

# Workshop Educates on **INSECT REARING**

By John Hawkins

Specialists met in Starkville recently to study a subject that most people would find rather questionable: how to raise insects alive.

“Growing quality insects is crucial to many areas of entomology and integrated pest management,” said Frank Davis, Mississippi State University emeritus adjunct professor of entomology and workshop coordinator.

The five-day workshop, titled “Principles and Procedures of Rearing Quality Insects,” was sponsored by MSU’s Department of Entomology and Plant Pathology, in partnership with the U.S. Department of Agriculture’s Biological Control and Mass Rearing Research Unit.

Twenty-five specialists attended the event from such countries as Australia, Belgium, Germany, Switzerland, Canada and the United States.

This year’s workshops were dedicated to retired USDA researcher and former MSU adjunct professor, Alan Bartlett, who made many contributions to the area of insect rearing.

This is the sixth workshop MSU has offered for professionals who already work in insect rearing and research. Universities and colleges around the world offer courses in entomology, but none offer instruction in the science and technology of raising insects, Davis said.

“Insect rearing deserves and requires a formal education, but many specialists receive training from other specialists and experienced experts in the field,” Davis said.



Frank Davis

Marco Nivovitch

“This course is the first of its kind anywhere in the world, and people come from many backgrounds, public and private, to take advantage of what we have to offer.”

Attendees had the opportunity to hear experts discuss topics such as insect diets, rearing systems and environments, diseases, genetics, quality control and management.

“Some of the workshop participants work in rearing parasites and predators, others grow insects such as butterflies that can be used by children and students as learning tools,” Davis said.

Those who participated in the course also toured the rearing facilities at the USDA laboratories and the Mississippi Agricultural and Forestry Experiment Station’s new state-of-the-art, insect-rearing lab at the Clay-Lyle

Entomology Building.

“Participants also are given a manual that contains everything covered in the workshop,” Davis said.

“In the future, I hope the manuals provided in the workshops will be compiled into the first-ever insect-rearing textbook.”

In addition to informative talks and tours, the event provided attendees with a chance to meet colleagues and socialize.

## EDITOR’S NOTE:

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## MAFES facility provides relief for those with an itch for bugs

When it comes to bugs, most people swat them, a few collect them, and a dedicated handful of Mississippi State University researchers grow them.

MSU entomologists cultivate their “crops” in a sophisticated laboratory completed recently in the Clay Lyle Entomology Complex.

The Insect Rearing Center was built with funds provided by MAFES. Among its features are a laboratory boasting a hospital-type air filtration system and ample space for a variety of growing environments.

Frank Davis, an MSU emeritus adjunct professor and coordinator of

the center’s activities, said the university’s bug rearing efforts began in the 1960s as a joint effort by university scientists and U.S. Department of Agriculture entomologists involved in the study of cotton pest control.

“Originally, USDA focused on the boll weevil and the university grew bollworms and tobacco budworms in a facility dubbed the ‘worm shed,’” he explained.

Davis said the original boll weevil research resulted in two major achievements: a near elimination in the South of the boll weevil as an economic threat to cotton and the implementation of

environmentally friendly methods to control crop-destroying worms.

Crop pest control remains an important part of entomological efforts by MAFES scientists. The new insect-rearing facility also is allowing researchers to focus on the increasing demand by private companies and public laboratories for bugs grown for specific uses.

Ladybugs and other insects used to control garden pests and butterflies sought by creative event coordinators for release at weddings are among some of the commercial applications cited by Davis.