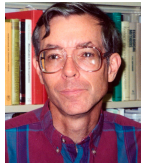


Robert McSorley

Professor



Contact

University of Florida
Entomology and Nematology Dept.
Building 970, Natural Area Dr. (Steinmetz Hall)
Gainesville, FL 32611

Email: mcsorley@ufl.edu

Phone: (352) 273-3940

(90% Research, 10% Teaching)

Education

- B.S., University of Cincinnati (Chemistry), 1971
- M.S., University of Cincinnati (Biological Sciences), 1974
- Ph.D., Purdue University (Entomology), 1978

Relevant Employment History

- Professor (1988-present); Associate Professor (1985-1988) Dept. Entomology and Nematology, University of Florida, Gainesville.
- Associate Professor (1983-1985); Assistant Professor (1978-1983), Tropical Research and Education Center, Homestead, Florida.
- Research Assistant, Purdue University, (1974-1978).
- Teaching Assistant, University of Cincinnati, (1972-1974).

Research

- Agricultural Ecology - sustainable agricultural practices; pest management (especially nematodes, insects, weeds); combining pest management and soil/crop fertility; environmental impacts of agriculture
- Nematode Ecology - factors affecting nematode community structure; role of non-parasitic nematodes in nutrient cycling and decomposition; nematodes as bioindicators of ecosystem health or disturbance
- Alternative Methods for Nematode Management - managing nematode pests by resistant cultivars, solarization, cover crops, crop rotation, and other nonchemical practices; alternatives to methyl bromide

Teaching

- ALS 3153, Agricultural Ecology
- ALS 5136, Agricultural Ecology Principles and Applications
- NEM 6201, Nematode Ecology

Books

- Powers, L. E., and R. McSorley. 2000. *Ecological Principles of Agriculture*. Delmar Thomson Learning, Albany, NY. (see <http://www.agriscience.delmar.com/>)
- Gallaher, R. N., and R. McSorley. 1997. *Proceedings of the 20th Annual Southern Conservation Tillage Conference for Sustainable Agriculture*. Special Series SS-AGR-60, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL.

Publications (selected recent publications)

Recent Book Chapters

- McSorley, R. 2011. Nematodes. Pp. 25-5 to 25-12 in P. Nannipieri, E. Paul, Y. Li, and M. Sumner (eds). *Handbook of Soil Science*, 2nd Ed. Taylor and Francis, Boca Raton, FL.
- McGovern, R.J., and R. McSorley. 2012. Management of bacterial and fungal plant pathogens by soil solarization. Pp. 53-62 in A. Gamliel and J. Katan (eds.). *Soil solarization: Theory and practice*. APS Press, The American Phytopathological Society, St. Paul, MN.
- McSorley, R., and R.J. McGovern. 2012. Management of nematode pathogens by soil solarization. Pp. 63-70 in A. Gamliel and J. Katan (eds.). *Soil solarization: Theory and practice*. APS Press, The American Phytopathological Society, St. Paul, MN.

Publications in Refereed Journals (last 5 years)

- Fraulo, A.B., R. McSorley, and O.E. Liburd. 2008. Effect of the biological control agent *Neoseiulus californicus* (Acari: Phytoseiidae) on arthropod community structure in north Florida strawberry fields. *Florida Entomol.* 91:436-445.
- Linares, J.C., J.M.S. Scholberg, K. Boote, C.A. Chase, J. Ferguson, and R. McSorley. 2008. Use of the cover crop weed index to evaluate weed suppression by cover crops in organic citrus orchards. *HortScience* 43:27-34.
- McSorley, R., K.-H. Wang, and G. Church. 2008. Suppression of root-knot nematodes in natural and agricultural soils. *Appl. Soil Ecol.* 39:291-298.
- Seman-Varner, R., R. McSorley, and R.N. Gallaher. 2008. Soil nutrient and plant responses to solarization in an agroecosystem utilizing an organic nutrient source. *Renewable Agric. Food Syst.* 23:149-154.
- Wang, K.-H., and R. McSorley. 2008. Exposure time to lethal temperatures for *Meloidogyne incognita* suppression and its implication in soil solarization. *J. Nematol.* 40:7-12.
- Wang, K.-H., R. McSorley, R.N. Gallaher, and N. Kokalis-Burelle. 2008. Cover crops and organic mulches for nematode, weed, and plant health management. *Nematology* 10:231-242.
- McSorley, R., K.-H. Wang, and J.J. Frederick. 2008. Integrated effects of solarization, sunn hemp cover crop, and amendment on nematodes, weeds, and pepper yields. *Nematropica* 38:115-125.
- Gill, H.K., R. McSorley, and D.D. Treadwell. 2009. Comparative performance of different plastic films for soil solarization and weed suppression. *HortTechnol.* 19:769- 774.
- McGroary, P., W.T. Crow, R. McSorley, R.M. Giblin-Davis, and J.L. Cisar. 2009. Seasonal fluctuations of *Belonolaimus longicaudatus* in bermudagrass. *Nematropica* 39:99-110.

