

FLORIDA ENTOMOLOGIST

(An International Journal for the Americas)

Volume 70, No. 1

March, 1987

TABLE OF CONTENTS

70th Annual Meeting Announcement and Call for Papers	i
SYMPOSIUM: INSECT BEHAVIORAL ECOLOGY—'86	
COWELL, B. C., H. C. HULL, JR., AND A. FULLER— <i>Recolonization of Small Scale Disturbances by Benthic Invertebrates in Florida Freshwater Ecosystems</i>	1
FRANK, J. H., AND L. P. LOUNIBOS— <i>Phytotemata: Swamps or Islands?</i>	14
MCCAULEY, D. E.— <i>Population Genetic Consequences of Local Colonization: Evidence From the Milkweed Beetle Tetraopes tetraophthalmus</i>	21
MCCOY, E. D.— <i>The Ground-Dwelling Beetles of Periodically-Burned Plots of Sandhill</i>	31
O'NEIL, R. J., AND R. N. WEIDENMANN— <i>Adaptations of Arthropod Predators to Agricultural Systems</i>	40
SYMPOSIUM: INSECTS IN ALTERED ENVIRONMENTS	
MASON, L. J., D. P. PASHLEY, AND S. J. JOHNSON— <i>The Laboratory as an Altered Habitat: Phenotypic and Genetic Consequences of Colonization</i> ..	49
COOPER, R. M., AND R. J. OETTING— <i>Influence of the Greenhouse Environment on Selected Pest Populations and Their Natural Enemies</i>	59
SHEFFER, B. J., AND M. L. WILLIAMS— <i>Factors Influencing Scale Insect Populations in Southern Pine Monocultures</i>	65
LOCKWOOD, J. A.— <i>The Moral Standing of Insects and the Ethics of Extinction</i> ..	70
MCCOY, E. D., AND J. R. REY— <i>Terrestrial Arthropods of Northwest Florida Salt Marshes: Hymenoptera (Insecta)</i>	90
SIEGFRIED, B. D.— <i>In-Flight Responses of the Pales Weevil, Hylobius pales (Coleoptera: Curculionidae) to Monoterpene Constituents of Southern Pine Gum Turpentine</i>	97
WEBB, J. C., J. SIVINSKI, AND B. J. SMITTLE— <i>Acoustical Courtship Signals and Sexual Success in Irradiated Caribbean Fruit Flies (Anastrepha suspensa) (Diptera: Tephritidae)</i>	103
BARFIELD, C. S., AND T. R. ASHLEY— <i>Effects of Corn Phenology and Temperature on the Life Cycle of the Fall Armyworm, Spodoptera frugiperda (Lepidoptera: Noctuidae)</i>	110
ESKAFI, F. M., AND R. T. CUNNINGHAM— <i>Host Plants of Fruit Flies (Diptera: Tephritidae) of Economic Importance in Guatemala</i>	116
WADDINGTON, K. D., AND L. H. HERBST— <i>Body Size and the Functional Length of the Proboscis of Honey Bees</i>	124
CALVERT, P. D., J. H. TSAI, AND S. W. WILSON— <i>Delphacodes nigrificacies Homoptera: Delphacidae: Field Biology, Laboratory Rearing, and Descriptions of Immature Stages</i>	129
SLATER, J. A.— <i>The Systematic Status of Ozophora quinque maculata Barber and Related Taxa (Hemiptera: Lygaeidae)</i>	134
CROMROY, H. L., F. W. ZETTLER, W. R. CARPENTER, AND M. S. ELLIOTT— <i>A New Mite Pest on Wax Myrtle in Florida (Acari: Eriophyidae)</i>	163

Continued on Back Cover

FLORIDA ENTOMOLOGICAL SOCIETY

OFFICERS FOR 1986-87

<i>President</i>	D. J. Schuster
<i>President-Elect</i>	J. L. Taylor
<i>Vice-President</i>	R. S. Patterson
<i>Secretary</i>	E. R. Mitchell
<i>Treasurer</i>	A. C. Knapp

<i>Other Members of the Executive Committee</i>		M. L. Wright, Jr.
		J. E. Eger, Jr.
		L. S. Osborne
		G. Mathurin
		A. Gettman
		C. G. Witherington
		J. R. McLaughlin

PUBLICATIONS COMMITTEE

<i>Editor</i>	J. R. McLaughlin
<i>Associate Editors</i>	A. Ali
	C. S. Barfield
	J. B. Heppner
	M. D. Hubbard
	O. Sosa, Jr.
	H. V. Weems, Jr.
	W. W. Wirth
<i>Business Manager</i>	A. C. Knapp

FLORIDA ENTOMOLOGIST is issued quarterly—March, June, September, and December. Subscription price to non-members is \$30.00 per year in advance, \$7.50 per copy. Membership in the Florida Entomological Society, including subscription to *Florida Entomologist*, is \$25 per year for regular membership and \$10 per year for students. Inquires regarding membership, subscriptions, and page charges should be addressed to the Business Manager, P. O. Box 7326, Winter Haven, FL 33883-7326. *Florida Entomologist* is entered as second class matter at the Post Office in DeLeon Springs and Winter Haven, FL.

Authors should consult "Instructions to Authors" on the inside cover of all recent issues while preparing manuscripts or notes. When submitting a paper or note to the Editor, please send the *original* manuscript, *original* figures and tables, and *3 copies* of the entire paper. Include an abstract and title in Spanish, if possible. Upon receipt, manuscripts and notes are acknowledged by the Editor and assigned to an appropriate Associate Editor who will make every effort to recruit peer reviewers *not* employed by the same agency or institution as the authors(s). Reviews from individuals working out-of-state or in nearby countries (e.g. Canada, Mexico, and others) will be obtained where possible. Page charges are assessed for printed articles.

Manuscripts and other editorial matter should be sent to the Editor, JOHN R. McLAUGHLIN, 4628 NW 40th Street, Gainesville, FL 32606.

This issue mailed March 27, 1987

—Oral Presentation
—Project Exhibit (Poster) Session
—Student Paper (Judged)
—Student Poster (Judged)

Return to: R. S. Patterson
USDA/ARS/IAMARL
P. O. Bo 14565
Gainesville, FL 32604

DEADLINE: 1 June 1987

Author's Name _____

Title of Paper _____

Affiliation and Address _____

of the First _____

(Presenting) Author _____

Abstract: *Must* be Provided. Do *not* use more than 75 words.

All submitted papers should be designed to be 8 minutes long with 2 minutes for discussion; visual materials must be restricted to 2x2 slides or overhead projector transparencies.

THE 70th ANNUAL MEETING OF THE
FLORIDA ENTOMOLOGICAL SOCIETY
ANNOUNCEMENT AND CALL FOR PAPERS

The Florida Entomological Society will hold its 70th Annual Meeting on 12-14 August, 1987 at the Daytona Beach Hilton, 2637 So. Atlantic Avenue, Daytona Beach, FL 32018; telephone (904)-767-7350. Room rates are \$65.00 either single or double (children included.) Pre-registration and registration information will be mailed to members.

Since many will present papers please copy the form and submit before 1 June, 1987 to:

R. S. Patterson, Chairman
Program Committee, FES
P.O. Box 14565
Gainesville, FL 32604
Phone: (904)-374-5903

Eight minutes will be allotted for presentation of oral papers, with 2 minutes for discussion. In addition, there will be a separate session for members who may elect to present a Project (or Poster) Exhibit. The three oral student papers and the three student Project Exhibits judged to be the best on content and delivery will be awarded monetary prizes during the meeting. Student participants in the judged sessions must be Florida Entomological Society Members and must be registered for the meeting.