

## CURRICULUM VITAE

### Gladis Zinati

Department of Plant Biology and Pathology  
Rutgers, The State University of New Jersey  
Foran Hall, 59 Dudley Road, New Brunswick, NJ 08901  
Tel: (732) 932-9375 ext. 118; Fax: (732) 932-9441  
Email: [zinati@aesop.rutgers.edu](mailto:zinati@aesop.rutgers.edu)

### EDUCATION:

- 1997, Ph.D. in Soil Science - Soil Fertility, Michigan State University, East Lansing, Michigan
- 1986, M.S. in Crop Production – Horticulture, American University of Beirut, Beirut, Lebanon
- 1983, B.S. in Agricultural Sciences, American University of Beirut, Beirut, Lebanon
- 1983, Diploma of Agricultural Engineering, American University of Beirut, Lebanon

### PROFESSIONAL EXPERIENCE:

- 9/2002-Present, Assistant Extension Specialist in Nursery Crop Management, in the Department of Plant Biology and Pathology, Rutgers University, School of Environmental and Biological Sciences, New Brunswick. Appointment: 70% Extension and 30% Research.
- 2001-2002, Postdoctoral Research Associate and Research Manager for Florida Organics Recycling Center for Excellence (FORCE). University of Florida, Department of Environmental Horticulture, Gainesville, Florida.
- 1998-2001, Postdoctoral Research Associate, University of Florida, Tropical Research and Extension Center (TREC), Homestead, Florida.
- 1998-2001, Extension outreach in south Florida, University of Florida, Tropical Research and Extension Center (TREC), Homestead, Florida.
- 1997-1998, Research Assistant II, Michigan State University, Plant Pathogen Diagnostic Clinic, E. Lansing, Michigan.
- 1990- 1995, Graduate Research Assistant, Michigan State University, E. Lansing, Michigan.
- 1992, Teaching Assistant, Michigan State University, East Lansing, Michigan.
- 1988-1989, Department Head, Research and Development, Comptoir Agricole du Levant, Zalka, Lebanon.
- 1987-1988, Executive Site Manager, Horticulture Landscaping, Azzam Company, Beirut, Lebanon.

### HONORS AND AWARDS:

- 2006, The American Society of Agricultural and Biological Engineers (ASABE), **Blue Ribbon Award**. Certificate for the RCRE bulletin E-309 entitled "*Landscape and Ornamental Plant Stress: Factors, Symptoms, Diagnosis and Management.*"

- 2006-Educational Aids Competition. Authored by Gladis Zinati, Ann B. Gould, Richard Buckley and Rich Obal.
- 2005, Rutgers Research Council Award, \$1,700.
- 1996, MSU Dissertation Completion Fellowship, \$8,000.
- 1994, Certificate of Appreciation for Volunteering Services, Office of International Students and Scholars, Michigan State University.
- 1993, Certificate of Appreciation for Cross-Cultural Activities, Office of University Apartments and Residence Life, Michigan State University.
- 1992-1993, Recipient of the W. B. and Candace Thoman Fellowship, Michigan State University, \$2,500.
- 1992, North Central Extension - Industry Soil Fertility Conference. Graduate Student Travel Award. St. Louis, Mo, \$500.
- 1991-1992, Two Certificates of Appreciation For Cross- Cultural Activities, Office of University Apartments and Residence Life, Michigan State University.
- 1984-1986, The United States Agency for International Development (USAID) Fellowship, American University of Beirut, equivalent to \$7,200.

## **PROFESSIONAL SERVICES AND APPOINTMENTS:**

### ***Multi-State Projects***

- NCDC216: Water Management and Quality for Ornamental Crop Production and Health (member of steering committee and helped in writing the project proposal, 2008-present).
- WERA058: Production, Transition Handling, Reestablishment of Perennial Nursery Stock (member 2008 - present).
- SERA017: Organization to Minimize Phosphorus Losses from Agriculture (member 2008-present).
- Old\_SERA 017: Minimizing Agricultural Phosphorus Run-off Losses for Protection of the Water (member, 2008).
- S1014: Mineral Controls on P Retention and Release in Soils and Soil Amendments (S280) (member, 2007- 2008).

### ***Program, Symposia, and Workshop Committees***

- 2009, Chair, Water Utilization Management Working Group, the American Society for Horticultural Science (2009-2010).
- 2009, Chair of the American Society for Horticultural Science Nursery Crops (NUR) Working Group (2008-2009).
- 2009, Organizer of the NUR Workshop “*Managing and Thriving in Tough Times, When Every Dime Counts!*” the American Society for Horticultural Science NUR Working Group, St. Louis, MO, July 2009.
- 2008, Chair-elect, the Water Utilization Management (WUM) Working Group, the American Society for Horticultural Science.
- 2007, Chair-elect, the Nursery Working Group, the American Society for Horticultural Science (2007-2008).

- 2007, Secretary, Water Utilization Working Group, the American Society for Horticultural Science (2007-2008).
- 2007, Co-coordinator, the 2007 Nursery Crops Workshop- Nursery Crops Working Group, the American Society for Horticultural Science.
- 2006, Secretary, the Nursery Crops Working Group, the American Society for Horticultural Science (2006-2007).
- 2004, Program Committee Member, North East Branch, the American Society of Agronomy, NEBASA Annual Meeting.
- 2003, Chair of the American Society for Horticultural Science Waste Utilization in Horticulture Working Group.
- 2003, Organizer of Workshop “*Development of Composting Technology for a Better Environment and Horticulture*” the American Society for Horticultural Science, Providence, RI, 2003.
- 2002, Member of the Scientific Board, Compost Science & Utilization (2002-2006).
- 2002, Moderator of session 3 presentations at The International Horticultural congress (IHC), Sustainable Agriculture Symposium (S10), Toronto, Canada.
- 2001, Chair of the American Society for Horticultural Science Weed and Pest Management Working Group (2001-2002).
- 2001, Organizer of Workshop “*Pest Management during Transition from Conventional to Organic Production*” the American Society for Horticultural Science, Sacramento, CA.
- 2001, Scientific Committee Member and Session Organizer at The International Horticultural congress (IHC), Sustainable Agriculture Symposium (S10), (2001-2002).

