



Insect Rearing Group

FRASS newsletter

VOL 8 No. 2 October, 1985

INSECT REARING FORMAL CONFERENCE

ESA Annual Meeting, Hollywood, Florida, December 8 - 12, 1985.

MODERATOR W. G. SCHULTZ

I. INVITED PAPERS

Tuesday December 10
1:30 p.m.

Insect Rearing: Developments and Needs
for Plant Protection. J.R.Brazzel

Construction of Florida's First Fruit
Fly Rearing Facility. R.E.Brown and
R.Nguyen

The Effect of Sorbic Acid and other
Antimicrobial Chemicals on Insect
Survival. F.V.Dunke1 and N.R.Read

Artificial Rearing of Endoparasites.
P.D.Greany

A Food Processing View on Biocontrol
of Insects and Weeds. R.C.Henne

An International Perspective on Insect
Rearing. D.A.Lindquist

The Introduction and Propagation of an
Exotic Parasitoid in Jordan.
D.E.Meyerdirk and R.F.Harwood

Raising a Scolytid Beetle in a Test
Tube, not in a Tree. D.M.Norris

Rearing Gypsy Moths: A Comparison
Between Mass Rearing and Research
Quantity Production. T.M.Odell and
J.A.Tanner

Avoiding Diseased Conditions in Insect
Rearing. C.F.Reichelderfer

Rearing *Niesthrea louisianica*
(Hemiptera, Rhopalidae) to Augment
Native Insects in Velvetleaf Control.
N.R.Spencer

Antibiotics and Insects: Chemistry and
Pathology. A.C.Thompson and
P.P.Sikorowski

Mass production of the Solanaceous
Fruit Fly, *Dacus latifrons*, in Hawaii.
R.I.Vargas S.Mitchell and R.Y.Miyabara

II. BUSINESS MEETING

5:05 p.m. - Insect Rearing Group.

III. SUBMITTED PAPERS

Begin at 7:00 p.m.

NEW INSECT REARING HANDBOOK AVAILABLE
HANDBOOK OF INSECT REARING: VOLUMES I AND II

edited by

PRITAM SINGH
Entomology Division
Department of Scientific and
Industrial Research
Auckland, New Zealand

R. F. MOORE
U. S. Department of Agriculture
Cotton Production Research Unit
Florence, South Carolina
USA

Progress in entomological research and the success of pest management programs depend on the successful rearing of insects in the laboratory. Most laboratories devise their own rearing procedures, and information on these procedures may not be readily available to other workers. On the other hand, there are also many published procedures for rearing a species and it is difficult for a worker to distinguish which is the best for his particular application. Not only does this situation give rise to duplication of effort, but more importantly, results cannot be compared from one laboratory to another because of the differences in rearing procedures used.

This new two-volume publication now

ORDER FROM:

ELSEVIER SCIENCE PUBLISHERS
P.O. Box 211, 1000 AE Amsterdam, The Netherlands

In the USA & Canada
ELSEVIER SCIENCE PUBLISHING CO. INC.
P.O. Box 1663, Grand Central Station, New York, NY 10163

In Australia & New Zealand
D.A. BOOK (AUST.) PTY.LTD.
11-13 Station Street, Mitcham, Vic. 3132, Australia

In India
ALLIED PUBLISHERS PRIVATE LTD.
Bombay - New Delhi - Calcutta - Madras - Bangalore

Volume I: US \$77.75/Dfl. 210.00
Volume II: US \$77.75/Dfl. 210.00
Customers in The Netherlands should add 5% BTW.

provides a practical guide for those who wish to rear insects for the first time, whether they be specialists or non-specialists. It is a "do-it-yourself" book, written in a style that is simple and logical to follow. The text first lists the equipment and materials required, then gives specific step-by-step rearing instructions, including precautions. Volume I covers fundamental information related to selected areas of insect rearing, plus species-specific rearing procedures for the orders Coleoptera, Dictyoptera, Hemiptera, Hymenoptera, Neuroptera and Orthoptera. Volume II deals with the rearing of Diptera and Lepidoptera.

Until now, there has been no standard work available on this subject.

NEW QUARANTINE FACILITY IN NEW JERSEY

ROBERT CHIANESE

New Jersey Department of Agriculture

In late winter of 1985 the New Jersey Department of Agriculture took occupancy of a new insect rearing laboratory thereby consolidating the NJDA workforce which, at the time, was divided between two facilities. The new 21,000 square foot Biological Pest Control Laboratory occupies five acres in Ewing Township. It is designed for the mass production and study of insect parasites and predators.

The laboratory's 11,000 square foot center section features environmental chambers that simulate any season or time of day, and specially designed sodium lighting to resemble natural light. Controls can hold humidity at 50 percent for optimum rearing

conditions. Diet preparation rooms are equipped to mix large batches of nutrients and vitamins on which beneficial insects thrive. Once reared, insects are observed in walk-in chambers, their behavior and adaptability scrutinized by entomologists and biologists.

