

# FRASS NEWSLETTER



INSECT REARING GROUP

VOL. 11 No. 1 MAY, 1988

## WHAT IS THE FRASS NEWSLETTER?

**FRASS NEWSLETTER** is a cooperative effort among the INSECT REARING GROUP, designed to provide a vehicle for communication among scientists involved in all aspects of insect rearing. FRASS is published bi-annually and consists of the 300+ FRASS subscribers from 28 countries. This is your newsletter and its effectiveness as a communication tool depends on the continuous input of information from you. Your input is very important and needed to keep the INSECT REARING GROUP informed on the current state of the art and to promote its advancement.

## TO GET FRASS OUT, WE NEED INPUT

Please give your support by sending to the FRASS Editor (Jay C. Pershing): Editorial comments, short papers on new rearing techniques, information requests, requests for starter colonies, your source lists for supplies, items for sale or trade, new publication citations or abstracts, announcements, appropriate meeting dates, and other related news items. The next edition is expected to be out in October, 1988.

## FRASS EDITORS

1975 N. C. Leppla, USDA-ARS  
1976 W. A. Dickerson, USDA-ARS  
1977 T. M. Odell, USDA-ARS  
1978 E. G. King, USDA-ARS  
1979 J. D. Hoffman, USDA-ARS  
1980 R. E. Wheeler, Chevron Chemical  
1981 G. Rymeus, Zoecon Industries  
1982-84 No issues, concentrated on other activities  
1985 D. R. Edwards, FMC  
1986 S. Burkhart, FMC

1987 R. E. Wheeler, Chevron Chemical\*  
1988 J. C. Pershing Monsanto Agricultural Company

## UPCOMING MEETINGS

The Insect Rearing Workshop, "Advances in Insect Rearing for Research and Pest Management", has been scheduled for Wednesday, July 6 at the XVIII International Congress of Entomology to be held in Vancouver, British Columbia on July 3 - 9, 1988.

TENTATIVE PROGRAM: July 6, STARTING TIME AT 8:30 a.m.:

Chair: Thomas E. Anderson, Ph.D.  
BASF Corp  
Research Triangle Park, NC 27709-3528

8:30 Insect Rearing Management: An Operating System for Rearing Facilities. Pritam Singh, Ento. Div., Dept. of Sci. and Ind. Res., Auckland, New Zealand

9:00 Studies on the Nutrition and Digestion of Entomophagous Insects Leading to the Development of Artificial Diets. Igor G. Yazlovetsky, All Union Instit. of Biol. Contr., Krishinev 277060 USSR

9:30 Manipulation of Diapause for Stockpiling Insects Used in Biological and Autocidal Control Programs. Robert A. Bell, IRL, AEOI, ARS-USDA, BLDG. 309, Room 214, BARC-E, Beltsville, Maryland

10:00 Coffee

10:30 The Influence of Rearing Conditions on Longevity, Reproduction,

**INTERNATIONAL  
VEDALIA  
SYMPOSIA ON  
BIOLOGICAL  
CONTROL: A  
CENTURY OF**



**SUCCESS** to be held at Riverside, California March 27-30, 1989 and McAllen, Texas April 4-6, 1989. The Riverside Symposium seeks 1) to review the basis of a century of successful biological control efforts, 2) to consider the future directions of biological control, and 3) to evaluate the roles of biological control in integrated pest management. The McAllen Symposium seeks 1) to facilitate the exchange of information on the successful production and use of biological control agents, 2) to develop greater awareness and appreciation for implementation as an increasingly important part of the field of biological control, and 3) to promote national and international cooperation in the use of biological control agents in pest management. Both symposia will consist of plenary lectures, concurrent sessions, workshops and poster sessions. For more information concerning participating or attending one or both symposia write to: International Symposia on Biological Control, Department of Entomology, University of California, Riverside, CA 92521

**FRASSIFIED ADS**

**COCKROACHES REARED:** I can rear a variety of cockroach species. Collaborative projects or contract rearing possible. Unsorted individuals or roaches sorted by age, sex or reproductive history can be supplied. I have had 25 years experience in this field. Present interests include production of behavior and learning mutants and the editing of a book on the neurobiology of cockroaches as models in biomedical research. Dr. Ivan Huber, Dept. of Biological and Allied Health Sciences, Fairleigh Dickinson Univ., Madison NJ 07940. Telephone: 201/593-8759.

**WANTED: DEAD OR ALIVE! MANY STORED PRODUCTS PEST.** *Gnathocerus cornutus, Anthrenus vervasci, A. scrophulariae, A. flavipes, Attagenus unicolor, Dermestes ater, D. maculatus, D. vorax, Gibbium aequinoctiale, Acanthoscelides obtectus, Bruchus pisorum, B. rufimanus, Callosobruchus chinensis, C. maculatus, Necrobia rufipes, N. ruficollis, Sitophilus zeamais, Araecerus fasciculatus, Calophylus oryzae, Prostephanus truncatus, Cathartus quadricollis, Pharaxonotha kirschi Lophocateres pusillus, et al.* I am willing to purchase or exchange (culture material, microslide mounts or 2X2 drymounts). If interested or able to help contact: Dick Wilkey, Arthropod Slidemounts, P.O. Box 185, Bluffton, IN46714.