***Ad hoc Manuscript Reviewer***

- Irrigation Science, 1 manuscript (2009)
- Waste Management, 1 manuscript (2007)
- Scientia Horticulturae, 2 manuscripts (2007-2008)
- Soil & Sediment Contamination, an International Journal, 3 manuscripts (2007-2009)
- HortTechnology, 3 manuscripts (2002-2007)
- Critical Reviews in Environmental Science and Technology, 1 manuscript (2006)
- Geoderma, 3 manuscripts (2006)
- J. Soil and Water Conservation, 1 manuscript (2006)
- Environmental Research, 1 manuscript (2005)
- J. Amer. Soc. Hort. Sci. (JASHS), 4 manuscripts (2004-2005)
- J. Environ. Management, 1 manuscript (2004)
- J. Environ. Pollution, 2 manuscripts (2004-2005)
- J. Veg. Crop Prod., 1 manuscript (2004)
- HortScience, 6 manuscripts (2003-2009)
- Compost Sci. Util., 8 manuscripts (2002-2006)
- Acta Hort. 16 manuscripts (2002-2003)
- Adv. Environ. Res., 1 manuscript (2002)
- J. Soil Sci. Soc. Amer. (SSSAJ), 2 manuscripts (2001)

### ***Grant Proposal Reviewer***

- 2009, Sigma Delta Epsilon/ Awards for Graduate Women in Science, Graduate Women in Science Organization, Department of Geology & Geophysics, University of Wisconsin-Madison (1 grant).
- 2008, BARD, the United States - Israel Binational Agricultural Research & Development grant proposal on Stress and fault detection in greenhouse production by direct measurement of crop status (1 grant).
- 2004, CSREES-USDA 2005. Small Business Innovation Research Program (SBIR) (1 grant).
- 2004, Cornell University Agricultural Experiment Station (CUAES) and Cornell Cooperative Extension Call for integrated pre-proposals addressing improved land use management (4 grants).
- 2004, CSREES-USDA 2004 National Research Initiative Competitive Grants Program Watershed Processes and Water Resources, on Vegetative Buffer Strips Effectiveness (1 grant).
- 2002, BARD, the United States - Israel Binational Agricultural Research & Development grant proposal on Sustainability of Stone Fruit Production Systems (1 grant).

### ***Online Course Evaluation***

- 2006, SARE National Agriculture Course "Sustainable Agriculture: Basic Principles and Concept Overview", Mississippi Extension Service, June 5, 2006.

### ***University Committees***

- 2007-2008, Faculty Advisor, The American-Lebanese Student Association.
- 2006, Member and Co-Organizer. Planting the Seeds Committee.
- 2002–Present, Chair, Rutgers Nursery Crops Working Group (RNC-WG), conducting business meetings, workshops, grant proposals, and publishing articles.
- 2003 – 2005, Member, EcoComplex Greenhouse Advisory Committee.
- 2004, Member, Rutgers University, Impervious Cover Working Group.
- 2003, Member. Department of Agriculture Jersey Fresh Working Group. Provide recommendations on standards for Jersey Fresh standards for floriculture and nursery plants.
- 2000- 2001, Representative, University of Florida- Social committee.
- 1994-1998, Representative of international students at MSU in the MSU Health Insurance Advisory Committee. Michigan State University, East Lansing, Michigan.
- 1992-1993, Coordinator of "Hunger Meal" A Thoman Fellowship program to increase the awareness of local the community towards global hunger and resource distribution. Michigan State University, East Lansing, Michigan.
- 1992-1996, Coordinator, Lebanese Student Club, Michigan State University East Lansing, Michigan.
- 1992-1996, Representative, University Apartment Residence Council, Michigan State University East Lansing, Michigan.
- 1991-1992, President, Graduate Student Organization, Department of Crop and Soil Sciences, Michigan State University East Lansing, Michigan.

## **PROFESSIONAL MEMBERSHIP:**

American Society of Agronomy and Soil Science Society of America  
American Society for Horticultural Science  
New Jersey Nursery and Landscape Association

## **EXTENSION, RESEARCH, AND TEACHING INTERESTS:**

Soil and crop management, nutrient and water management for field, vegetable, and ornamental crop production:

-Develop sustainable cropping systems for various crops that integrate nutrient, water, and pest management practices through the use of biological and natural inputs such as mycorrhizal fungi, minerals and clays, cover crops, and compost.

-Incorporate the use of tools and techniques that improve nutrient and water uptake efficiency, reduce cost of production, plant stress, plant diseases and pests.

- Develop best management practices that optimize plant health and sustain crop production in an eco-friendly multifaceted system.

## **PUBLICATIONS:**

### ***Book Chapter***

Zinati, G. M. 2005. Nursery Management. *In: Cultivating Peace of Mind: A Nursery Producer's Guide to Managing Risk, Risk Management Education for Farmers*, Published by USDA. Available at the USDA National Agricultural Library.

### ***Refereed Journal Articles***

Mylavarapu, R.S., and **G.M. Zinati**. 2009. Improvement of soil properties using compost for optimum parsley production in sandy soils. *Scientia Horticulturae*, 120(3): 426-430.

**Zinati, G. M.**, D. R. Christenson and D. Harris. 2007. Estimation of field N mineralization from laboratory incubation for sugar beet production in Michigan. *Commun. Soil Sci. Plant Anal.* 38:1-16.

Ullah, S. and **G. M. Zinati**. 2006. Denitrification and nitrous oxide emissions from riparian forests exposed to prolonged nitrogen runoff. *Biogeochemistry* 81:253-267.

Yu, S. and **G. M. Zinati**. 2006. Physical and chemical changes in container media in response to bark substitution for peat. *Compost Science & Utilization* 14(3):222-230.

**Zinati, G. M.** 2005. Compost in the 20<sup>th</sup> Century: A tool to control plant diseases in ornamental and vegetable crops. *HortTechnology* 15(1):61-66.

**Zinati, G. M.,** Y.C. Li, H.H. Bryan, R.S. Mylavarapu and M. Codallo. 2004. Distribution and fractionation of phosphorus, cadmium, nickel and lead in calcareous soils amended with compost. *J. Environmental Science and Health Part B*, 39(1):209-223.

**Zinati, G. M.** 2002. Introduction. The Weed Control and Pest Management Workshop. *HortTechnology* 12(4):588-589.

**Zinati, G. M.** 2002. Transition from conventional to organic farming systems: I. challenges, recommendations and guidelines for pest management. *HortTechnology* 12(4):606-610.

**Zinati, G. M.** 2002. Transition from conventional to organic farming systems: II. Summary of discussion session and recommendations for future research. *HortTechnology* 12(4):611-612.

**Zinati, G. M.,** Y. C. Li and H. H. Bryan. 2001. Accumulation and distribution of copper, iron, manganese and zinc in calcareous soil amended with compost. *J. Environmental Science and Health Part B*, 36(2):229-243.

**Zinati, G. M.,** D. R. Christenson and D. Harris. 2001. Temporal and spatial distribution of <sup>15</sup>N tracer and temporal pattern of N uptake by sugarbeet from various depths. *Commun. Soil Sci. Plant Anal.* 32(9&10):1445-1456.

**Zinati, G. M.,** Y. C. Li and H. H. Bryan. 2001. Utilization of compost increases organic carbon and its humin, humic and fulvic acid fractions in calcareous Soil. *Compost Science & Utilization* 9(2):156-162.

Bryan, H.H., A. A. Abdul-Baki, J. Reeves III, L. Carrera, W. Klassen, **G. M. Zinati** and M. Codallo. 2001. Perennial *Arachis* spp. as a multipurpose living mulch, ground cover and forage. *J. Veg. Crop Prod.* 7 (2):113-136.

