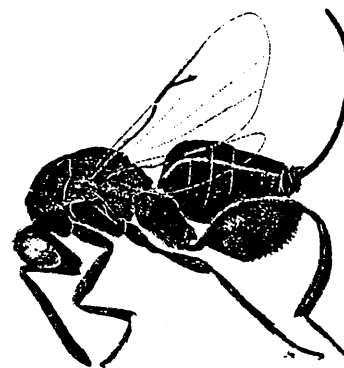


Chalcid Forum

A Newsletter to Promote Communication Among Chalcid Workers

No. 17 - October 1994



Chalcimerus borceai Steffan & Andriescu

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Editors' Notes

After a somewhat lengthy delay, we are happy to report that *Chalcid Forum* is back in business, at least for another year. Because a great amount of time has elapsed since the last issue (nearly a year and a half), much of the news we have is somewhat (out)dated. Sorry about that, but we are doing the best we can. What do you expect for free? If more people sent more news we would send the issue out earlier, but hardly anyone tells us anything and so we sit here waiting for your exciting input while we make no output. That can be reversed, of course, but only if you have more input. The drawing for the masthead was done by Mary Lou Cooley of the Systematic Entomology Laboratory (retired).

Research News

Don Horning [Wyllella, RMB 902, Loomberah via Tamworth NSW 2340, Australia]: "Arnold's article on notauli [*Chalcid Forum* 16:5-7] was most interesting, especially the references to William Sharp Macleay. We have a lot of *Chalcis* and *Leucospis* from Cuba, with labels in his handwriting. We also have *Polistes* from there, also labeled by him. So the identity of the *Polistes* could be checked, if needed. Interestingly, the paper was published in the middle of Macleay's stay in Cuba - 1826 - 1835."

K. Surekha [Division of Entomology, Indian Agricultural Research Institute, New Delhi, India]: In addition to a change of address, Dr. Surekha informs us: "I am continuing my postdoctoral research on

"Biosystematic studies on the Eulophidae of the Indian subcontinent."

P. M. Sureshan [Zoological Survey of India, Kerala, India]: In addition to a change of address, Dr. Sureshan informs us: "I have submitted my Ph.D. thesis recently on the systematics of Pteromalidae (Pteromalinae) from Kerala, India. Officially I am now concentrating on the identification of chalcidoid collections available in our station brought from various surveys and at the same time selected Pteromalidae for detailed systematic studies. In this connection I am ready to send Indian chalcids for comparison on request in future."

Felix Manuel Fontal Cazalla

[Museo Nacional de Ciencias Naturales, Madrid, Spain]: "I'm a student who has started doing research on the Encyrtidae at the Museo Nacional de Ciencias Naturales in Madrid helped by Dr. Jose Luis Nieves Aldrey."

David Rivers [Department of Entomology, University of Wisconsin-Madison, Wisconsin, USA]: "My research interests deal with the biology of pteromalids, specifically those that parasitize cyclorrhaphs. Thus, I am very interested in the work of anyone who works with the Pteromalidae and closely related species."

R. R. Askew [Cheshire, England]: "In September 1993 I am retiring from the University of Manchester. Whilst I will continue to work part-time at the University for some time after that date, most of my entomological work will be done at home." (See new address in directory.)

Izumi Ohta [Laboratory of Insect Pest Control, Chugoku National Agri-

cultural Experiment Station, Hiroshima, Japan]: "I am now investigating the egg parasitoid *Trichogramma chilonis* Ishii."

Eiji Ikeda [Entomological Institute, Hokkaido University, Sapporo, Japan]: According to John Huber, "Mr. Ikeda will be in Ottawa for at least 6 months (July-December, and perhaps longer). He did an M.Sc. in Japan on *Chryso-charis* and wants to start a Ph.D. on Tetrastichinae of Japan when he returns to Hokkaido. He has published on *Dimmockia* and his main interest is Eulophidae. While in Ottawa he is beginning to learn the genera in various other chalcid families as well as the Eulophidae."

Scott Digweed [Department of Entomology, University of Alberta, Edmonton, Alberta, Canada]: According to John Huber, Mr. Digweed "... is doing an M.Sc. in biological control of leafmining sawflies on birch."

