

## OTHER

### PROFESSIONAL

#### EXPERIENCE

Agricultural Consultant 1981-1983

### PROFESSIONAL

#### SKILLS

1. Field and laboratory plant disease diagnosis.
2. Fungal and bacterial taxonomy emphasizing: *Fusarium* sp; *Cylindrocladium* sp. *Pythium* and *Phytophthora* spp. *Erwinia* sp., *Pseudomonas* sp., and *Xanthomonas* sp.
3. Fungal and bacteriological techniques.
4. Field plot techniques, including design, data collection and data analysis.
5. Use of a wide variety of laboratory equipment.
6. Working knowledge of most MS software, SAS, PageMaker, OmniPage 9.0, Photoshop. I have some experience writing Visual basic 5.0 and HTML. Familiarity with Slide and Flat bed scanning, Digital Palette, Digital Camera.

### PROFESSIONAL

#### ACHEIVEMENTS

1. Development of a pest and disease scout Program in commercial chrysanthemum production.
2. Development of basic data for an as needed pesticide application program in commercial chrysanthemum production.
3. Developed rapid laboratory procedures for routine analysis of irrigation water for plant pathogens.
4. Identified and evaluated a replacement for Terr-O-Gas, a methyl bromide soil fumigant.
5. Developed disease control programs for a *Stemphylium* disease of commercial carnations; Foliar leaf spot of *Dieffenbachia*; Leaf blight of *Hibiscus*; and cultural control programs for Bacterial Leaf spot of chrysanthemum; *Pseudomonas* basal rot of *Geranium*.
6. Developed routine "in vitro" and "in vivo" procedures for evaluation of experimental pesticides.
7. Development of 'Fusarium' sensitivity testing and rating for commercial carnations.
8. Development and maintenance of a web page located at <http://plantpath.ifas.ufl.edu/takextpub/default.htm> as well as prepared documents and associated images for presentation.
9. Holder of Public Applicator License (pesticide categories 1A1)

**PROFESSIONAL  
SOCIETIES  
MEMBERSHIP**

Soil and Crop Science Society of Florida

**HONORS**

Chair Diagnostic Committee-  
American Phytopathological Society

**Grants**

Collaborative Research Agreement: Evaluation of Fungicidal Materials with NaturNorth Technologies 2005 and Renewal for 2006

Collaborative Research Agreement: Stage One Fungal Bioassays with Nippon Soda. 2001-2002.

Collaborative Research Agreement: Stage One Fungal Bioassays with Nippon Soda. 2000-2001.

Collaborative Research Agreement: Stage One Fungal Bioassays with Nippon Soda. 1999-2000.

**Patents**

5,5-DISUBSTITUTED THIAZOLIDINE DERIVATIVE PESTICIDES  
U.S. Patent: 6,476,055, Issue Date: November 05,2002

FUNGAL PYRIMIDINE DERIVATIVES  
U.S. Patent: 6,818,631, Issue Date: November 16,2004

**PUBLICATIONS**

**Published articles**

1. Roberts,P.D.,Urs,R.R.,Kucharek,T.A.,Semer,C.R.,Benny,G.L.,and Pernezny,K. 2003, Outbreak of Choanephora Blight Caused by *Choanephora cucurbitarum* on Green Bean and Pepper in Florida. Plant Dis. 87:1149
- 2.Paul, Anna-Lisa, Semer,C., Kucharek,T.,and Ferl,R.J. 2001. The Fungicidal and phytotoxic properties of benomyl and PPM in supplemented agar media supporting transgenic arabidopsis plants for a Space Shuttle flight experiment. Applied Microbiology and Biotechnology(2001) 55:480-485.
3. Kucharek,T.A.,Purcifull,D.E.,Fletcher,J.H.,Crawford,W.E.,Hoover,R. and Semer,C. 2000. Control of aphid-transmitted viral diseases(ATVD) in yellow summer squash(YSS) in Florida with resistant cultivars. Phytopathology 90:S126. Publication no. P-2000-0011-SOA.