Abdul-Baki, A.A., H. H. Bryan, **G. M. Zinati**, W. Klassen, M. Codallo and N. Heckert. 2001. Biomass yield and flower production in sunn hemp: Effect of cutting the main stem. *J. Veg. Crop Prod.* 7(1):83-104.

#### **Refereed Articles In The Works**

Shau X. and **G. Zinati**. Surface charge and adsorption of humic acid and phosphate on goethite (*In Review, SSSAJ*).

**Zinati, G. M.**, R. Mylavarapu, and A. Gould. Nutrient loading and quality of water in tail-water recovery systems in nursery operations. (*In preparation for resubmission to Journal of Environmental Quality*).

**Zinati, G. M.** Substitution of pine bark for vermiculite reduces nutrient content in leachates from herbaceous perennial plants (*In preparation*).

**Zinati, G. M.** Minerals and clay amendment affect *Rudebackia* biomass and leachate nutrient content (*In preparation*).

**Zinati, G. M.**, J. Dighton, and A. J. Both. Irrigation, fertilizer and mycorrhizae affect plant biomass accumulation of nursery crops and nutrients in leachates (*In preparation*).

#### **REFEREED ABSTRACTS:**

**Zinati, G. M.** and J. Dighton. 2009. Integration of natural mycorrhizae in production of container-grown nursery crops (*ASHS, HortScience*).

**Zinati, G. M.**, J. Dighton, and A. Gould J. 2009. Substrate media, fertilizer rate, and mycorrhizal inoculum source affect azalea plant root mycorrhizal colonization and severity of *Phytophthora Cinnamomi* infection (*ASHS, HortScience*).

Fernandez, T.R., J. Lea-Cox, **G. Zinati**, C. Hong, R. Cabrera, D. Merhaut, J. Albano, M. van Iersel, T. Yeager, and D. Buhler. 2009. NCDC216: A new multistate group for water management and quality for ornamental crop production and health. (*ASHS, HortScience*).

Fernandez, T.R., J. Lea-Cox, **G. Zinati**, C. Hong, R. Cabrera, D. Merhaut, J. Albano, M. van Iersel, T. Yeager, and D. Buhler. 2009. NCDC216: A new multistate group for water management and quality for ornamental crop production and health. Abstract Proceedings of the 2009 National Water Quality Meeting, St. Louis, MO.

**Zinati, G. M.** and J. Dighton. 2008. Impact of fertilizers on ornamental nursery plant growth and mycorrhizal colonization. (abstract) Proceedings, ASA-CSSA-SSSA International Annual Meetings, Houston, TX. Available at: <http://a-c-s.confex.com/crops/2008am/webprogram/Paper45690.html>

**Zinati, G. M.** 2008. Application position of zeolite affects nursery plant biomass. *HortScience* 43 (4): 1128.

**Zinati, G.M.**, John Dighton, Rich Obal, Jim Johnson, Jerry Frecon, and Carl Nordstrom. 2008. Effects of fertilizers and naturally-occurring mycorrhizae on sustainable production of nursery crops. *HortScience* 43 (4): 1126.

**Zinati, G. M.**, J. Dighton, and A.J. Both. 2007. Fertilizer, irrigation and mycorrhizal effects on container-grown nursery crop biomass accumulation and leachate nutrient content. *HortScience* 42(4): 862.

**Zinati, G. M.** 2007. Container substrates that improve water retention and quality of leachates. *HortScience* 42(4): 839.

Pratap Manyangari, Amarender S. Reddy, and **G.M. Zinati**. 2007. Effect of preharvest micronutrient foliar sprays on postharvest vase life of gladiolus (*Gladiolus grandiflorus*). *HortScience* 42(4): 906.

**Zinati, G. M.**, P. Oudemans, A. Gould and R. Mylavarapu. 2007. Capture and Recycle Runoff: Water Quality Assessment. Proceedings of the 2007 National Water Quality Meeting, Savannah, GA.

**Zinati, G. M.** 2007. Rutgers University Nursery Management Program: Research and Extension. Proceedings of the 2007 National Water Quality Meeting, Savannah, GA.

**Zinati, G. M.** 2006. Evaluation of container media and cyclic irrigation on *Ilex x meserveae* growth and nutrient concentration in leachates. *HortScience*. 41(4):977.

**Zinati, G. M.** 2006. Substrate media and fertilizer source affect nitrogen and phosphorus levels in leachate from container-grown Shasta daisy. *HortScience* 41(4):1055.

Shuai X. and **G. M. Zinati**. 2005. Effect of phosphate and humic acid adsorption on surface charge of goethite. CD. *In* 2005 Agronomy Abstracts. ASA, Salt Lake City, UT.

Ullah, S. and **G. M. Zinati**. 2005. Denitrification and nitrous oxide emissions from riparian forest soils exposed to chronic mineral nitrogen loading. *In* 2005 Agronomy Abstracts. ASA, Salt Lake City, UT.

**Zinati, G. M.**, R. S., Mylavarapu, P. Oudemans, and A. B. Gould. 2004. Nutrient loading in runoff and recycling water of nursery operations. CD. *In* 2004 Agronomy Abstracts. ASA, Seattle, WA.

Yu, S. and **G. M. Zinati**. 2004. Physical and chemical properties of various containerized substrate mixes. CD. *In* 2004 Agronomy Abstracts. ASA, Seattle, WA.

Yu, S. and **G. M. Zinati**. 2004. Sorption and desorption of phosphorus in various mixes in containerized substrate media. CD. *In* 2004 Agronomy Abstracts. ASA, Seattle, WA.

**Zinati, G. M.** 2003. Nutrient and water management program for nursery operations in New Jersey. CD. *In* 2003 Agronomy Abstracts. ASA, Denver, CO.

**Zinati, G. M.**, R. S. Mylavarapu and J. Sanchez. 2003. Nutrient management using compost. CD. *In* 2003 Agronomy Abstracts. ASA, Denver, CO.

