

CHALCID FORUM

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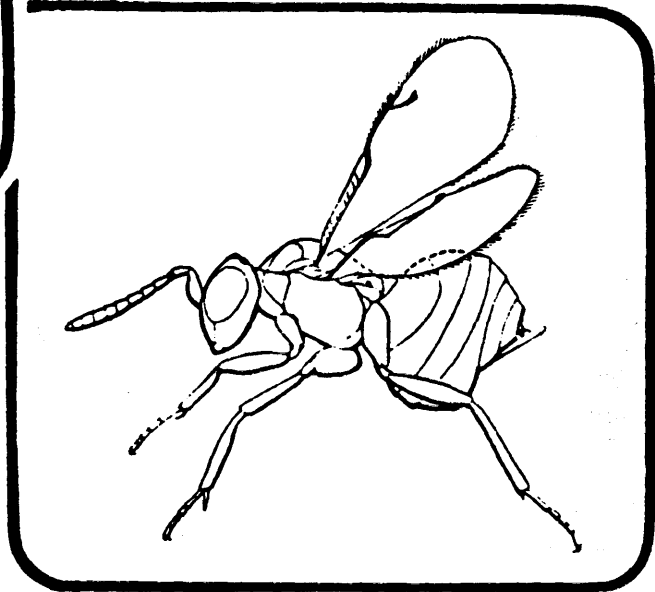
**A Forum to Promote Communication
Among Chalcid Workers**

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**EDITORS' NOTES**

Once again CHALCID FORUM is late, which is fast becoming a tradition. The next issue (July) most likely will also be late because of the XVIII International Congress of Entomology in Vancouver, July 3-9. Both JH and GG will be at the Congress (if everything goes as planned) and we hope to see many of you there.

We include with this issue the standard "RECENT LITERATURE" section, and again urge you to please send copies of your publications to the editors in exchange for this service, which many of you have indicated is valuable. We also include a new directory for CHALCID FORUM, with telephone numbers and chalcidoid groups and areas of interest for those who responded to the "directory and questionnaire" included in the January 1987 issue. A 1988 questionnaire is included with this issue in an attempt to increase the "RESEARCH NEWS" and other sections of the newsletter for the next issue.

Finally, the masthead of this issue (*Tanaostigmodes* sp.), is in honour of John LaSalle, friend and colleague, who recently published the results of his Ph.D. thesis: "New World Tanaostigmatidae (Hymenoptera, Chalcidoidea). Contrib. Amer. Entomol. Inst. (1987), vol 23, no.1, 181 pp." This important publication illustrates the vast amount of taxonomic work remaining to be done in the Chalcidoidea, with 49 of 69 recognized species (71%) described as new. We wish John the best of success in his new 'pet' group, the tetrastichine Eulophidae.

RESEARCH NEWS

Huang Dawei. I am finishing my Ph.D. thesis on the Chinese species of Pteromalidae. I have studied some Chinese species of 3 genera: *Spalangia* (12 species), *Sphexigaster* (15 species) and *Stictomischus* (12 species), including 25 new to science and 13 newly recorded to China. This paper will be published in 1989. I am now working on other genera of Pteromalidae.

James A. DiGiulio. I am continuing work on my Ph.D. thesis, which is a revision of the New World *Sycophila* (= *Eudecatoma*) of the family Eurytomidae. If anyone knows of any such material and if I have not contacted you or your institution by now, I would appreciate hearing from you. I would especially like to hear about collections from the southwestern U.S. and beyond into Central and South America. Any Old World material would be accepted cheerfully for loan or exchange, also. I am also interested in developing a collection of the world genera. If any of you have any unusual eurytomids, determined or not, I would like to see them.

Terry D. Miller. I am currently working on the biology of a species of *Orasema* in the *coloradensis* species group and I am collaborating with Chris Darling of the ROM on the biology of *Chrysolampus sisymbrii*. Taxonomic interests and projects are on parasitic Cynipoidea and Scoliidea.

Abbas Ali Nasrollahi. I am working on a biological control project for control of cotton pests in the northern part of Iran. Useage of a synthetic pyrethroid has resulted in a new serious pest, which is the cotton whitefly, that is threatening the cotton industry in northern Iran. We are not sure whether it is *Bemisia tabaci* or another species because there are some differences between it and *B. tabaci*. We have sent specimens of the whitefly and some of its natural parasites to the Zoological Institute, Academy of Sciences, Leningrad, for determination. Two natural enemies of the whitefly were determined by Dr. E.S. Sugonyaev. One is *Eretmocerus mundus* Mercet and the other is *Encarsia partenopea* Masi. The *Er. mundus* is very promising, its population rises later in the season, in late August-October, when they quit spraying, and it parasitizes 70% of the whitefly puparia. The *En. partenopea* is also very good and we are in the process of trying to find more biocontrol agents for this pest.