4. Semer,C.R.,IV and Charudattan, R. 1997. First Report of *Rhizoctonia solani* causing a foliar Leaf spot on Brazilian pepper-tree(*Schinus terebinthefolius*). Plant Dis. 81:424
5. Martin, F.N. and Semer, C.R. IV,. 1997.Selection of drug- tolerant strains of *Pythium sylvaticum* using sublethal enrichment. Phytopathology 87:685-692.
6. Semer,C.R.,IV.1987. Basamid and methyl bromide compounds as fumigants in carnation and chrysanthemum production in selected propagation media.Proc. Fla.Hort Soc. 100:330-334.
7. Randhawa,P.S. and Semer,C.R.,IV. 1987.Control of bacterial leaf spot of chrysanthemum by chemicals and bacterial antagonists.in Biological and cultural tests for control of plant diseases. Vol.#2 p.60.
8. Randhawa,P.S. and Semer,C.R.,IV. 1986.Increased moisture content of propagation media enhances bacterial rot of Chrysanthemum. Proc.Fl.State Hort.Soc.99:
9. Semer,C.R.IV, and Raju,B.C. 1985. Biological and cultural control of Fusarium wilt on selected chrysanthemum cultivars. Biological and Cultural tests for control of plant Diseases. 1:66.
10. Semer,C.R.IV, and Raju,B.C. 1985. Biological and cultural control of Fusarium wilt of selected chrysanthemum cultivars. Biological and Cultural tests for control of plant Diseases. 1:67.
11. Semer,C.R.IV, and Raju,B.C. 1985. Phytophthora leaf blight of hibiscus, a new disease caused by *Phytophthora parasitica*. Plant Disease 69:1005-1006.
12. Semer,C.R.IV, and Raju,B.C. 1984. Basel rot of Geranium cuttings in propagation caused by *Pseudomonas cichorii*. Proc.Fl. State Hort. Soc.97:273-274.
13. Semer,C.R.IV,Raju,B.C. and Tepper,B.L. 1983.A new disease of *Dieffenbachia Maculata*"Camille":Leaf spot caused by *Colletotrichum gloeosporides* during transit and its control by the application of fungicides.Proc. Fl.State Hort. Soc. 96:280-282.
14. Tepper,B.L.,Raju,B.C.and Semer,C.R.IV,. 1983.Fusarium stem rot of chrysanthemum (*Chrysanthemum morifolium* (RAMAT))caused by *Fusarium solani* : In vitro fungicide efficacy and disease control studies. Proc. Fl. State Hort.Soc.96: 300-303.
15. Raju,B.C.,Semer,C.R.IV, and Tepper,B.L.1983.Fusarim Wilt of Mums.Acta Horticulture 152:65-76.
16. Wilson,C.L.,Spotts,R.A., and Semer, C.R.IV,.1977. New injection equipment and a new fungicide for Dutch Elm Disease control. Plant Disease Reporter.61:694-698.

## Abstracts/Presentations

- 17) McGovern, R. J. and Semer, C.R. 2005. Evaluation of Fungicides for reduction of Phytophthora Blight in Tropical Pumpkin. Southern Division American Phytopathological Society Meeting 2006
18. Kucharek, T. A. and Semer C.R. 2004, Proceedings of The American Peanut Research and Education Soc. The Occurance and control of Peanut Rust in Central Florida from 1998 through 2002. pp76-77.
19. Kucharek, T.A., Purcifull, D., Semer, C.R. and Webb, S. 2003. 8<sup>th</sup> ICCP, Christchurch, New Zealand. Effect of resistant cultivars on control of aphid-transmitted viruses in squash (*Cucurbita pepo*) in Northern Florida.
20. Kucharek, T. A. and Semer, C. 2002. The occurrence and fungicidal control of Peanut Rust in central Florida. Soil and Crop Science Society of Florida. Annual Meeting 2002
21. Kucharek, T. A. and Semer, C. 2002. The occurrence and fungicidal control of Peanut Rust in central Florida. Southern Division, American Phytopathological Society, Annual Meeting.
22. Semer, C.R.; Kucharek, T.A.; Whitty, E.B. and Thomas, B.. Efficacy of Actigard for control of Blue Mold in Flue-cured tobacco: A summary of four years of field evaluations. 2001. Soil and Crop Science Society, Annual Meeting.
23. Kucharek, T.A. and Semer, C.R., 2001. Financial returns with select spray programs for leaf spots and rust of peanut. 2001 American Phytopathological Society National Meeting.
24. Kucharek, T.A. and Semer, C.R., 2001. Variance in financial returns considering costs of selected fungicide spray programs for control of Leafspots and Rust of peanut (cv' Georgia Green). APRES National Meeting. @001 Proceedings, Vol.33, p48.
25. Kucharek, T.A. and Semer C. 2000. Fungicidal control of peanut leaf spots and peanut rust in Florida in 1998 and 1999. Soil and Crop Science Annual Meeting.
26. Kucharek, T.A., Purcifull, D.E., Fletcher, J.H., Crawford, W.E., Hoover, R. and Semer, C.R. 2000. Control of aphid-transmitted viral diseases (ATVD) in yellow summer squash (YSS) with resistant cultivars. Southern Division, American Phytopathological Society, Annual Meeting.
27. Kucharek, T.A., Hoover, R. and Semer, C. 1999. Bluemold of tobacco and soilborne diseases of peanut. Florida Phytopathological Society Biennial Meeting.