A spacious greenhouse is stocked with some of New Jersey's most important crops, cultivated for an onslaught of laboratory-induced infestations to test the parasites' ability to significantly reduced pest damage. With their effectiveness documented, they are then released into test fields and monitored for their rate of pest control.

The department's current biological control programs include:

PEST	PARASITES OR PREDATOR
Gypsy Moth	<u>Cassinaria arjuna</u> <u>Coccygomimus disparis</u> <u>Cotesia melanoscelus</u> <u>Cotesia schaeferi</u>
Mexican Bean Beetle	<u>Oplomus dichrous</u> <u>Pediobius foveolatus</u>
Colorado Potato Beetle	<u>Edovum puttleri</u>
European Red Mite	<u>Stethorus punctum</u>
Alfalfa Weevil	Survey for parasites
European Corn Borer	Survey for parasites
Musk Thistle	Survey for predators*

* A new predator, imported from Italy, Ceuthorhynchidius horridus, received from the Virginia Department of Agriculture was released in New Jersey for the first time this June.

New Jersey Department of Agriculture supports IPM and is committed to a strong, vital Garden State farm industry. The Department is involved with cooperative programs both with the USDA and Cook College, the agricultural and environmental sciences departments of Rutgers University.

REQUESTS, COMMENTS AND FRASS

Where do you get those gelling agents N. C. Leppla told you about in the last issue of FRASS (Vol. 8 No. 1 1985)?

GELCARIN CP812

FMC Corporation
Marine Colloids Division
2000 Market St.
Philadelphia, PA 19103
Call Ruth Ann Fox (800) 526-3649

\$7.51/lb - 50-200 lbs
\$6.26/lb - 200 lbs
\$5.51/lb - 1000 lbs
(50 lb minimum)

GUAR GUM

Aldrich Chemical Co.
Box 355
Milwaukee, WI 53201
(414) 273-3850

\$6.00/ 500g
Item #28,599-4

Stein-Hall Specialty Chemicals
605 Third Ave.
New York, NY 10016

KELTROL/KELZAN (Sodium Alginate)

Kelco
Division of Merck & Co.
75 Terminal Ave.
Clark, NJ 07066
(201) 381-6900

\$6.60/lb - Keltrol
(food grade)
\$5.00/lb - Kelzan
(industrial grade)

SUPER COL 903 (Locust Bean Gum)

Hercules Inc.
Hercules Plaza
Wilmington, DE 19894
Call Ruth Austin (302) 594-6497

Name has been changed to
Hercules FL 50-40. It is
in very short supply
\$6.00/lb 55.12 lb bags.

Henkel Corporation
Call Betty (800) 241-3225

\$0.63/lb - 50 lb bag

SUPER SLURPER (Starch Graft Polymer)

Industrial Services Inc.
Bradenton, FL
(813) 792-7778

"Terrasorb"

Grain Processing Co.
1600 Oregon St.
Muscatine, IA
Call Peter Byron (319) 264-4252

"Waterlock"
\$6.83 - 7.85/kg

Super Absorbent Co.
Rt. 3 Box 342
Lumberton, NC 28358
(919) 739-3839

\$153.50/50 lb drum

REQUEST

++++++

Dr. Ivan Huber is in need of about 1,000 adult Periplaneta americana. If you can supply or know of potential sources, please contact Dr. Huber at Fairleigh Dickinson University, Madison, NJ 07940 (201) 377-4700.

++++++

ARTHROPOD SPECIES IN CULTURE

Lists of cultures are still coming in for the second edition of "Arthropod Species in Culture". Hopefully, the compilation will be complete by mid October, and submitted to the Entomological Society of America for publishing. The register will then be available from ESA for the cost of publishing.

The FRASS Newsletter is published biannually by the Insect Rearing Group, which is composed of over 600 scientists involved in insect rearing in 27 countries. Comments, information, requests, articles, ect. are invited. This issue is brought to you by the FMC Corporation, Agricultural Chemical Group. Edited by Dennis R. Edwards, FMC Corporation, Box 8, Princeton, NJ 08540. (609)452-2300.

FRASS EDITORS

1975 N.C.Leppla, USDA ARS
1976 W.A.Dickerson, USDA ARS *Tom E'Dell*
1975 N.C.Leppla, Forest Service
1978 E.G.King, USDA ARS
1979 J.D.Hoffman, USDA ARS
1980 R.E.Wheeler, Chevron Corporation
1981 G.Rymeus, Zoecon Industries
1982 Not Published
1983 Not Published
1984 Not Published
1985 D.R.Edwards, FMC Corporation

WORDS OF EXPERIENCE

There is always enough time to do it over, but never enough time to do it right the first time.

MAILING LIST

FRASS is available to those scientists interested in rearing. Send subscription requests and change of address to: Ron Wheeler, Chevron Chemical Corporation, 940 Hensley St. Richmond, CA 94804.

TO:

Ron Wheeler
Chevron Chemical Corp.
940 Hensley St.
Richmond, CA 94804

Please add my name to the FRASS mailing list.

NAME: _____

ADDRESS: _____