W. Witsack. I work on Mymaridae (especially *Anagrus*) and other parasites and predators (Hymenoptera) of Auchenorrhyncha.

FORUM

[Ed. note: the following was abstracted from a letter by Mr. R. George, who produces various types of entomological nets, cages and Malaise traps for sale from "Marris House Nets", 54 Richmond Park Avenue, Queen's Park, Bournemouth, England, BH8 9DR. We include this in FORUM because the sentiments expressed should be of concern to all entomologists.]

To date I have sold 787 Malaise traps (460 in U.K. and 327 overseas). Apart from the activities of entomologists, sales have been helped by deer, dogs, sheep, wild boar, cows, gardener's bonfires, the occasional hurricane and gales on Alpine slopes. My exports have gone to: Abu Dhabi (1), Algeria (4), Australia (50), Austria (3), Brazil (2), Canada (11), Columbia (1), Zaire (1), Eire (15), Finland (5), France (19), Gambia (4), Guadeloupe (2), Holland (7), Hong Kong (6), India (2), Yugoslavia (2), Kuwait (1), Malaysia (23), New Caledonia (4), New Zealand (22), Norway (63), Pakistan (1), Senegal (1), Singapore (1), Spain (1), Sweden (16), Switzerland (4), U.S.A. (6), West Germany (29), Zambia (17) and Zimbabwe (1).

Certainly many of the traps sold in Great Britain, particularly those bought by the British Museum (Natural History) have been used in many parts of the world but I have no precise knowledge about this. Over the last ten years an enormous amount of material must have been captured and I wonder how many specimens have been identified, how many have been stored away, how many thrown away? On these points I would like to express my own view about the mass collecting resulting from the use of Malaise traps. Firstly, I strongly hold the opinion that we must not kill and waste. Therefore, whether we collect for our own purposes/research/national collections, etc., it is incumbent upon us to ensure that the material which we do not use is passed onto other entomologists who will use it. This means that there must be adequate staffing, facilities and resources for sorting, curating and storing. Secondly, most of the national museums upon whom the majority of the responsibility surely will fall must be thoroughly aware of the problems and must find the finances and resources with which to do the job. Thirdly, I absolutely support the argument of Stubbs (1977: "There will never be another chance in the history of Planet Earth." Antenna, 1(2): 38-39), that "We still have time to go out and obtain material which will almost instantly become a fossil collection The chances are that similar material could not be obtained by someone in the field in hundred's of years time. We are talking of a scientific goldmine that can never be quarried again".

I know that Stubbs was referring, in the main, to the fauna of tropical rain forests but I am sure that the argument applies in quite a high degree to collecting everywhere. Let the "instant fossil" collections increase as fast as possible.