- Zinati, G. M.** 2003. Compost: A tool for disease suppression. *HortScience* 38:745-746.
- Zinati, G. M.** 2003. Research and Extension program for nursery management in New Jersey. *HortScience* 38:760.
- Zinati, G. M.,** H. H. Bryan, R. McSorley and R. S. Mylavarapu. 2002. Sustainable cropping systems for tomato production in south Florida. Presented at the 26<sup>th</sup> International Horticultural Congress. Toronto, Canada, August 13-17, 2002.
- Zinati, G. M.** and E. R. Emino. 2002. Effect of co-compost on sandy soil properties for specialty cut-flower production. *In* 2002 S. Branch, Am. Soc. Hort. Sci. Orlando, FL. 2-5 Feb. 2002.
- Zinati, G. M.** and E. R. Emino. 2002. Florida Organics Recycling Center for Excellence (FORCE): Research and education programs for Florida. *In* Abstracts of technical papers, 2002 Annual Meeting, S. Branch, ASA, Orlando, FL. 2-5 Feb, 2002.
- Zinati, G. M.,** H. H. Bryan and R. S. Mylavarapu. 2001. Degradation of sunn hemp and its effect on soil organic carbon. *In* 2001 Agronomy abstracts. ASA, Charlotte, NC.
- Zinati, G. M.,** H. H. Bryan, R. McSorley and A. A. Abdul-Baki. 2001. Utilization of cover crops, compost and plastic mulch as alternative to methyl bromide for watermelon production in south Florida. *HortScience*, 36(3): 560.
- Zinati, G. M.,** R. S. Mylavarapu, Y. C. Li, H. H. Bryan, B. Basti and M. Codallo. 2000. Temporal variation of microbial biomass carbon and nitrogen under various cover crops. p. 248. *In* 2000 Agronomy abstracts. ASA, Minneapolis, MN.
- Zinati, G. M.,** H. H. Bryan and Y. C. Li. 2000. Enhancing germination of purple coneflower (*Echinacea angustifolia*) using stratification, salt priming and biostimulants. *HortScience*, 35:504.
- Bryan, H. H., A. A. Abdul-Baki, L. Carrera, **G. M. Zinati**, and W. Klassen. 2000. Selecting rhizoma peanuts (*Arachis glabrata*, Benth.) for living mulch in vegetable production in Florida. *HortScience*, 35:507.
- Abdul-Baki, A. A., H. H. Bryan, **G. M. Zinati**, W. Klassen, M. Codallo and N. Heckert. 2000. Cutting the main stem of sunn hemp plants increased flower production. *HortScience*, 35:471.
- Zinati, G. M.,** H. H. Bryan, A. A. Abdul-Baki and W. Klassen. 1999. Cover crop mulches for tomato production in south Florida as an alternative to methyl bromide. *HortScience*, 35:551.

**Zinati, G. M.,** Y. C. Li, H. H. Bryan and A. A. Abdul-Baki. 1999. Nitrogen mineralization and volatilization dynamics in calcareous soil under cover crop in a tomato production field. p. 235. *In* 1999 Agronomy abstracts. ASA, Salt Lake City, UT.

**Zinati, G. M.,** Y. C. Li and H. H. Bryan. 1998. Distribution and fractionation of phosphorus and trace metals in soils amended with composts. p. 193. *In* 1998 Agronomy abstracts. ASA, Baltimore, MD.

**Zinati, G. M.,** Y. C. Li and H. H. Bryan. 1998. Accumulation and fractionation of organic matter in soils amended with composts. p. 237. *In* 1998 Agronomy abstracts. ASA, Baltimore, MD.

**Zinati, G. M.,** D. R. Christenson. 1996. Estimating N loss under sugarbeet. p. 252. *In* 1996 Agronomy abstracts. ASA, Indianapolis, IN.

**Zinati, G. M.,** D. R. Christenson. 1995. Prediction of nitrogen fertilizer needs for sugarbeet. p. 259. *In* 1995 Agronomy abstracts. ASA, St. Louis, MO.

**Zinati, G. M.,** D. R. Christenson. 1995. Prediction of cumulative N mineralization in the field from a laboratory incubation study. Am. Soc. Agron. Abstr. St. Louis, MO, Agronomy Abstracts, page 259.

**Zinati, G. M.,** D. Harris and D. R. Christenson. 1994. Distribution of applied <sup>15</sup>N and its uptake by sugarbeet from various depths. p. 303. *In* 1994 Agronomy abstracts. ASA, Seattle, WA.

Christenson, D. R. and **G. M. Zinati.** 1991. Nitrogen uptake by sugar beets from various depths in Soil. p. 66. *In* 1991 Sugarbeet Technol. Abstracts. Am. Soc. Sugar Beet Technol. Monterey, CA.

*Non-Refereed Journal Articles* (SNA, trade magazines, proceedings, reports and bulletins, fact sheets, and newsletters)

*SNA and Trade Magazines*

Fernandez, T.R., J. Lea-Cox, **G. Zinati,** C. Hong, R. Cabrera, D. Merhaut, J. Albano, M. van Iersel, T. Yeager, and D. Buhler. 2009. NCDC216: A New Multistate Group for Water management and quality for ornamental crop production and health. SNA (In Press)

**Zinati, G. M.** 2004. Weathering the Cold. American Nurseryman. 199 (7):29-35.

**Zinati, G. M.** 2000. Finding alternative to methyl bromide. BioCycle, 41(8):66-67.

Klock-Moore, K. A., G. E. Fitzpatrick and **G. M. Zinati.** 2000. Compost use in container production of ornamental horticulture crops. BioCycle 41 (11): 58-60.

*Proceedings*

Fernandez, T.R., J. Lea-Cox, **G. Zinati**, C. Hong, R. Cabrera, D. Merhaut, J. Albano, M. van Iersel, T. Yeager, and D. Buhler. 2009. NCDC216: A New Multistate Group for Water Management and Quality for Ornamental Crop Production and Health. The 2009 USDA-CSREES National Water Quality Conference Proceedings, St. Louis, MO.

**Zinati, G.M.**, P. Oudemans, A. Gould, and R. Mylavarapu. Capture and Recycle Runoff: Water Quality Assessment. The 2007 USDA-CSREES National Water Conference Proceedings, Savannah, GA, January 31, 2007.

[http://www.usawaterquality.org/conferences/2007/abstract\\_index.html](http://www.usawaterquality.org/conferences/2007/abstract_index.html)

**Zinati, G.M.** Rutgers University Nursery Management Program: Research and Extension. Poster Presentation at the 2007 USDA-CSREES National Water Conference, Savannah, GA, January 30, 2007.

[http://www.usawaterquality.org/conferences/2007/abstract\\_index.html](http://www.usawaterquality.org/conferences/2007/abstract_index.html)

Bertschinger, L., J.D., Anderson, N., de Groot, D., Granatstein, R., Habib, K., Mullinix, D., Neilsen, F., Pomares García, F.P. Weibel, and **G. Zinati**, 2004. Conclusions from the 1<sup>st</sup> symposium on sustainability in horticulture and a declaration for the 21<sup>st</sup> century. Acta Hort. (ISHS)638: 509-512 [http://www.actahort.org/books/638/638\\_65.htm](http://www.actahort.org/books/638/638_65.htm).

**Zinati, G. M.**, H. H. Bryan and M. Codallo. 2002. Solarization and additives as an alternative to methyl bromide for field bedding plant production. Proc. Fla. State Hort. Soc. Vol. 115:123-127.

**Zinati, G. M.**, H. H. Bryan and R. S. Mylavarapu. 2002. Methyl bromide alternative tactics for vegetable production in south Florida. FACTS Proc. 2001:33-36.

**Zinati, G. M.** and H. H. Bryan. 2001. Solarization of spent media in plastic bags and organic amendments for the production of bedding plants. Proc. Fla. State Hort. Soc. Vol. 114: 258-262.

**Zinati, G. M.**, H. H. Bryan and Y. C. Li. 2000. Stratification enhances germination of purple coneflower (*Echinacea angustifolia*) and St. John's wort (*Hypericum perforatum*) seeds. Proc. Fla. State Hort. Soc. Vol. 113:172-174.