Sudhir Singh [Plant Protection Division, Institute of Rain and Moist Deciduous Forests Research, Assam, India]: In addition to a change of address Dr. Singh informs us: "I am working on chalcid taxonomy since 1985 under the guidance of Prof. Man Mohan Agarwal. The topic of this work is "Taxonomic studies on parasitic micro-Hymenoptera (Chalcidoidea)". This work has been published under the series: Aligarh Muslim University Zoological publication on Indian insect types, vol. XIV. Title of monograph is "Taxonomic studies on Indian encyrtid parasites from north-eastern region." Copies are ready to be dispatched to regular receivers of this publication series, but those interested in getting the

copy may write to Prof. Man Mohan Agarwal, Dept. of Zoology, A.M.U., Aligarh-202002, India. The monograph incorporates 20 new species along with some already described elsewhere (with SEM and photomicrograph illustrations). It is regretted that expected quality of the plates could not be produced (due to financial constraints), anyway they are quite discernible."

Jan-Marc Anga [Department of Entomology, The Natural History Museum, London]: "Hi, I am Jean-Marc Anga, from the Ivory-Coast, in West Africa. I am currently working on my Ph.D. thesis, investigating the phylogenetic systematics of anagyrines (Hymenoptera: Encyrtidae), parasitoids of mealybugs (Homoptera: Pseudococcidae) of economic importance. Before coming to Great-Britain, I was working on a biological control programme in my home country, with the assistance of the International Institute of Tropical Agriculture, Nigeria. I am presently at The Natural History Museum, in London, working with my supervisor Dr. John Noyes and also benefiting from the knowledge of Drs. Zdenek Bouček, John LaSalle, Andy Polaszek etc. If I can fathom the intricacies and controversies surrounding the concept of phylogenetic analysis and understand the esoteric computer programmes (Hennig86, PAUP and MacClade), I shall complete my thesis and undertake the revision of the African species of the genus *Lepitomastix* or *Anagyrus* and include it in the thesis. I am planning to remain in London until June 1995. After my Ph.D., I intend to go back home and pursue a career in insect taxonomy."

Jian Huang [Department of Plant protection, Fujian, People's Republic of China]: I received my Ph.D. in August of 1991 [This is obviously very old news, and the Editors' fault for which they apologize abjectly. Still, the information may be of some interest. Eds.] with my thesis entitled "Systematic studies of Aphelinidae of China," in which 93 species and 17 genera of Aphelinidae are described, including 42 new species, 1 new combination, and 4 genera and 14 species which are recorded for the first time from China. Now I am

studying on biological control of citrus pests such as the citrus scales and citrus red mite, and on parasites of the scale insects, as well as systematics of the family Aphelinidae and other families of Chalcidoidea."

John M. Heraty [Systematic Entomology Laboratory, National Museum of Natural History, NHB-168, Washington, DC 20560, (202) 357-1856, fax: (202) 786-9422, e-mail:mnhen136@sivm.si.edu: "Yes, I have moved again. I have just finished a one year fellowship with the Smithsonian Institution where I was working on a generic revision of the Eucharitidae. This past June I transferred to a USDA/APHIS postdoctoral position with Mike Schauff looking at the systematics of the *Encarsia strenua* group. Here I get to try my hand with traditional morphological characters and am also delving into the world of molecular techniques. At least for the moment I will be trying some sequencing to see if there is any truth to some of the concepts of species groups in *Encarsia*. For this I would be glad to receive any specimens of *Encarsia* (live, dead or pickled) for study (especially the *strenua* group but other species will do). One comment: I am appalled at how little mounted material (especially in good condition) exists for species of *Encarsia* and the poor condition of those slides that do exist! I know they are hard to collect, and a pain to mount, but we (the chalcid community) are doing a poor job of developing collections for such an economically important group. There are vastly superior collections of eucharitids, which let's face it, are not a group that has been recognized for its economic value! Just being cute should not be the sole criterion for building our collections.

At last, there is light at the end of the rainbow. As of next July I will be assuming a position as Assistant Professor of Systematic Entomology at the University of California, Riverside. This is essentially Gordon Gordh's old position, and thankfully the department decided to continue with their tradition of chalcid workers. I will be continuing my studies of Eucharitidae, Aphelinidae, and Galapagos Chalcidoidea in the southern California sunshine. It will be a great pleasure to work with the new Col-

lection Manager at Riverside, Ser-guey Trjapitzin, who is already making great progress on cleaning up the collection.

Victor Fursov [Institute of Zoology, Ukrainian Academy of Sciences]: "I think it would be interesting to arrange something like a discussion about computer programmes of new computer advantages which can be used in chalcidology. I know that many entomologists use various software programmes for their special purposes, so it would be a good idea to discuss some problems and tasks." Dr. Fursov sent the following article, from which much specific data was edited out. If you wish more specific information you will have to contact Dr. Fursov as indicated at the end of the article.

