



Timothy K. Broschat
Professor, Environmental Horticulture

100% Research

B.S.- North Dakota State University
M.A.- University of Kansas
Ph.D.- Ohio State University

Although my research activities have spanned a wide range of tropical ornamental crops from tropical foliage plant production, tropical cut flower production, palm horticulture, container-grown woody ornamental plant production, and landscape production, my current research is focused on mineral nutrition and fertilization of palms and other ornamental plants in the landscape.

Selected Publications

Broschat, T.K. 2000. Potassium and phosphorus deficiencies of ixora. HortTechnology 10:314-317.

Broschat, T.K. 2000. Phytotoxicity and longevity of twenty-two preemergent herbicides used on three species of container-grown palms. HortTechnology. 10:27-33.

Broschat, T.K. and K.A. Klock-Moore. 2000. Root and shoot growth responses to phosphate fertilization in container-grown plants. HortTechnol. 10: 765-767.

Broschat, T.K. 2001. Substrate nutrient retention and growth of container-grown plants in clinoptilolitic zeolite-amended substrates. HortTechnol. 11:75-78.

Broschat, T.K. and T.J. Weissling. 2001. Susceptibility of lantana cultivars to *Orthezia insignis*. HortTechnology 11:460-462.

Broschat, T.K. and K.A. Klock-Moore. 2001. Influence of substrate and fertilizer analysis on growth and quality of five species of bedding plants. HortTechnology 11:434-437.

- Elliott, M.L. and T.K. Broschat. 2001. Observations and pathogenicity studies on *Ganoderma zonatum*, a palm pathogen in Florida. *Palms* 45:62-72.
- Klock-Moore, K.A. and T.K. Broschat. 2001. Irrigation systems and fertilizer affect petunia growth. *HortTechnology* 11:416-418.
- Klock-Moore, K.A. and T.K. Broschat. 2001. Effects of four growing substrates on growth of ornamental plants in two irrigation systems. *HortTechnology* 11:456-460.
- Elliott, M.L. and T.K. Broschat. 2001. Effects of a microbial inoculant on plant growth and rhizosphere populations of container-grown plants. *HortTechnology*. 12:222-225.
- Broschat, T.K. 2001. Influence of light intensity on optimum fertilization rate in five species of tropical ornamental plants. *HortTechnology*. 12:226-229.
- Broschat, T.K., N.A. Harrison, and H. Donselman. 2002. Losses to lethal yellowing cast doubt on coconut cultivar resistance. *Palms* 46:185-189.
- Broschat, T.K. and K.A. Moore. 2003. Influence of fertilizer placement on plant quality, root distribution, and weed growth in container-grown tropical ornamental plants. *HortTechnology* 13:305-308.
- Busey, P., T.K. Broschat, and D.L. Johnston. 2003. Injury to landscape and vegetable plants by volatile turf herbicides. *HortTechnology* 13:650-652.
- Broschat, T.K. 2003. Effectiveness of various iron sources for correcting iron chlorosis in dwarf ixoras. *HortTechnology* 13:625-627.
- Broschat, T.K. and M.L. Elliott. 2004. Nutrient distribution and sampling for leaf analysis in St. Augustinegrass. *Commun. Soil Sci. Plant Anal.* 35:2357-2367.
- Broschat, T.K. and K.K. Moore. 2004. Phytotoxicity of several iron fertilizers and their effects on Fe, Mn, Zn, and Cu content of African marigolds and zonal geraniums. *HortScience* 39:595-598.
- Vendrame, W., K.K. Moore, and T.K. Broschat. 2004. Interaction of light intensity and controlled release fertilization rate on growth and flowering of two New Guinea *impatiens* cultivars. *HortTechnology* 14:491-495.
- Broschat, T.K. and M.L. Elliott. 2005. Effects of iron source on iron chlorosis and *Exserohilum* leaf spot severity in *Wodyetia bifurcata*. *HortScience* 40:218-220.
- Broschat, T.K. 2005. Release rates of ammonium-nitrogen, nitrate-nitrogen, phosphorus, and potassium from two controlled release fertilizers under different substrate environments. *HortTechnology* 15:332-335.

Broschat, T.K. and M.L. Elliott. 2005. A key to common landscape palm disorders and diseases in the continental United States. *Palms* 49:143-148_.

Broschat, T.K. 2006. Effects of phosphorous and phosphoric acids on growth and phosphorus concentrations in container-grown tropical ornamental plants. *HortTechnology* 15: 105-108_.