28. Kucharek, T.A., Semer, C. and Hoover, R. 1999. The Presence, distribution, and some etiological characteristics of isolates of *Didymella bryoniae* in Florida with different levels of sensitivity to benomyl. *Phytopathology* 89:S42. Publication no. P-1999-0297-AMA.
29. Miller, S.A. and Semer, C.R. IV. 1998. Methods and Practice of Plant Disease Diagnosis: An electronic book accessible on the world wide web. International Congress of Plant Pathology. Edinburgh, Scotland. Section 6.79
30. Semer, C.R. IV, Charudattan, R. and Yandoc, C.B. 1997. Evaluation of a new species of *Botryosphaeria* (anamorph: *Fusicoccum*) as a biocontrol agent for *Melaleuca* (*Melaleuca quinquenervia* (Cav.) S.T. Blake). *WSSA Abstracts* 37:60.
31. Martin, F.N. and Semer, C.R. IV. 1994. Efficacy of *Pythium oligandrum* in field evaluations for controlling damping-off of tomato transplants. *Phytopathology* 84: 1113
32. Martin, F.N. and Semer C.R. IV. 1992. Construction of mutants of *Pythium sylvaticum* with stable dominant antibiotic tolerance. *Phytopathology* 82:1167.
33. Martin, F. N. and Semer C.R. IV. 1991. Biological control of damping-off of tomato transplants using the non-plant pathogen *Pythium oligandrum*. *Phytopathology* 81:1149
34. Martin, F. N. and Semer C.R. IV. 1990. The influence of soil pH on the ecology of *P. aphanidermatum* and *P. ultimum*. *Phytopathology* 80:1030
35. Semer, C.R., IV; Mitchell, D.J.; Mitchell, E.; Martin, F.N. and Alfenas, A.C. 1987. Isolation, identification and chemical control of *Cylindrocladium musae* sp. nov. associated with toppling disease of Banana. *Phytopathology* 77:
36. Semer, C.R. IV, Raju, B.C., Trolinger, J.C. and Randhawa, P.S. 1986. Leaf spot and blight of *Cissus rhombifolia* caused by *Cylindrocladium* spp. *Phytopathology* 76:1071.
37. Trolinger, J.C., Semer, C.R. IV, and Raju, B.C. 1986. Blight of Pothos caused by Three Fungi. *Phytopathology* 76:1071.
38. Randhawa, P.S. and Semer, C.R. IV. 1986. Selection of bacteria antagonistic to *Pseudomonas cichorii* on chrysanthemum leaves. *Phytopathology* 76:1135.

39.Randhawa,P.S. and Semer,C.R.IV. 1986.Enhanced rotting of chrysanthemum cuttings infected with *Erwinia chrysanthemi* under anaerobic conditions.Phytopathology 76:1136.

40.Raju,B.C.,Trolinbger,J.C.,and Semer,C.R.IV.1985. Three fungi associated with a leaf and stem rot of azalea cuttings when exposed to fogging. Phytopahtology 75:1305.

41.Raju,B.C. and Semer,C.R.IV.1984. Biological and chemical control of Fusarium wilt of chrysanthemum. Phytopathology 74:822.

## **Annual Reports**

2003

Kucharek, T. A. and Semer, C. Financial returns from 1999 to 2002 for fungicidal control of Leaf Spot, Rust and White Mold of peanut as indicated by dollars returned per dollar expended.

2002

Kucharek,T.A., Semer, C. and Tyree, A. Test on suppression of viruses and blue mold with select agrichemicals.

Kucharek, T.A., Semer, C. and Brown, W. Tobacco blue mold test in Alachua County.

2001

Kucharek, T. A. and Semer,C. 2001. Diseases of peanut.

Kucharek, T.A.; Semer,C. and Tyree, A. 2001. Test on suppression of viruses in tobacco with select agrichemicals.

Kucharek, T. A.; Semer,C. and Thomas, B. 2001. Tobacco bluemold and yield test.

## 2000

Kucharek, T.A. and Semer,C. 2000. Disease of peanut.

Kucharek, T.A. and Semer,C. 2000. Diseases of watermelon.

Kucharek,T.A.; Semer,C, and Tyree,A. 2000. Control of tobacco Diseases.

## 1999

Kucharek, T. A. and Semer, C. 1999. Suppression of leaf spot, rust and white mold of peanuts.

Kucharek, T. A. and Semer,C. 1999. Suppression of diseases in watermelon.

Kucharek,T.A. and Semer,C. 1999. Control of tobacco Diseases.

## 1998

Kucharek, T. A. and Semer C. 1998. Suppression of leaf spot, rust and white mold of peanuts.

Kucharek, T.A. and Semer, C. 1998. Suppression of diseases of Watermelons.

Kucharek, T.A. and Semer,C. 1998. Control of tobacco diseases.