**FOR SALE: A GLOSSARY OF INSECT REARING TERMS,** 64 pages, M. D. Ashby and Pritam Sing. \$9.95 (US) including postage and handling. The Publications Officer, Science Information Publishing Centre, DSIR, P.O. Box 9741, Wellington, New Zealand.

Frass is available to those scientists interested in rearing. Send subscription requests to: Ron Wheeler Chevron Chemical Corp. P.O. Box 4010 Richmond, CA 94804

**FRASS EDITOR**

Jay C. Pershing  
Monsanto Agricultural Company  
700 Chesterfield Village Parkway  
Chesterfield, Missouri 63017

There are facts about insects  
and there are opinions,  
insects know the facts,  
people have opinions.

Resistance to Insecticides and to Natural Enemies. M.J. Berlinger, Ent. Lab., Agric. Res. Org., Gilat Regional Exp. Sta., Mobile Post, Negev, Israel

Laboratory, Agri. Chem. Div., Chevron Chemical Company, P.O. Box 4010, Richmond, CA 94804, USA

11:00 Seasonal and Nutritional Influences on the Toxicological Response of the First Instar Larvae of Spodoptera Littoralis (Boisduval) in a Mass Rearing Culture. Victor Flueck, Ciba Geigy AG, Basel, AG 2.721, 4002, Basel, Switzerland

11:30 Multiple Species Rearing in Support of Research. Edgar King, Jr., Southern Field Crop Insect Management Laboratory, ARS-USDA, Stoneville, Mississippi

12:00 Lunch

1:30 Quality Control in the Maintenance of Laboratory Colonies. Norman C. Leppla, USDA-ARS, 1700 S.W. 23rd Dr., Gainesville, FL 32604, USA

2:00 Aphids and Aphid Parasites as a Model System. M. Mackauer, Center for Pest Management, Simon Frazier University, Burnaby, B.C. V5A 1S6 Canada

2:30 Insect Rearing in Support of Classical Biological Control. R.F. Moore, USDA-ARS, International Activities - European Parasite Laboratory, American Embassy, Agri., APO New York 09777, USA

3:00 Coffee

3:30 Problems with Entomopathogens of Insects in Cultures. George G. Soares, Jr., Director of Ent., Mycogen Corporation, 5451 Oberlin Drive, San Diego, CA 92121, USA

4:00 Mass Rearing of Fruit Flies for Biological Control Programs. Hiroaki Nakamori, Fruit Flies Laboratory, Okinawa Prefectural Agri. Exp. Sta., 4-222 Sakiyama-cho, Naha, Okinawa, 903 Japan

4:30 History and Functions of the INSECT REARING GROUP. Ronald E. Wheeler, Lead Scientist - Entomology, Biological Research

For further information concerning registration and accommodations, contact Venue West Ltd., #801-750 Jervis St., Vancouver, B.C., Canada V6E 2A9 or call phone number 1-604/228-3168.

**THE 1988 ANNUAL ESA  
MEETING IN LOUISVILLE  
December 4 - 5, 1988**

**INSECT REARING FORMAL CONFERENCE**

"Bugs for Bucks: Rearing Insect\$ for Profit" is what the 1988 INSECT REARING FORMAL CONFERENCE is about. The conference will have a different twist to it in that a panel for discussion will be set up following the paper presentations. The intent of this year's conference is not only to present information on rearing and on operating a commercial insectary, but to have the audience participate in the form of questions and/or comments directed toward the panel. The discussion will be lead by Dr. Norm Leppla and will include such areas as, 1) markets for commercial insect rearing, 2) establishing a commercial insectary, and 3) the major hurdles in developing this industry.

There will be a four hour morning session including invitational speakers and submitted papers followed by a panel discussion on the topic of commercial insect rearing.

These conferences have provided us with an excellent forum for discussing major issues relative to insect rearing. Please come with your experiences and/or questions and comments and be ready to develop the idea "Bugs for Bucks: Rearing Insect\$ for a Profit".

Moderators: Jay C. Pershing  
Monsanto Agricultural Company,  
Chesterfield MO 63017

Pete Versoi  
BASF Corporation  
Research Triangle Park, NC 27709

SUBSCRIPTION REQUEST FORM

CIRCLE ONE: New Subscription. Address Change. Cancel Subscription.

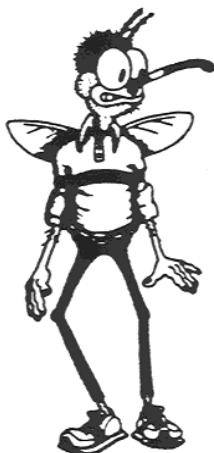
Please print or type and send to R.E Wheeler, Chevron Chemical Company, P.O. Box 4010, Richmond, California 94f804, USA

NAME: \_\_\_\_\_

ADDRESS(make as short as possible) \_\_\_\_\_

\_\_\_\_\_ ZIP \_\_\_\_\_

*Beware!  
The next issue of FRASS is due out in October and  
because the editor expects to be up to his thorax in  
FRASS related issues please send your input as early as  
possible for printing.*



N. C. Leppla  
USDA, SEA  
Insect Behavior Lab.  
Box 14565  
Gainesville, FL 32604

