) Seedlings. 7<sup>th</sup> North American Forest Biology Conference, Lexington, KY.
- Egel, D.S., and P.E. Pope. 1984. Relating Soil Phosphorus to Uptake by Mycorrhizal Green Ash Seedlings: Influence of Extraction Method. Annual Meeting, American Society Agronomy, Las Vegas, NV P. 258. (abstract)
- Egel, D.S., and R.M. Endo. 1985. Kentucky Bluegrass Litter Harbors *Microflora suppressive* to *Cochliobolus sativus*. Phytopathology 75: 1327 (abstract)
- Egel, D.S., J.H. Graham and T.D. Riley. 1990. Population Dynamics of Strains of *Xanthomonas campestris* Differing in Aggressiveness on Citrus. Phytopathology 80:965 (abstract)
- Egel, D.S., J.H. Graham and R.E. Stall. 1990. Genetic Characterization of Pathovars of *Xanthomonas campestris* Causing Diseases on Citrus. Phytopathology 80:965 (abstract)
- Egel, D.S., and P.J. Cotty. 1992. Restriction of DNA Amplified from Aflatoxin Producing and Nonproducing Strains of *Aspergillus*. Phytopathology 82:1080 (abstract)
- Egel, D.S., and P.J. Cotty. 1992. Relationships Among Strains in the *Aspergillus flavus* Group which, Differ in Toxin Production, Morphology, and Vegetative Compatibility Group. Aflatoxin Elimination Workshop, Fresno, CA, 1-3 November.
- Damicone, J.P. and D.S. Egel. 1995. Reaction of Watermelon Cultivars and Breeding Lines to Bacterial Fruit Blotch. Biological and Cultural Tests for the Control of Plant Disease. Vol. 10, p. 153.
- Egel, D.S. 1997. Physiological Specialization of *Colletotrichum orbiculare* on Muskmelon. Phytopathology 87:S27.
- Egel, D.S. 1998. Using Spray Pressure and Nozzle Type to Apply Chlorothalonil Efficiently to Muskmelons Infected with *Alternaria* Leaf Blight. Phytopathology 88:S25.
- Egel, D.S. 1999. Severity of *Alternaria* Leaf Blight on Muskmelon Varieties, 1996. Biological and Cultural Tests: 14:157.
- Egel, D.S. 1999. Severity of *Alternaria* Leaf Blight on Muskmelon Varieties, 1997. Biological and Cultural Tests: 14:158.
- Egel, D.S. 2000. Evaluation of Fungicides for the Control of Anthracnose on Watermelon, 1999. Fungicide and Nematicide Tests. 55:285
- Egel, D.S. 2000. Evaluation of Fungicides for the Control of Gummy Stem Blight on Watermelon, 1999. Fungicide and Nematicide Tests. 55:286
- Egel, D.S. 2001. Evaluation of Fumigants for the Control of Fusarium Wilt and Root-knot Nematode of Watermelon, 2000. Fungicide and Nematicide Tests. 56:N19
- Egel, D.S. 2002. Evaluation of Fungicides for the Control of Gummy Stem Blight on Watermelon, 2001. Fungicide and Nematicide Tests. 57:V127
- Egel, D.S. 2002. Evaluation of Fungicides for the Control of Early Blight on Tomato, 2002. Fungicide and Nematicide Tests. 58:V079
- R. Harikrishnan, D.S. Egel, K.K. Rane, and R D. 2002. Martyn. Evidence for the Biological Nature and Host Specificity of Mature Watermelon Vine Decline. Phytopathology 92:S34
- Ramasubramaniam, H. Egel, D.S., Gunter C. and R. Martyn. 2002. Evaluation of Fungicide Application Methods and Plastic Mulch on Severity of Mature Watermelon Vine Decline (MWVD), 2001. Fungicide and Nematicide Tests. 57:V135
- Westphal, A., and D.S. Egel. 2003. Evidence for Biological Nature of Mature Watermelon Vine Decline. Proceedings of International Congress of Plant Pathology, Vol. 2:259. Selected for oral presentation, 14 of 48 submitted.
- Egel, D.S. 2004. Abamectin Seed Treatment for Controlling *Meloidogyne incognita* in Watermelon, 2002. Fungicide and Nematicide Tests. 59:V106
- Egel, D.S. 2004. Evaluation of Fungicides for the Control of Foliar Diseases of Watermelon, 2003. Fungicide and Nematicide Tests. 59:V007
- Egel, D.S. 2005. Evaluation of Fungicides for the Control of Early Blight on Tomato, 2004. Fungicide and Nematicide Tests. 60:V014
- Egel, D.S. 2006. Evaluation of Fungicides for the Control of Downy Mildew of Pumpkin 2005. Fungicide and Nematicide Tests. 61:V106
- Egel, D.; Rex Drennen and Elizabeth Maynard. On-Farm Evaluation of Powdery Mildew Tolerant Pumpkin Cultivars, 2006. Midwest Vegetable Variety Reports, Purdue University. Bulletin 18048.

