



**Bonnie and Bernard  
Lowenstein**

The Dr. Lowenstein Lecture Series is made possible through a gift from Bonnie and Bernard Lowenstein of Albuquerque, NM. The objective of the lecture series is to bring renowned scientists in Horticulture, Agriculture, Genetics, and Environmental Science to the NMSU to foster greater appreciation of new development in the field. Dr. Lowenstein practiced medicine with the US Indian Services, the Army, and the Veterans Administration from 1936 to 1982. His experience brought him to Albuquerque, NM, where he currently resides. Bonnie had a life-long interest in gardening and flowers. This commitment was expressed in her dedication to gardening, and her involvement in the Albuquerque Garden Club. Dr. Lowenstein was inducted into the Sam Steele Society in 1997 in recognition of his contribution to the College of Agricultural, Consumer & Environmental Sciences.

The Bonnie Lowenstein Memorial endowed scholarship has benefited undergraduate students since 1993, and the Lowenstein Lecture Series benefits students, faculty and the horticulture community of New Mexico. The lecture series was established to promote interest and knowledge of other fields of plant science. New Mexico State University and the Department of Plant and Environmental Sciences greatly appreciate the generosity and support of Dr. Lowenstein.



**Dr. John Masiunas**

University of Illinois at Urbana - Champaign

**Sponsored by the Bonnie and  
Bernard Lowenstein Endowment**

**Hosted by Dr. Mark Uchanski**

Plant and Environmental Sciences

**Dr. John Masiunas** is a professor in the Horticulture group of the Department of Crop Sciences at the University of Illinois at Urbana – Champaign. He teaches courses on vegetable gardening, commercial vegetable production, international horticulture, and weed ecology. He is a member of the College of ACES Academy for Teaching Excellence and received the Spidler Teaching Award and NCWSS Education Award.

His Extension program has developed weed management solutions for horseradish, snap beans, pumpkins, and organic producers. Masiunas' research focuses on weed ecology and alternative vegetable production systems. Another major research emphasis is using cover crops (cereal rye, sorghum, buckwheat, and mustard) as tools to manage problematic weeds of vegetable and organic cropping systems.

Recently, Masiunas' group (Babadoost, Kushad, Juvik, Weinzierl and others) have concentrated on using *Brassicaceae* (mustard) green manure crops as biofumigants to suppress soil-borne pests. They identified genotype, cropping system, and environmental factors that influenced biofumigant activity. Mustard biofumigant activity was greater on sandy soils with < 1% organic matter than clay silty loam soils with 2% organic matter. Weed species vary in their sensitivity to mustard biofumigants. Field and greenhouse experiments found that genotype and biomass interacted to determine biological-activity and selectivity. Greater than 1% of 'Ida Gold' tissue incorporated into the soil suppressed weeds but also injured cucumber plants.

Mustard and other cover crops must be considered only one component of integrated pest management systems for sustainable vegetable production. Masiunas will discuss the application of these same techniques to the desert southwest. It is our pleasure to host Dr. John Masiunas at New Mexico State University this fall.

Masiunas' invited lectures are sponsored by the Bonnie and Bernard Lowenstein Endowment and the Department of Plant and Environmental Sciences.

## Grower's Talk

### WHERE:

USDA Cotton Ginning Lab  
3<sup>rd</sup> Floor, Conference room

### WHEN:

October 23, 2009  
10:00 – 11:00 a.m.

### TITLE:

**"Biofumigation Potential for the Desert Southwest"**

## Departmental Seminar:

### WHERE:

Gerald Thomas Hall  
Room 200

### WHEN:

October 23, 2009  
3:30 -4:30 pm

### TITLE:

**"Brassicas and Biofumigation"**