NEW TAXONOMIC COMPUTER DATABASE "ZOO-CATALOGUE" (version 2.20.1992)

by V. N. Fursov and N. B.
Narolsky

One of the main tasks for all zoologists is the conservation and rapid use of various materials belonging to different taxa of animals. The work with modern computer database is the most effective way of dealing with the information which allows us to solve this problem. All current databases were created for specific requests of users. They are relatively complicated to used by other specialists. The software programme "ZOO-CATALOGUE" provides a wide range of special useful functions and opportunities especially for zoologists. The programme is easy to use and requires no prior computer experience.

Using the programme you can create an unlimited number of working catalogues, each of which contains generic data in alphabetical order and within each genus specific data are included in alphabetical order. The programme will automatically sort the information and create 11 separate files. All created dbf-files are comparable by "dBASE" or "FoxPro" programmes. The programme "ZOO-CATALOGUE" (without documentation) includes about 330 Kbytes.

Generic and specific data are kept in 14 Memo-areas: *Synonymia* (synonyms, bibliography, etc.); *Diagnosis* (taxonomic diagnosis, relations to other taxa); *Descriptio* (full description of taxon); *Systematic* (notes on systematics, keys); *Phylogenia* (data on phylogeny); *Oecologia* (data on ecology); *Biologia* (data on biology); larva (data on larval stage, developmental data); *Hospes* (relations with other animals); *Plantae* (relations with plants); *Oeconomic* (importance for human activity); *Type Mater* (type material); *Materiae* (material studied); *Distribut* (data on distribution, zoogeography). In each Memo-area it is possible to input 65535 bytes of information (about 34 pages of text). "SEARCH" allows searching of key words in each of the 14 names Memo-areas and the choice of a specific taxon. All data can be printed or exported to separate ASCII files by 45 main types of enquiries, which may also be combined in different order. In obtaining information for your uses you may print the data from either one, several, or all Memo-areas. You may choose to print the information for either one, several, or all taxa or for taxa chosen by key word. You may also print a list of Latin names of taxa without any data.

Anyone interested in more information about this should contact us at Department of Entomology, Institute of Zoology of Ukrainian Academy of Sciences, Kiev, Lenin Street, 15, 252601, Ukraine. FAX (044) 224-1569. FAX-modem (044) 224-8372. Tel. (044) 224-9333. We may be able to arrange to supply the copies of this programme on request if you are interested (with a reasonable cost). The programme "ZOO-CATALOGUE" (= catalog.exe on disk) without documentation takes the place of one 360K, 5.25-inch floppy disk. System requirements: IBM PC/XT/AT and clones, 360K, 720K, 1.2MB or 1.4MB disk drive or hard disk, CGA, EGA, or VGA adaptor and colour monitor, almost any printer.

Obituary

An obituary written by David Rosen for Paul DeBach appeared in the *Israel Journal of Entomology*, vol. 27:125-127 in 1993.

Museum Reports

THE CANADIAN NATIONAL COLLECTION

by John Huber

The Canadian National Collection of Insects contains a large collection of chalcidoids in 70% ethanol stored in a cold room at +2°C to retard deterioration. My report is to let the chalcidological community know that this source of material exists and to encourage taxonomists to visit the CNC to extract taxa of interest for revisionary work. The collection was mainly amassed since 1985 and represents material that, for the most part, has never been stored for any length of time at room temperature. The specimens are therefore in excellent condition. Gary Gibson and I have removed specimens of most of the families for study by various specialists so the chalcidoid alcohol collection actually contains only the families Eulophidae, Pteromalidae, Eurytomidae, Chalcididae and relatively few members of the remaining families.

In addition to pure chalcidoids, the CNC has a large collection of unsorted Hymenoptera in ethanol, most of which had been stored at room temperature for up to 15 years before being placed in cold storage in 1986. Most of those specimens are quite faded but, nevertheless, there are many chalcids still useful for taxonomic study in that part of the collection. We have had the chalcids extracted from vials representing all but the Nearctic region. The Nearctic miscellaneous Hymenoptera vials have not yet been counted but there are two cabinets full, arranged by U.S. state and Canadian province.

Although many of the vials may have only 1-5 specimens many others have hundreds. A rough and probably conservative guess of 10 specimens per vial on average would give about 50,000 specimens in alcohol.