- Egel, D.;** Butch Zandstra and Elizabeth Maynard. On-Farm Evaluation of Tomato Cultivars for Disease Resistance, 2006. Midwest Vegetable Variety Reports, Purdue University. Bulletin 18048.
- Egel, D. S.** and Hoke, S. 2007. Evaluation of Fungicides for the Control of Downy Mildew of Pumpkin, 2006. Plant Disease Management Reports 1:V019. DOI: 10.1094/PDMR01.
- Gunter, C., **Egel, D.**, Lam, F. and Hoke, S. 2007. Evaluation of Non-harvested Watermelon Pollenizers for Flowering Characteristics and *Fusarium oxysporum* f. sp. *niveum* Susceptibility. HortScience vol. 42(4) p.932.
- Egel, D. S.**, Hoke, S. and Gunter, C. 2008. Evaluation of Triploid Watermelon for Resistance to Fusarium Wilt. Plant Disease Management Reports 2:V020. DOI: 10:1094/PDMR02.
- Egel, D. S.** and Hoke, S. 2008. Evaluation of Fungicides for the Control of Gummy Stem Blight on Watermelon, 2006. Plant Disease Management Reports 2:V021. DOI: 10:1094/PDMR02.
- Egel, D. S.**, and Hoke, S. 2008. Evaluation of Fungicides for the Control of Early Blight on Tomato, 2007. Plant Disease Management Reports 2:V022. DOI: 10:1094/PDMR02.
- Egel, D. S.** and Hoke, S. 2008. Evaluation of Fungicides for the Control of Gummy Stem Blight and Powdery Mildew on Muskmelon, 2007. Plant Disease Management Reports 2:V023. DOI: 10:1094/PDMR02.

### Refereed Publications

- Graham, J.H., and **D.S. Egel.** 1988. Phytophthora Root Rot Development on Mycorrhizal and Phosphorus-Fertilized Sweet Orange Seedlings. Plant Disease 72:611-614.
- Egel, D.S.**, J.H. Graham and T.D. Riley. 1991. Population Dynamics of Strains of *Xanthomonas campestris* Differing in Aggressiveness on *Swingle citrumelo* and Grapefruit. Phytopathology 81:666-671.
- Egel, D.S.**, J.H. Graham and T.D. Riley. 1991. Genomic Relatedness of Strains of *Xanthomonas campestris* Causing Diseases of Citrus. Applied and Environmental Microbiology 57:2724-2730.
- Gottwald, T.R., J.H. Graham and **D.S. Egel.** 1992. Analysis of Foci of Asiatic Citrus Canker in a Florida Citrus Orchard. Plant Disease 76:389-396.
- Cotty, P.J., P. Bayman, **D.S. Egel** and K.S. Elias. 1994. Agriculture, Aflatoxins and Aspergillus. In: The Genus Aspergillus. Edited by Keith A. Powell et al., Plenum Press, New York.
- Egel, D.S.**, P.J. Cotty and K.S. Elias. 1994. Relationships Among Isolates of *Aspergillus* sec. *flavi* that Vary in Aflatoxin Production. Phytopathology 84:906-912.
- Leite, R.P., **D.S. Egel** and R.E. Stall. 1994. Genetic Analysis of Hrp-Related DNA Sequences of *Xanthomonas campestris* Strains Causing Diseases of Citrus. Applied and Environmental Microbiology 60:1078-1086.
- Stall, R.E., C. Beaulieu, **D. Egel**, N.C. Hodge, R.P. Leite, G.V. Minsavage, H. Bouzard, J.B. Jones, A.M. Alvarex and A.A. Benedict. 1994. Two Genetically Diverse Groups of Strains are Included in *Xanthomonas campestris* pv. *vesicatoria*. International Journal of Systematic Bacteriology 44:47-53.
- Egel, D.S.**, K. Rane, R.X. Latin, and R.D. Martyn. 2000. Mature Watermelon Vine Decline: A Disease of Unknown Etiology in Southwestern Indiana. Plant Health Progress - Accession DOI:10.1094/PHP-2000-2712-01-HN
- Egel, D.S.** and Harmon, P. 2001. Effects of Nozzle Type and Spray Pressure on Control of Alternaria Leaf Blight of Muskmelon with Chlorothalonil. Plant Disease 85:1081-1084.
- Egel, D.S.**, R. Harikrishnan and R. Martyn. 2005. First Report of *Fusarium oxysporum* f. sp. *niveum* Race 2 as Causal Agent of Fusarium Wilt of Watermelon, in Indiana. Plant Disease 89:108
- Keinath, A.P., K.L. Everts, D.B. Langston, Jr., **D.S. Egel**, and G.J. Holmes. 2006. Multi-State Evaluation of Reduced-Risk Fungicides and MELCAST Against Alternaria Leaf Blight and Gummy Stem Blight on Muskmelon. Crop Protection (26) 1251-1258.
- Egel, D.S.** and S. Adkins. 2007. Squash Vein Yellowing Virus Identified in Watermelon in Indiana. Plant Disease 91(8) 1056 DOI: 10.1094/PDIS-91-8-1056B.
- Keinath, A.P., K.L. Everts, D.B. Langston, Jr., **D.S. Egel**, and G.J. Holmes. 2007. Evaluation of Combinations of Chlorothalonil with Azoxystrobin, Harpin, and Disease Forecasting for Control of Downy Mildew and Gummy Stem Blight on Melon. Crop Protection 26 (2) 83-88. <http://dx.doi.org/10.1016/J.Cropro.2006.04.004>
- Egel, D.S.** and R. D. Martyn. 2007. Fusarium wilt of watermelon and other cucurbits. The Plant Health Instructor. DOI: 10.1094/PHI-I-2007-0122-01
- Egel, D.S.**, Gunter, C. and R. D. Martyn. 2008. Planting Method, Plastic Mulch and Fumigation Influences Growth, Yield and Root Structure of Watermelon. Hort Science 43(5):1410-1414