- McSorley, R., K.-H. Wang, E.N. Roskopf, N. Kokalis-Burelle, H.N. HansPetersen, H.K. Gill, and R. Krueger. 2009. Nonfumigant alternatives to methyl bromide for management of nematodes, soil-borne disease, and weeds in production of snapdragon (*Antirrhinum majus*). *Internat. J. Pest Manage.* 55:265-273.
- Portman, S.L., J.H. Frank, R. McSorley, and N.C. Leppla. 2009. Fecundity of *Larra bicolor* (Hymenoptera: Crabronidae) and its implications in parasitoid: host interaction with mole crickets (Orthoptera: Gryllotalpidae: *Scapteriscus*). *Florida Entomol.* 92:58-63.
- McSorley, R., D.R. Seal, W. Klassen, K.-H. Wang, and C.R.R. Hooks. 2009. Non-target effects of sunn hemp and marigold cover crops on the soil invertebrate community. *Nematropica* 39:235-245.
- Bhan, M., R. McSorley, and C.A. Chase. 2010. Effect of cropping system complexity on plant-parasitic nematodes associated with organically grown vegetables in Florida. *Nematropica* 40:53-70.
- Gill, H.K., R. McSorley, G. Goyal, and S.E. Webb. 2010. Mulch as a potential management strategy for lesser cornstalk borer, *Elasmopalpus lignosellus* (Insecta: Lepidoptera: Pyralidae) in bush bean (*Phaseolus vulgaris*). *Florida Entomol.* 93:183-190.
- Gill, H.K., and R. McSorley. 2010. Effect of integrating soil solarization and organic mulching on the soil surface insect community. *Florida Entomol.* 93:308-309.
- Linares, J., J. Scholberg, D. Graetz, K. Boote, R. McSorley, and C. Chase. 2010. Effects of perennial peanut and common bermudagrass on nitrogen and water uptake in young citrus trees. *J. Plant Nutrition* 33:200-218.
- Portman, S.L., J.H. Frank, R. McSorley, and N.C. Leppla. 2010. Nectar-seeking and host-seeking by *Larra bicolor* (Hymenoptera: Crabronidae), a parasitoid of *Scapteriscus* mole crickets (Orthoptera: Gryllotalpidae). *Environ. Entomol.* 39:939-943.
- Hanspetersen, H.N., R. McSorley, and O.E. Liburd. 2010. The impact of intercropping squash with non-crop vegetation borders on the above-ground arthropod community. *Florida Entomol.* 93:590-608.
- Hooks, C.R.R., K.-H. Wang, A. Ploeg, and R. McSorley. 2010. Using marigold (*Tagetes* spp.) as a cover crop to protect crops from plant-parasitic nematodes. *Appl. Soil Ecol.* 46:307-320.
- Willcox, E.V., G.W. Tanner, W.M. Giuliano, and R. McSorley. 2010. Avian community response to grazing intensity on monoculture and mixed Florida pastures. *Rangeland Ecol. Mgmt.* 63:203-222.
- Luc, J.E., W.T. Crow, R. McSorley, and R.M. Giblin-Davis. 2010. Suppression of *Belonolaimus longicaudatus* with in vitro-produced *Pasteuria* sp. endospores. *Nematropica* 40:217-225.
- Gill, H.K., R. McSorley, and M. Branham. 2011. Effect of organic mulches on soil surface insects and other arthropods. *Florida Entomol.* 94:226-232.
- Luc, J.E., W.T. Crow, W. Pang, R. McSorley, and R.M. Giblin-Davis. 2011. Effects of irrigation, thatch, and wetting agent on movement of *Pasteuria* sp. endospores in turf. *Nematropica* 41:185-190.
- Luc, J.E., W. Pang, W.T. Crow, R. McSorley, and R.M. Giblin-Davis. 2011. Specificity of in vitro-produced *Pasteuria* sp. endospores to suppress *Belonolaimus longicaudatus*. *Nematropica* 41:248-253.
- McSorley, R. 2011. Effect of disturbances on trophic groups in soil nematode assemblages. *Nematology* 13:553-559.
- McSorley, R. 2011. Amegda J. Overman (1920-2011) pioneer in nematode management. *Nematropica* 41:1-2.
- McSorley, R. 2011. Assessment of rotation crops and cover crops for management of root-knot nematodes (*Meloidogyne* spp.) in the southeastern United States. *Nematropica* 21:200-214.
- Pang, W., W.T. Crow, J.E. Luc, R. McSorley, R.M. Giblin-Davis, K.E. Kenworthy, and J.K. Kruse. 2011. Comparison of water displacement and WinRHIZO software for plant root parameter assessment. *Plant Disease* 95:1308-1310.