**Zinati, G. M.** and H. H. Bryan. 2000. Solarization of recycled potting media for ornamental production. Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions. Orlando, FL, Nov 6-9, 2000.

*Fact Sheets and bulletins* (\*\* available online at the USDA National Library  
<http://riley.nal.usda.gov/wqic/>)

**Zinati, G.M.,** A. B. Gould, R. Buckley, and R. Obal. 2006. Landscape and ornamental plant stress: factors, symptoms, diagnosis, and management. Rutgers Cooperative Research and Extension Bulletin E309, 6pp.

<http://njaes.rutgers.edu/pubs/publication.asp?pid=E309> (Won a national award).

**Zinati, G.M.\*\*** and X. Shau. 2005. Management of iron in irrigation water. Rutgers Cooperative Research and Extension Fact sheet FS516, 4pp.

<http://njaes.rutgers.edu/pubs/publication.asp?pid=FS516>

**Zinati, G.M.\*\*** 2005. Irrigation management options for containerized-grown nursery crops. Rutgers Cooperative Research and Extension Bulletin E302, 8pp.

<http://njaes.rutgers.edu/pubs/publication.asp?pid=E302>

**Zinati, G.M.\*\*** 2005. Nutrients and nutrient management for containerized nursery crops. Rutgers Cooperative Research and Extension Bulletin E303, 10pp.

<http://njaes.rutgers.edu/pubs/publication.asp?pid=E303>

**Zinati, G.M.\*\*** 2005. Pest and pest and pesticide management practices in nursery operations E299, 7pp. <http://njaes.rutgers.edu/pubs/publication.asp?pid=E299>.

**Zinati, G.M.** 2005. Pot-in-pot nursery production system: What you need to know before establishment. Rutgers Cooperative Research and Extension Fact sheet FS519, 4pp.

<http://njaes.rutgers.edu/pubs/publication.asp?pid=FS519>

**Zinati, G.M.** 2004. Management recommendations on cold hardiness and dehardening for container-grown nursery crops. Rutgers Cooperative Research and Extension Fact sheet FS528, 4pp. <http://njaes.rutgers.edu/pubs/publication.asp?pid=FS528>

**Zinati, G.M.** and R. P. Rice, Jr. 2000. Evaluation of tomato cultivars produced in unheated plastic houses. University of Florida Experiment Station bulletin, Vol. 1, pp. 1-10.

*Newsletters (New Jersey Nursery and Landscape Association (NJNLA) and Plant and Pest Advisory)*

**Zinati, G.M.** 2007. Management of nursery plants using mycorrhizae. NJNLA Newsletter 5(4): 7.

**Zinati, G.M.** and John Dighton. 2007. Managing nursery crops using mycorrhizae: the underground helpers. Plant & Pest Advisory-Landscape, Nursery & Turf edition 13(16):4-5.

**Zinati, G.M.** 2007. An integrated approach to developing nutrient management schemes for container-grown nursery crops. Plant & Pest Advisory-Landscape, Nursery & Turf edition 13(16):5.

**Zinati, G.M.** 2007. Updates on research and extension activities of nursery management program. NJNLA Newsletter 5(3):10.

**Zinati, G.M.** 2006. Updates on research and extension activities of nursery management program. NJNLA Newsletter 4(3):10.

**Zinati, G.M.** and A. B. Gould. 2006. Plan ahead for better management of landscape and nursery plants. NJNLA Newsletter 4(2):7.

**Zinati, G.M.** and A. B. Gould. 2006. Plan ahead for better management of landscape and nursery plants. Plant & Pest Advisory-Landscape, Nursery & Turf edition 12(2):1-2 (adapted from NJNLA Newsletter 4(2):7.

**Zinati, G.M.** 2006. Iron in Irrigation Water and Methods of Control. NJNLA Newsletter 3(3):7.

**Zinati, G.M.** 2005. Managing pests and pesticides in nursery operations. NJNLA Newsletter 3(2):11 and 15.

**Zinati, G.M.** 2005. Suppression of root diseases with compost. NJNLA Newsletter 3(1):9.

**Zinati, G.M.** 2004. Announcement. NJNLA Newsletter 2(3):7.

**Zinati, G.M.** 2004. *Phytophthora ramorum* (Pr) also known as Sudden Oak Death, leaf blight, dieback and stem canker. NJNLA Newsletter 2(2):7-8.

**Zinati, G.M.** 2003. Tips on best management Practices (BMPs) for field grown nursery production. NJNLA Newsletter 1 (3):11-12.

**Zinati, G. M.** 2003. Guidelines on best management practices (BMPs) for container grown nursery production. NJNLA Newsletter 1(3):12.

Orton, E. R. - **G.M. Zinati**. 2003. RED BEAUTY<sup>®</sup> Holly introduced by NJAES/Cook College. NJNLA Newsletter 1(2):6.

### Reports

**Zinati, G.M.** 2006. Development of Nutrient Management Program Using Riparian Buffers for New Jersey Nursery Operations. First Year Annual Report to Daniela Sharma, Cook College, Rutgers University.

**Zinati, G.M.** 2005. Development, Implementation and Support of an Integrated Crop Management Program for New Jersey's Nursery Industry. Second Year Annual Report to the Executive Dean's Office, Cook College, Rutgers University.

**Zinati, G.M.** 2004. Development, implementation and support of an integrated crop management program for New Jersey's nursery industry. Annual Report to the Executive Dean's Office, Cook College, Rutgers University.

**Zinati, G.M.** 2003. A two-day workshop on nutrient and water management of nursery crops in New Jersey. Annual Report on DES Grant Initiative, Department of Specialists, Rutgers University.

**Zinati, G.M.,** E. R. Emino and D. McConnell. 2003. Research and education programs at UF/IFAS on composting waste streams for Florida. Annual Report. University of Florida.

**Zinati, G.M.,** H. H. Bryan and Y. C. Li. 1999. Developing technology for improving and accelerating germination of herbs. One year Achievement Report, February 1999. Plantation Medicinals, Inc., 4p.

**Zinati, G.M.,** H. H. Bryan and Y. C. Li. 1998. Developing technology for improving and accelerating germination of herbs. Report October 1998. Plantation Medicinal Inc., 16p.

**Zinati, G.M.,** H. H. Bryan and Y. C. Li. 1998. Developing technology for improving and accelerating germination of herbs. Report May 1998. Plantation Medicinal Inc., 24p.

Christenson, D. R., C. E. Bricker, L. F. Siler, **G. M. Zinati,** M. B. Butt. 1993. Soil fertility and management for sugar beet production. Annual Report to Michigan Sugar Company and Monitor Sugar Company. 22p.

Christenson, D. R., C. E. Bricker, L. F. Siler, **G.M. Zinati,** M. B. Butt. 1992. Soil fertility and management for sugar beet production. Annual Report to Michigan Sugar Company and Monitor Sugar Company. 22p.

Christenson, D. R., C. E. Bricker, R. Schmenk and **G.M. Zinati.** 1991. Soil fertility and management for sugarbeet production. Annual Report to Michigan Sugar Company and Monitor Sugar Company. 14p.