## Grants received (Partial list)

**Development and Delivery of a Disease Warning System for Muskmelon and Watermelon.** R.X. Latin and D.S. Egel. \$15,000 awarded for three years (June 1996-May 1999).

**“Benefit Analysis of a Single Use Fungicide for Muskmelons in Indiana”** National Agricultural Pesticide Impact Assessment Program, \$8,745. (1997-8)

**Integrated Management of Foliar Diseases of Melons in the Eastern United States.** Supported by USDA-Crops at Risk. Investigators: Anthony Keinath, Kathryn Everts, Daniel Egel, David Langston, Gerald Holmes, Edmund Estes. Amount granted to Purdue: \$24,000 over 3 years (2001-2004)

**The Etiology and Management of a Mature Watermelon Vine Decline Disease in Southern Indiana.** Egel, D.; Rane, K.; Latin, R.; and Martyn, R. Funded by the Indiana Commissioner of Agriculture Value added Research Fund and the Purdue University School of Agriculture, \$65,000. 2001-2003

**Delivery of a Weather-Based Spray Advisory Program to Illinois and Indiana.** Supported by US EPA, administered by American Farmland Trust. Role: Principal Investigator. Amount granted: \$15,000 over 2 years (2003-2005)

**Management of Mature Watermelon Vine Decline, an Important New Disease in Indiana.** Supported by the Mary Rice Foundation. Role: Principal Investigator. Amount granted: \$10,000 over 2 years (2003-2005)

**The Management of Watermelon Vine Decline through Sustainable Management Practices.** USDA-NCR-SARE 2006 R&E, \$98,500 2006-2009.

**Expanding ipmPIPE for Cucurbit Downy Mildew Forecasting.** Principal Investigator- Gerald Holmes, North Carolina State University. Over 20 cooperators across the Eastern U.S. Amount granted over \$900,000. Submitted in 2007. Funded to 2009.

**Managing Fusarium Wilt of Watermelon with Fungicide Drench Treatments.** Granting agency IR-4. \$30,000. Grant submitted in 2007. Project will commence in 2009. Dan Egel is Principal Investigator. 6 investigators in 6 states.

## Professionally Related Community Service

Science Judge for the Tri-State Science and Engineering Competition. 1996-2006.  
Judge Science Fair Projects for students.

Science Olympiad, hosted annually by Vincennes University. 2003-2006.  
Help to prepare and present competition on water quality event.

Agriculture in Space Program-Knox County Library Summer Reading Program-2003.  
Prepared a science project for children for library program.

Get to Know Trees- Knox County Library Summer Reading Program-2007.  
Children watched presentation and made craft.

## Community Service

Member Church Board (United Church of Christ, Vincennes) 1997-2000. (President 2000)

Presided over major expansion of church parking facilities and the addition of a new room.

Literacy Tutor, Knox County Literacy Program, 1996-2004.  
Tutored two students in English skills.

Adult Mentor, Kids Hope USA, school years, 2006-present.  
Act as mentor of an elementary student once a week.

## References

Provided upon request.