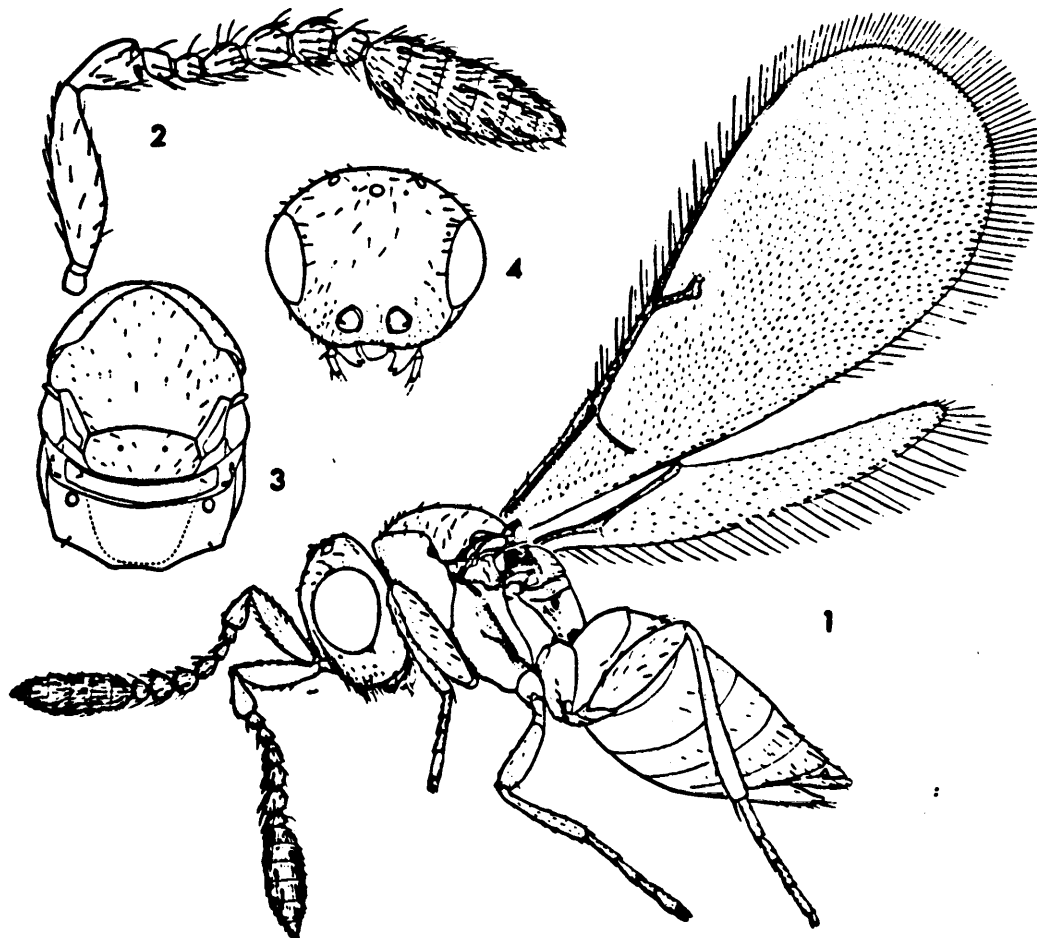
ANNOUNCEMENTS

Changing of the guard. Dr. Carl Yoshimoto retired from the Biosystematics Research Centre as of December 31, 1987; he remains as an honorary research associate. Dr. John Huber is very happy to announce [and GG is very very happy] that he has been hired by the Canadian Forestry Service to replace Carl and is seconded to BRC.

!!!! A BIRTH IN THE SUPERFAMILY !!!!

The superfamily Chalcidoidea is proud to announce the birth of its new family **ROTOITIDAE**, a citizen of New Zealand fathered by Zdenek Boucek and John Noyes [Systematic Entomology (1987) 12: 407-412]. For the benefit of readers of **CHALCID FORUM** that have not yet seen this publication, we have taken the liberty of reproducing the illustrations of the proud addition.

Rotoitidae from New Zealand



FIGS. 1-4. *Rotoita basalis*, female; 1, habitus from left side, holotype; 2, left antenna, inner aspect; 3, thorax, dorsal view; 4, head, facial view (2-4 from a slide-mounted paratype).

We are also pleased to announce that *Rotoita* may have a sister. During a recent collecting trip to Chile, Lubomir Masner collected numerous females of a brachypterous chalcidoid (?) that may represent a second genus of Rotoitidae, based on a 14-segmented antenna with a 6-articled clava, 4-segmented tarsi and short, weak foretibial spur. However, we are still extracting specimens and have yet to mount any for study, and have definitely not yet convinced ourselves that the "thing" really is a chalcidoid. Stay tuned to **CHALCID FORUM** for further developments!

RESEARCH INSTITUTES

Natural History Museum of Los Angeles County (900 Exposition Boulevard, Los Angeles, CA, USA 90007); by Roy R. Snelling.

When I came to the Natural History Museum of Los Angeles County (LACM) in 1963, the Hymenoptera collection was almost nonexistent. Since then, it has grown enormously and comprises about 40% of the total collection of about 5 million specimens. Reflecting my own interests and expertise, most of this expansion has been within the aculeates.

Growth within the Parasitica has been less spectacular since these are usually acquired on a more casual basis. Nonetheless, there is a considerable amount of material, mainly from western North America and from Central America. Undoubtedly there are some goodies amongst all this. The Parasitica are, however, under-utilized and much is unsorted and unidentified.

