

# Gregory E. MacDonald

**Rank:** Associate Professor

**Specialization:** Weed Science

**Location:** Gainesville

## **Educational Background:**

B.S.	1986	Plant Science/Veg. Crops	Cornell University
M.S.	1991	Weed Science	University of Florida
Ph.D.	1994	Weed Science	University of Florida

## **Employment:**

1994-98	Assistant Professor	Crop and Soil Sciences	University of Georgia
1998-present	Assistant Professor	Agronomy Department	University of Florida

**Current FTE:** 70% Research / 30% Teaching

## **Teaching:**

<b>Courses:</b>	PLS 4601	Principles of Weed Science	Every fall semester
	PLS 5652	Advanced Weed Science	Spring even years
	PLS6655	Plant/Herbicide Interaction	Spring odd years

## **Graduate Students: Current (Total)**

M.S.: 1 (2); Committee Member: 2 (3)

## **Research:**

Conduct weed management research in agronomic crops, with emphasis on physiological aspects of herbicides on weeds and crops including transgenic cropping technology. Also conduct studies in the area of weed biology and environmental and physiochemical factors influencing herbicidal activity and persistence.

**Grants/Contracts/Gifts (last 5 years):** Florida - \$9,500; Georgia - \$155,732

## **Service to Professional Societies:**

1997-present	Chairman, Extension Committee, Weed Science Society of America
1997	Program Chairman, Horticultural Crops, Southern Weed Science Society
1995-96	Georgia Vegetable and Small Fruit Conference and Trade Show - General and Program Chairman

## Honors/Awards:

- 1998 University of Georgia - College of Agriculture and Environmental Sciences - Tifton Campus "The Award of Excellence for Junior Scientist"
- 1997 Georgia Association of County Agricultural Agents - Young Professional Award
- 1997 American Society of Agronomy - 1997 Educational Materials Award, Publications-Manual - "Intensive Wheat Management in Georgia"
- 1996 American Society of Agronomy - 1996 Educational Materials Award, Newsletter - "Peanut Pointers"
- 1996 American Society of Agronomy - 1996 Educational Materials Award, Newsletter - "News and Views on Grains and Forages".
- 1994 Weed Science Society of America. Outstanding Graduate Student Award.

**Selected Publications: Career Summary-** Referred Articles: 14; Non-referred Articles: 82; Extension Articles: 96; Abstracts: 43.

Gitaitis, R., G. MacDonald, R. Torrence, R. Hartley, D.R. Sumner, J.D. Gay and W.C. Johnson III. 1998. Bacterial streak and bulb rot on onion: II. *Pseudomonas viridiflava* and its association with weed hosts. *Plant Disease* 82(8):935-938.

R. Querns, G.E. MacDonald, J.F. Gaffney, C.A. Chase, H.A. Moye, D.G. Shilling and T.A. Bewick. 1998. Effects of N,N'-Dibutylurea on photosynthetic electron-transport reactions in isolated chloroplasts. *Pesticide Biochemistry and Physiology* 59:129-135.

Gitaitis, R., D. Sumner, D. Gay, D. Smittle, G. MacDonald, B. Maw, W.C. Johnson III, B. Tollner and Y. Hung. 1997. Bacterial streak and bulb rot on onion: I. A diagnostic medium for the semiselective isolation and enumeration of *Pseudomonas viridiflava*. *Plant Dis.* 81:897.

MacDonald, G.E., W.T. Haller and D.G. Shilling. 1996. UV-B filtration to reduce photolysis of fluridone in experimental tanks. *J. Aquatic Plant Manage.* 34:78-80.

Shilling, D.G., B.J. Brecke, C. Hiebsch and G.E. MacDonald. 1995. Effect of soybean (*Glycine max*) cultivar, tillage, and rye (*Secale cereale*) mulch on sicklepod (*Senna obtusifolia*). *Weed Tech.* 9:339-342.

MacDonald, G.E., B.J. Brecke, D.L. Colvin and D.G. Shilling. 1994. Chemical and mechanical control of dogfennel (*Eupatorium capillifolium*). *Weed Tech.* 8:483-487.

MacDonald, G.E., D.G. Shilling and T.A. Bewick. 1993. The effects of endothall and other aquatic herbicides on chlorophyll fluorescence, respiration, and cellular integrity. *J. Aquatic Plant Manage.* 31:50-55.