**PRESENTATIONS AT NATIONAL CONFERENCES AND SYMPOSIA:** (\*chosen for a podcast by the American Society for Horticultural Science)

Fernandez, T.R., J. Lea-Cox, **G. Zinati,** C. Hong, R. Cabrera, D. Merhaut, J. Albano, M. van Iersel, T. Yeager, and D. Buhler. 2009. NCDC216: A new multistate group for water management and quality for ornamental crop production and health. Presented at the 2009 National Water Quality Meeting, St. Louis, MO.

**Zinati, G.M.\*** 2008. Application position of zeolite affects nursery plant biomass. Presented at the 2008 ASHS Annual Conference, Orlando, FL, July 23, 2008.

**Zinati, G.M.\***, John Dighton, Rich Obal, Jim Johnson, Jerry Frecon, and Carl Nordstrom. 2008. Effects of fertilizers and naturally-occurring mycorrhizae on sustainable production of nursery crops. Presented at the 2008 ASHS Annual Conference, Orlando, FL, July 23, 2008.

**Zinati, G. M.**, J. Dighton, and A.J. Both. 2007. Fertilizer, irrigation and mycorrhizal effects on container-grown nursery crop biomass accumulation and leachate nutrient content. Presented at the 2007 ASHS Annual Meeting, Scottsdale, Arizona, July 17, 2007.

**Zinati, G. M.\*** 2007. Container substrates that improve water retention and quality of leachates. Presented at the Nursery Crop Workshop (NCW)-2007: "Water Conservation Practices for Nursery Crop Production", ASHS Annual Meeting, Scottsdale, Arizona, July 19, 2007.

**Zinati, G. M.**, P. Oudemans, A. Gould and R. Mylavarapu. 2007. Capture and Recycle Runoff: Water Quality Assessment. Presented at the 2007 National Water Quality Meeting, Savannah, GA.

**Zinati, G. M.** 2007. Rutgers University Nursery Management Program: Research and Extension. Presented at the 2007 National Water Quality Meeting, Savannah, GA.

**Zinati, G. M.** 2006. Substrate media and fertilizer source affect nitrogen and phosphorus levels in leachate from container-grown Shasta daisy. Presented at the 2006 ASHS Annual Meeting, Louisiana, New Orleans.

**Zinati, G. M.** 2006. Evaluation of container media and cyclic irrigation on *Ilex x meserveae* growth and nutrient concentration in leachates. Presented at the 2006 ASHS Annual Meeting, Louisiana, New Orleans.

Shuai X. and **G. M. Zinati**. 2005. Effect of phosphate and humic acid adsorption on surface charge of goethite. Presented at the 2005 Agronomy Meeting, ASA, Salt Lake City, UT.

Ullah, S. and **G. M. Zinati**. 2005. Denitrification and nitrous oxide emissions from riparian forest soils exposed to chronic mineral nitrogen loading. Presented at the 2005 Agronomy Meeting, ASA, Salt Lake City, UT.

**Zinati, G. M.**, R. S., Mylavarapu, P. Oudemans, and A. B. Gould. 2004. Nutrient Loading in Runoff and Recycling Water of Nursery Operations. Presented at the 2004 Agronomy Meeting, ASA, Seattle, WA.

Yu, S. and **G. M. Zinati**. 2004. Physical and chemical properties of various containerized substrate mixes. Presented at the 2004 Agronomy Meeting, ASA, Seattle, WA.

Yu, S. and **G. M. Zinati**. 2004. Sorption and desorption of phosphorus in various mixes in containerized substrate media. Presented at the 2004 Agronomy Meeting, ASA, Seattle, WA.

**Zinati, G. M.** 2003. Nutrient and water management program for nursery operations in New Jersey. Presented at the 2003 Agronomy Meeting, ASA, Denver, CO.

**Zinati, G. M.,** R. S. Mylavarapu and J. Sanchez. 2003. Nutrient management using compost. Presented at the 2003 Agronomy Meeting, ASA, Denver, CO.

**Zinati, G. M.** 2003. Compost: A tool for disease suppression. Presented at the 2003 ASHS Meeting, Providence, Rhode Island.

**Zinati, G. M.** 2003. Research and Extension program for nursery management in New Jersey. Presented at the 2003 ASHS Meeting. Providence, Rhode Island.

**Zinati, G. M.,** H. H. Bryan, R. McSorley and R. S. Mylavarapu. 2002. Sustainable cropping systems for tomato production in south Florida. Presented at The 26<sup>th</sup> International Horticultural Congress. Toronto, Canada, August 13-17, 2002.

**Zinati, G. M.** and E. R. Emino. 2002. Florida Organics Recycling Center for Excellence (FORCE): research and education programs on composting waste streams for Florida. Presented at the International Symposium on Composting and Compost Utilization, Columbus, OH, May 6-9, 2002.

**Zinati, G. M.,** H. H. Bryan and R. S. Mylavarapu. 2001. Degradation of sunn hemp and its effect on soil organic carbon. Presented at the 2001 Agronomy Meeting, ASA, Charlotte, NC.

**Zinati, G. M.,** H. H. Bryan, R. McSorley and A. A. Abdul-Baki. 2001. Utilization of cover crops, compost and plastic mulch as alternative to methyl bromide for watermelon production in south Florida. Presented at the 2001 ASHS Meeting, Sacramento, CA.

**Zinati, G. M.,** R. S. Mylavarapu, Y. C. Li, H. H. Bryan, B. Basti and M. Codallo. 2000. Temporal variation of microbial biomass carbon and nitrogen under various cover crops. p. 248. Presented at the 2000 Agronomy Meeting, ASA, Minneapolis, MN.

**Zinati, G. M.,** H. H. Bryan and Y. C. Li. 2000. Enhancing germination of purple coneflower (*Echinacea angustifolia*) using stratification, salt priming and biostimulants. Presented at the 2000 ASHS Meeting, Orlando, FL.

Bryan, H. H., A. A. Abdul-Baki, L. Carrera, **G. M. Zinati**, and W. Klassen. 2000. Selecting rhizoma peanuts (*Arachis glabrata*, Benth.) for living mulch in vegetable production in Florida. Presented at the 2000 ASHS Meeting, Orlando, FL.

Abdul-Baki, A. A., H. H. Bryan, **G. M. Zinati**, W. Klassen, M. Codallo and N. Heckert. 2000. Cutting the main stem of sunn hemp plants increased flower production. Presented at the 2000 ASHS Meeting, Orlando, FL.

**Zinati, G. M.**, H. H. Bryan, A. A. Abdul-Baki and W. Klassen. 1999. Cover crop mulches for tomato production in south Florida as an alternative to methyl bromide. Presented at the 1999 ASHS Meeting.

**Zinati, G. M.**, Y. C. Li, H. H. Bryan and A. A. Abdul-Baki. 1999. Nitrogen mineralization and volatilization dynamics in calcareous soil under cover crop in a tomato production field. p. 235. Presented at the 1999 Agronomy Meeting, ASA, Salt Lake City, UT.