The collection is housed in Cornell-type drawers in a compactor system. A rough break-down of our holdings is as follows:

CHALCIDOIDEA	19	drawers	Proctotrupoidea	15.5	drawers
Ichneumonoidea	51	drawers	Ceraphronoidea	1	drawer
Cynipoidea	5	drawers	Trigonoidea	0.2	drawers
Evanoidea	2.5	drawers			

The Proctotrupoidea are comparatively well represented because in 1973 the LACM inherited the collection of Robert M. Fouts following his death that year in Hollywood. Some types of Kieffer and Bradley were also in the Fouts collection so that these too came to the LACM. Types of Fullaway and of McCracken & Egbert were acquired in 1964 when the remnants of the Stanford University collection were transferred to the LACM. Other types by these two authors are in the California Academy of Sciences, San Francisco, although a few appear to be lost. For the benefit of readers of CHALCID FORUM, the following primary types of Chalcidoidea are housed in the LACM:

TORYMIDAE:	<i>Ormyrus distinctus</i>	Fullaway	(1912)		
EURYTOMIDAE:	<i>Eurytoma incerta</i>	"	(")		
		<i>Eurytoma querci</i>	"	(")	
		<i>Decatoma doanei</i>	"	(")	
		<i>Decatoma gracilis</i>	"	(")	
		<i>Decatoma kelloggi</i>	"	(")	
EULOPHIDAE:	<i>Tetrastichus pattersonae</i>	"	(")		
		<i>Tetrastichus stanfordiensis</i>	"	(")	

I can supply interested readers with a complete list of the primary types of Parasitica contained in the LACM. Researchers are welcome if they wish to visit the museum and I will do my best to satisfy legitimate loan requests.

American Entomological Institute (3005 SW 56th Avenue, Gainesville, FL, USA 32608); by Henry Townes.

The Hymenoptera at the American Entomological Institute were counted at the end of 1987. The numbers of chalcidoids were as follows:

Torymidae	1,573	Eucharitidae	1,052
Pteromalidae	6,451	Eupelmidae	1,957
Eurytomidae	1,704	Encyrtidae	478
Chalcididae	6,051	Eulophidae	2,820
Leucospidae	165	Mymaridae	520

Origins of these specimens are worldwide, but with relatively few from the Palearctic region. Loans are made for revisional studies to workers with good reputations for returning specimens. Most of the specimens have been determined to genus by John LaSalle, Zdenek Boucek, and John Noyes so that they are ready to be loaned.

TRAVEL REPORTS

Gérard Delvare. Last summer (July and August 1987) I went to Colombia and Ecuador, invited by a french colleague of mine, Philippe Genty, who is working in an oil palm company, as the manager for pest protection of the plant. The purpose of the trip was first the 14th Congress of the Entomological Society of Colombia, held in Bogota (15-17 July, 1987), and then the collecting of chalcids in both countries. I presented for the Congress a paper on the general classification and on some biological features of the parasitic Hymenoptera. Then we came to the plantation of San-Alberto in the department of Cesar. This plantation is nearly 20 years old and Philippe came here at the very beginning, when the people were destroying the primary forest either to plant oil palms, or to rear cattle. He had to study the complex of pests of the palm, which comprises mainly phyllophagus species (Lepidoptera and hispine Coleoptera). By rearing the preimaginal instars of the pests, he found high levels of parasitism, often due to Hymenoptera. Now air sprayings have been stopped; the insecticides are injected through the roots of the palm, in order to respect the useful fauna.

When driving over the plantation (8,000 hectares, which means that you can drive for 20 kilometers and see only oil palms) an impression of uniformity comes out. In fact the ecosystem is more varied: meadows are included in the area; a small primary forest has been kept; small rivers, named "canos" are bordered by natural vegetation. In the ditches along the tracks grow several plants possessing nectariferous glands under their leaves which are very attractive to the parasitic Hymenoptera. In order to favour the parasites and to increase the level of parasitism on the pest populations these plants are protected.

In 1984, an inventory of the attracted fauna was performed by sweeping the plants and about 200 species of parasitic Hymenoptera were recorded, 80% of them being chalcidoids. More surprising, in these samples, the Chalcididae were predominant and within the family the genus *Spilochalcis* was represented by about 80 species. I could not believe that *Spilochalcis* was

so abundant and the plants so attractive until I saw nearly a swarm of them, flying around a *Solanum torvum* plant. In good places you could stay one or two hours near the same plant and still collect new wasps. It must be specified that although the primary forest has nearly completely disappeared from the area, I collected 2,500 *Spilochalcis* within the plantation during 2 weeks, just using by eyes and my pooter. The Malaise trap gave very bad results since only several tens of specimens were collected during the same time. At San-Alberto the attractive plants previously recorded were: *Solanum torvum* and *S. hirtum* (Solanaceae), *Urena sinuata* and *U. trilobata* (Malvaceae), and one *Eupatorium* (Asteraceae).