A separate article on CNC dried (pinned, pointed, or card-mounted) chalcids will be given in future, once we have some idea of their numbers and composition. The ethanol collection of pure chalcids is as follows (the number of vials follows the country):

Neotropical. Argentina - 38, Be-

lize - 21, Bolivia - 15, Brazil - 118, Chile - 176, Columbia - 32, Costa Rica - 120, Dominican Republic - 47, Ecuador - 219, Guatemala - 79, Panama and Honduras - 49, Jamaica - 59, Mexico - 297, Paraguay - 38, Peru - 49, Trinidad - 256, Suriname - 17, Venezuela - 98, West Indies - 105. **Total vials:** 1833.

Nearctic. Canada. Alberta - 93, British Columbia - 144, Manitoba - 40, Maritimes - 64, Ontario - 408, Saskatchewan - 8, Yukon - 19. **Total vials:** 776. United States. Alaska - 2, Arizona - 56, California - 183, Colorado - 14, Florida - 323, Georgia - 63, Illinois - 5, Maryland - 56, Missouri - 30, New Mexico - 21, North Carolina - 22, Oklahoma - 9, Oregon - 17, South Carolina - 77, Tennessee - 5, Texas - 337, Washington - 30, Virginia - 37, Wyoming - 6, other states - 71. **Total Vials:** 1364

Palaearctic. Czech Republic - 22, Italy and Spain - 67, Japan - 16, Sweden - 48, Oman - 33, other countries - usually fewer than 5 vials for each - 126. **Total vials:** 312.

Afrotropical (Ethiopian). Cameroun - 18, Ivory Coast - 7, Nigeria - 68, South Africa - 17, Somalia - 10, Tanzania - 3, Uganda - 18, other countries - usually fewer than 5 vials for each - 46. **Total vials:** 187.

Oriental. Malaysia (Sabah) + Indonesia (mostly Borneo) - 122, Nepal - 78, India - 30, Taiwan - 8, Thailand-Singapore - 40, other countries - usually fewer than 5 vials for each - 11. **Total vials:** 289.

Australian. Australia - 101, New Guinea - 302, other countries - usually fewer than 5 vials each - 35. **Total vials:** 438.

Total vials of pure Chalcidoidea: about 5200.

In addition there are numerous jars of old (1960's) reared material, mostly Eulophidae and Encyrtidae.

People sorting out our ethanol chalcids for particular groups to revise are welcome to keep part of the material in payment for the sorting, mounting and labeling of the specimens borrowed, but we expect primary types to be deposited in the CNC together with a certain proportion of the non-type specimens.

DOUTT TYPE MATERIAL

by Mike Schauff

The following type material is now

housed in the United States National Museum: MYMARIDAE: *Arescon clarkei* Doutt 1955, female holotype; *Barypolynema medicae* Annecke & Doutt 1961, female and male paratypes; *Dahmsia australiensis* Doutt 1975, 2 female paratypes; *Lymaenon saipanensis* Doutt 1955, female holotype and male allotype; *Nesetaerus gressitti* Doutt 1955, female holotype; *Stethynium annulatum* Doutt 1947, female paratype. TRICHOGRAMMATIDAE: *Chaetogramma occidentalis* Doutt 1974, female paratype; *Epoligosita pallida* Doutt (in Doutt & Viggiani 1968), 2 female paratypes; *Lathromeris pacifica* Doutt 1955, female holotype; *Oligosita kusaiensis* Doutt 1955, female holotype; *Oligosita oceanica* Doutt 1955, ?female holotype; *Xiphogramma annecke* Doutt 1974, 2 female paratypes.

**SURVEY OF CHALCIDOIDEA IN
COLLECTION OF
DENVER MUSEUM
OF NATURAL HISTORY
AS OF FEBRUARY 1994**
Compiled by Richard S. Peigler,
Curator of Entomology

Our collection is not very large, but it is growing at a moderate rate. I am a lepidopterist interested in parasitoids of Saturniidae moths, and have reared some of these or had them sent to me by colleagues. I also collect at light, sweeping, and with mailase trap on a small scale, so have other material from these sources. I am very interested in offering loans to other researchers. All material below is pinned or pointed, unless otherwise stated. An asterisk (*) indicates host remains are pinned with the specimen. [Ed. note: The nomenclature of these species is verbatim.]