**Zinati, G. M.**, Y. C. Li and H. H. Bryan. 1998. Distribution and fractionation of phosphorus and trace metals in soils amended with composts. Presented at the 1998 Agronomy Meeting, ASA, Baltimore, MD.

**Zinati, G. M.**, Y. C. Li and H. H. Bryan. 1998. Accumulation and fractionation of organic matter in soils amended with composts. p. 237. Presented at the 1998 Agronomy Meeting, ASA, Baltimore, MD.

**Zinati, G. M.**, D. R. Christenson. 1996. Estimating N loss under sugarbeet. Presented at the 1996 Agronomy Meeting, ASA, Indianapolis, IN.

**Zinati, G. M.**, D. R. Christenson. 1995. Prediction of nitrogen fertilizer needs for sugarbeet. Presented at the 1995 Agronomy Meeting, ASA, St. Louis, MO.

**Zinati, G. M.**, D. R. Christenson. 1995. Prediction of cumulative N mineralization in the field from a laboratory incubation study. Presented at the 1995 Agronomy Meeting, ASA, St. Louis, MO.

**Zinati, G. M.**, D. Harris and D. R. Christenson. 1994. Distribution of applied  $^{15}\text{N}$  and its uptake by sugarbeet from various depths. Presented at the 1994 Agronomy Meeting, ASA, Seattle, WA.

Christenson, D. R. and **G. M. Zinati**. 1991. Nitrogen uptake by sugar beets from various depths in Soil. Presented at the 1991 Am. Soc. Sugar Beet Technol. Monterey, CA.

#### **PRESENTATIONS AT REGIONAL CONFERENCES AND SYMPOSIA:**

**Zinati, G. M.** 2004. Water and nutrient management for nursery operations. Presented at the NEBASA/SSSA. Bordentown, NJ, July 14, 2004.

**Zinati, G. M.** and E. R. Emino. 2002. Effect of co-compost on sandy soil properties for specialty cut-flower production. *In* 2002 S. Branch, Am. Soc. Hort. Sci. Orlando, FL. 2-5 Feb. 2002.

**Zinati, G. M.** and E. R. Emino. Florida Organics Recycling Center for Excellence (FORCE): Research and education programs for Florida. *In* Abstracts of technical papers, 2002 Annual Meeting., S. Branch, ASA, Orlando, FL. 2-5 Feb, 2002.

**Zinati, G. M.** 2001. Overview on the alternatives to methyl bromide for vegetable production in south Florida. Alternative to Methyl Bromide Symposium. Presented at the Annual Meeting of the Soil and Crop Fl. Soc., Hutchinson Island, FL, June 10-12, 2001.

### **INVITED AND STATEWIDE PRESENTATIONS:**

Management of nursery plants using mycorrhizae. Presented at the South Jersey Landscape Conference and Nursery Growers Meeting, Masso's Crystal Manor, Glassboro, NJ , December 3, 2008.

Effects of fertilizers and naturally-occurring mycorrhizae on sustainable production of nursery crops. Presented at the Nursery Meeting at Cream Ridge, NJ, August 28, 2008.

Future trends in producing nursery crops. Presented at the Hands-on Workshop: Future trends in nursery crop production-using natural mycorrhizae, Millville, NJ, June 25, 2008.

Updates on research and extension activities: Related to the development of nutrient management practices for container-grown crops using naturally-occurring mycorrhizal fungi. Presented at the South Jersey Nursery Growers Meeting, Millville, NJ, February 29, 2008.

Mycorrhizae in the landscape. Presented at the Central Jersey Turf and Ornamental Institute. Angelonis Ceder Gardens, Hamilton, NJ, February 20, 2008.

Nutrient management in container-grown nursery crops. Presented at the 2008 Long Island Horticulture Conference, Holiday Inn, Ronkonkoma, NY. Sponsored by Cornell Cooperative Extension, Suffolk County, January 30, 2008.

The benefits and uses of mycorrhizae in Christmas trees: Ways to increase survival in plantings. Presented to Christmas tree growers at the New Jersey Christmas Tree Growers' Association Winter Conference, Clinton, NJ, January 26, 2008.

The contribution of mycorrhizal fungi in sustainable landscaping. Presented at the 2008 NJNLA Trade Show - Educational Session, Somerset, NJ, January 17, 2008.

Challenges and management of ornamental plant nutrition. Presented to Master Gardeners at the First Regional MG Conference, Roseland, NJ, December 5<sup>th</sup>, 2007.

Nursery crop nutrient management: Mycorrhizal associations. Presented at the Annual Nursery Growers Meeting, RCR&E office, Cumberland, NJ, November 13, 2007.

Updates on research work done at Overdevest Nurseries and Cream Ridge. Presented at twilight meeting arranged by Sun Gro Horticulture, Maple Nurseries, Cumberland, NJ, October 19, 2007.

Plant evaluation of SARE 2007 Project. Presented to the New Jersey nursery growers, Cream Ridge, NJ, October 9<sup>th</sup>, 2007.

Integration of mycorrhizae in nutrient management schemes for nursery crops. Presented at the Annual Nursery Meeting, Cream Ridge, NJ, August 16, 2007.

Plant nutrition. Presented at the American Rhododendron Society, Park Ridge, NJ. Sponsored by the Tappan Zee Chapter, March 24, 2007.

Updates on research and extension activities. Presented at the NJNLA Annual Technology Conference, Millville, NJ, February 23, 2007.

Avoid stressing your plants. Presented at the 2007 Central Turf & Ornamental Institute, Freehold Gardens Hotel, NJ, February 7, 2007.

Avoid common nursery and landscape problems by keeping healthy plants. Presented at the Central Landscape and Ornamental Institute and 2007 NJNLA Trade Show, Somerset, NJ, January 17, 2007.

Plant nutrition. Presented at the North Jersey Master Gardener Meeting, New York State Park, NJ, November 29, 2006.

Plant nutrition. Presented at the North Jersey Master Gardener Meeting, Essex County, Roseland, NJ, November 28, 2006.

How do fertilizers affect nursery crop production and sustainability of your operation? Presented at the Annual Nursery Growers Meeting, RCR&E office, Cumberland, NJ, November 1<sup>st</sup>, 2006.

Container media and nutrient management for container-grown nursery crops. Presented at the 2006 Greenhouse, Tunnel and Nursery Workshop, RAREC, Bridgeton, NJ, Sept 28, 2006.

Irrigation management for nursery crops. Presented at the 2006 Greenhouse, Tunnel and Nursery Workshop, RAREC, Bridgeton, NJ, Sept 28, 2006.

Overwintering nursery crops. Presented at the 2006 Greenhouse, Tunnel and Nursery Workshop, RAREC, Bridgeton, NJ, Sept 28, 2006.

Field demonstration to nursery growers and members of NJNLA on mycorrhizae, fertilizer and irrigation research results. Presented at the Fruit and Ornamental Research and Extension Center, Cream Ridge, NJ Sept 21, 2006.