- Pang, W., J.E. Luc, W.T. Crow, K.E. Kenworthy, R.M. Giblin-Davis, R. McSorley, and J.K. Kruse. 2011. Bermudagrass cultivar responses to sting nematodes. *Crop Science* 51:2199-2203.
- Gill, H.K., and R. McSorley. 2011. Effects of different organic mulches on the soil surface arthropod community and weeds in snapdragon. *International Journal of Pest Management* 58:33-40.
- McSorley, R. 2011. Trends in the *Journal of Nematology*, 1969-2009: Authors, states, nematodes, and subject matter. *Journal of Nematology* 43:63-68.
- McSorley, R. 2011. Overview of organic amendments for management of plant- parasitic nematodes, with case studies from Florida. *Journal of Nematology* 43:69-81.
- Pang, W., J.E.Luc, W.T. Crow, K.E. Kenworthy, R. McSorley, J.K. Kruse, and R.M. Giblin-Davis. 2011. Responses of seashore paspalum cultivars to sting and spiral nematodes. *Crop Science* 51:2864-2867.
- Pang, W., J.E. Luc, W.T. Crow, K.E. Kenworthy, R. McSorley, and R.M. Giblin-Davis. 2011. Screening bermudagrass germplasm accessions for tolerance to sting nematodes. *HortScience* 46:1503-1506.
- Pang, W., J.E. Luc, W.T. Crow, K.E. Kenworthy, R.M. Giblin-Davis, R. McSorley, and J.K. Kruse. 2011. Field responses of bermudagrass and seashore paspalum cultivars to sting and spiral nematodes. *Journal of Nematology* 43:201-208.
- Barrett, C.E., X. Zhao, and R. McSorley. 2012. Grafting for root-knot nematode control and yield improvement in organic heirloom tomato production. *HortScience* 47:614-620.
- Gill, H.K., G. Goyal, and R. McSorley. 2012. Diel activity of fauna in different habitats sampled at the autumnal equinox. *Florida Entomologist* 95:318-324.
- McSorley, R. 2012. Ecology of the dorylaimid omnivore genera *Aporcelaimellus*, *Eudorylaimus* and *Mesodorylaimus*. *Nematology* 14:645-663.
- Ozores-Hampton, M., R. McSorley, and P.A. Stansly. 2012. Effects of long-term organic amendments and soil sanitation on weed and nematode populations in pepper and watermelon crops in Florida. *Crop Protection* 41:106-112.