PERILAMPIDAE

1. 3 specimens from Iowa
2. Colorado, Arapahoe Co., 30 km east of Denver, 10 July 1988, R. S. Peigler
3. *Perilampus carolinensis** Maryland, Bowie, Patuxent Wildlife Refuge, 11 June 1945, ex *Anisota senatoria* (Saturniidae), Robert T. Mitchell

CHALCIDAE

1. *Spilochalcis albifrons** Maryland, Bowie, Patuxent Wildlife

Refuge, 8 October 1951, ex *Hyposoter fugitivus* (Ichneumonidae) in *Anisota senatoria* (Saturniidae), Robert T. Mitchell

2. black chalcid (3 specimens*): South Carolina, Greenville Co., Greenville, with dates, reared from *Hyposoter fugitivus* in *Anisota peigleri* and *A. pellucida*
3. *Brachymeria ovata* (?) Texas, Burnet Co., Inks Lake State Park, 8 April 1979, R. S. Peigler, collected with Texas Parks permit.
4. *Ceratostigma meteori* 4 specimens, one with host remains, Texas, Walker County, Stubblefield Lake, with dates, reared from *Hyposoter fugitivus* from *Anisota* spp., including *senatoria*.
5. *Spilochalcis mariae*: 1 specimen: South Carolina, Greenville Co., Taylors, spring 1966, emerged from *Callosamia angulifera* cocoon (Saturniidae), R. S. Peigler, remainder of series in Los Angeles County Museum.
6. *Spilochalcis mariae*: 8 specimens, Louisiana, East Baton Rouge Parish, 14 Feb 1966, J. E. Eger, ex *Antheraea polyphemus* (Saturniidae). Others from series in LACM.
7. *Spilochalcis mariae*: 6 specimens*, Mexico, Jalisco, Jocotepec, June 1979, R. L. Halbert, parasite in cocoon of *Rothschildia jorulla* (Saturniidae). More of these in LACM; also in LACM I sent series of this parasitoid reared from cocoons of *Rothschildia lebeau forbesi* from Brownsville, Texas, area.

TORYMIDAE

1. *Monodontomeris minor*: large series from Colorado, reared in 1980s from cocoons of *Hyalophora cecropia*, hyperparasitoids on *Gambrus extrematus* (Ichneumonidae). R. S. Peigler
2. *Monodontomeris montivagus*: California, Contra Costa County, ex gall of *Quercus lobata*, S. E. Stone.
3. *Torymus californicus*: series of 50-60, California, Contra Costa County, reared from gall on *Quercus*, S. E. Stone
4. *Torymus tubicola*, 2 specimens, California, Contra Costa County, reared, S. E. Stone

PTEROMALIDAE

1. *Agiommatous attaci**: Indonesia,

Sumatra, Brastagi, Lake Toba, emerged 8 Oct 1986, ex-egg of *Attacus atlas* (Saturniidae), Ulrich Paukstadt

2. Pteromalid (?): 1 specimen: South Carolina, Greenville, 29 June 1987, R. S. Peigler

EULOPHIDAE

1. *Horismenus floridanus**: Texas, Walker Co., Stubblefield Lake, emerged 15 Oct 1976, hyperparasitoid in *Cotesia anisotae* (Braconidae), R. S. Peigler
2. Eulophids: series of 6*, Florida, Gadsden County, Interstate 10 and Apalachicola River, July 1992, hyperparasitoids in *Cotesia anisotae* (Braconidae) in *Anisota pellucida* (Saturniidae), R. S. Peigler [possibly *Horismenus floridanus*~]
3. 3 specimens, unidentified, Nevada, Clark Co., emerged May 1988 from eggs of *Hemileuca neumoegeni* (Saturniidae), Michael J. Smith
4. series of 8, cocoons attached to leaf pinned below, South Carolina, Greenville, July 1973, possibly ex-*Hemileuca nevadensis* (not native) that was being reared on same branch, R. S. Peigler
5. 1 specimen, South Carolina, Greenville, 24 June 1977, sitting on back of (attacking?) *Automeris zozine* (Saturniidae, native to Mexico) mature larva, R. S. Peigler
6. 2 specimens*-unidentified, maybe not eulophids, Arizona, Ajo, 24 January 1991, reared from eggs of *Eupackardia calleta* (Saturniidae), J. Bruce Duncan
7. Large series of over 50, some in alcohol, some pointed*: South Carolina, Greenville Co., Greenville, emerged indoors February 1994, collected December 1993, from large white egg sac of spider, R. S. Peigler
8. *Tetrastichus* sp.: one from *Anisota* egg from Stubblefield Lake, Walker Co., Texas, Sept. 1976, R. S. Peigler
9. *Tetrastichus gigas*: 15 specimens: California, Contra Costa Co., reared by S. E. Stone

EUPELMIDAE

We have large and small series, mostly with host remains (dried host

eggs pinned below), of many specimens of *Anastatus*, including *redu-*

new combinations, and a host parasite catalogue. Not priced; postage,

(Bouček of course). What to do? I use MacWrite Pro word processing

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