Does it matter what type of fertilizer and substrate medium you use for growing nursery crops? Presented at the 2006 Cream Ridge Nursery Research and Extension Meeting, Fruit and Ornamental Research and Extension Center Cream Ridge, NJ August 17, 2006.

Updates and future research and extension activities to NJNLA Board Members. Presented at the NJNLA Board Meeting, Bordentown, NJ, June 22, 2006.

Controlled-release fertilizers (CRFs) for nursery crops: Are they all the same? Presented at the 2006 Twilight Nursery Insect Control Meeting, Maple Valley Nursery, Rosenhayn, NJ, May 24, 2006.

Managing off-site nursery runoff with riparian forest buffers, Presented at the 2006 Spring Twilight Nursery Meeting, RCR&E office, Cumberland, NJ, March 7, 2006.

Updates on research and Extension activities. Presented at the NJNLA Annual Technology Conference, Millville, NJ, February 24, 2006.

Plant Nutrition. Presented at the North Jersey Master Gardener Meeting, Roseland, NJ, November 16, 2005.

Plant stresses and things you can do to help prevent them. Presented at the Annual Nursery Growers Meeting, RCR&E office, Cumberland, NJ, November 1<sup>st</sup>, 2005.

Advancements in New Jersey's nursery management program. Presented at the Cream Ridge Nursery Research and Extension Meeting, Fruit and Ornamental Research and Extension Center Cream Ridge, NJ, August 24, 2005.

Field demonstration of pot-in-pot research experiment. Presented at the Urban Ecology Teacher Workshop, Fruit and Ornamental Research Center, Cream Ridge, NJ, June 30, 2005.

BMPs for nursery operations. Presented at the Annual Twilight Fruit, Vegetable and Flower Meeting, Mahwah, NJ, April 27, 2005.

Cyclic irrigation and substrate media mixes for pot-in-pot nursery production. Presented at the Cream Ridge Nursery Research and Extension Meeting, Fruit and Ornamental Research and Extension Center, August 12, 2004.

Updates on research and Extension activities in nursery management program. Presented at the NJNLA South Chapter Meeting, RCR&E office, Cumberland, NJ, March 31, 2004.

Current BMPs implemented in Nursery Operations of NJ. Presented at the NJNLA 2004 Trade Show, January 29, 2004.

Hands on tools for measuring and monitoring of container substrate media parameters. Presented at the NJNLA 2004 Trade Show, January 29, 2004.

How do water and nutrient management impact your nursery operation. Presented at the Annual Nursery Growers Meeting, RCE Cumberland County. November 12, 2003.

Key nutrients get into water resources (N-P-K), and researching the impact of nursery practices on water quality. Presented at Nursery Twilight meeting, Loews Farm. September 17, 2003.

Review and discussion of two-day workshop/in-service training. Presented at the RCE Cumberland County Extension and Education Center. June 18, 2003.

Nutrient and water management for nursery operations. Presented at the two-day workshop/in-service training. Presented to faculty, specialists, Extension agents, nursery growers, and government representatives at the RCE Cumberland County Extension and Education Center. June 17, 2003.

The basics of nutrient management for nursery crops. Presented at the Ninth Annual New Jersey Pest Control & Soil Fertility Conference, Charlie's Other Brother Restaurant, Mt. Holly, NJ, December 3<sup>rd</sup>, 2002.

Basics of nutrient management for plant production. Presented at the South Jersey Nursery Meeting, Rutgers Cooperative Extension, Millville, NJ, October 30<sup>th</sup>, 2002.

### **LECTURES AND CLASS ROOM COORDINATION:**

Developing nutrient and water management schemes for container-grown nursery crops. Guest lecture presented to graduate students in the Introduction to Plant Biology Class. Presented at Cook Campus, Department of Plant Biology and Pathology, New Brunswick, NJ, November 7, 2007.

Nursery crop production in New Jersey: Challenges and management techniques. Guest lecture presented to undergraduate students in Introduction to Horticulture Class. Presented at the Fruit Research and Extension Center, Cream Ridge, NJ, Oct 2<sup>nd</sup>, 2007.

Promoting the nursery management program through research and Extension outreach. Lecture for faculty, staff and students. Department of Plant Biology and Pathology and

Department of Extension Specialists. Rutgers University, New Brunswick, NJ, November 14, 2006.

Nutrient and water management schemes for nursery operations. Guest lecture to graduate students in the Introduction to Plant Biology Class. Presented at Cook Campus, Department of Plant Biology and Pathology, New Brunswick, NJ, November 8, 2006.

Overview of nursery management program at Rutgers University. Guest lecture to undergraduate students in Introduction to Horticulture Class. Presented at the Fruit Research and Extension Center, Cream Ridge, NJ. October 3, 2006.

Nutrient and water management options for nursery operations. Guest lecture to graduate students in Introduction to Plant Biology. Department of Plant Biology and Pathology, Rutgers University, New Brunswick, NJ, December 7, 2005.

Ornamental plants. Guest lecture to undergraduate students in Introduction to Ethnobotany. Department of Plant Biology and Pathology, Rutgers University, New Brunswick, NJ. April 22, 2005.

Nursery management program at Rutgers University. 2004. Lecture for faculty, staff and students. Department of Plant Biology and Pathology. Rutgers, University, New Brunswick, NJ. November 12, 2004.

Overview of nursery management program. Guest lecture to undergraduate students in Introduction to Horticulture. Department of Plant Biology and Pathology, Rutgers University, New Brunswick, NJ. October 5, 2004.

Nursery Crop Production. Co-Coordinator. Department of Plant Biology and Pathology, Rutgers University, New Brunswick, NJ. January through May 2004.

Plant nutrition. Guest lecture to graduate students in Plant Physiology. Department of Plant Biology and Pathology, Rutgers University, New Brunswick, NJ. April 18 and 20, 2003.

Soil and nutrient management. Guest lecture to undergraduate students in Nursery Production. Department of Plant Biology and Pathology, Rutgers University, New Brunswick, NJ. March 3, 2003.

Accumulation and fractionation of carbon, phosphorus and metals. Lecture for faculty, staff, and students. University of Florida, Tropical Research and Education Center, Homestead, FL, March 2000.

**POSTDOCTORAL TRAINING:**

Sami Ullah, 2005-2006

Xiufu Shuai, 2005-2006

Shen Yu, 2004

**MENTORING GRADUATE AND UNDERGRADUATE STUDENTS:**

Graduate students (grant proposal-critique)

2007 Tim Sibicky

2004 Leah Ingalsbe

Undergraduate students (mentoring and cooperative education experience, 3-6 credits)

2009 Nick Gayliards

Jillian Weislo

Nick Greene

2008 Linh Nguyen

Nurul Ibrahim

Nick Gayliards

Mark Gluck

2007 Sinyee Ch'Ng

Michael Sitaras

Nurul Ibrahim

Linh Nguyen

2006 Michelle Anderson

Lynda Kamnansone

2005 Michael Cooperhouse

2004 Nicole Warren

Anik Patel

2003 Marie Klein

Anik Patel

Charles Ayeni