I left San-Alberto for Shushufindi, in the Napo department of Ecuador, with regret. The plantation there is bordering the primary forest. The collecting within the plantation was not so good. In fact the *Spilochalcis* were abundant but limited to 5 or 6 species. So we went to the border of the forest where it was better than in Colombia: 95 species of *Spilochalcis* represented by 1,200 specimens, collected during one week. The attractive plants were *Solanum* "cocona" (a local name), *Solanum nigra* and other plants not yet identified.

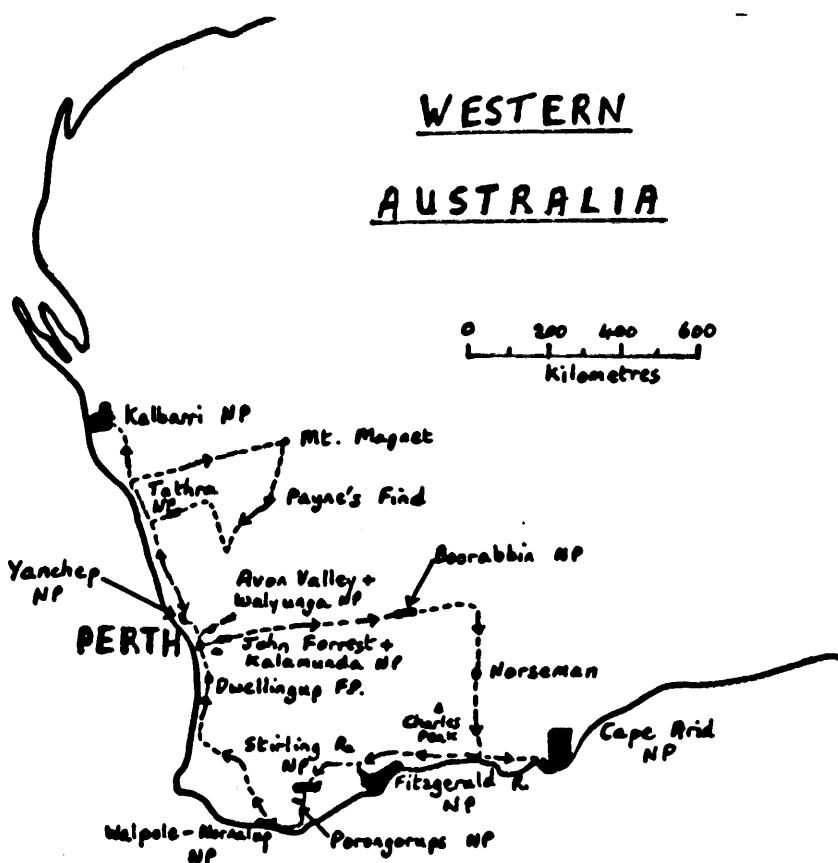
In conclusion, many thanks to Philippe who introduced me to these such nice chalcids and to this taxonomic adventure. If you travel to the neotropics, take your pooter, get good glasses (if you need them) and look carefully at the vegetation, mostly if there are Solanaceae and Malvaceae: you may be surprised!

John Noyes. [Ed. note: what follows is a severely edited version of an 8 page trip report by John about his 1986/87 collecting trip to western Australia; unfortunately much information about the trials, tribulations, disease, pestilence, natural disasters and "wild australians" had to be left out because of space limitations. However, we would be happy to send a complete copy to anyone who requests it.]

Australia - land of Foster's lager, XXXX and Crocodile Dundee. Few people know that it is also probably one of the world's encyrtid capitals, possibly rivalled only by Madagascar. It was for this reason that I planned to visit there during late 1986 and early 1987. As the majority of chalcid collecting in Australia has been done in the east I decided to concentrate my efforts in the southwest.

I flew to Adelaide via Sydney, landing in Adelaide just as Pope Paul was leaving for the last stage of his Australian tour. The weather was perfect with a glorious sun. Andy Austin (an honorary chalcidologist, ex CIB in the BMNH) met me and took me to the Waite Institute where we picked up some collecting equipment and I was given a quick tour of his domaine. The collection of Parasitica is already looking impressive and I am sure that in the future this collection will be one of the more important collections of Australian Parasitica.

While in Adelaide I collected coccids on a eucalypt from Mount Baker in the hope of rearing some encyrtid parasites. I also collected on some hills near the Waite Institute, where I found a single female of *Metanotalia maderensis*, a european species not previously recorded from Australia, and a number of *Psyllaephagus*. However, the best collecting was on a reserve



called Aldinga Scrub, an area of coastal sand dunes about 50 km south of Adelaide. This place was probably the best I have ever been to for encyrtids. There was at least one undescribed genus near *Cryptanusia*, and several species of *Psyllaephagus* and *Parectromoidella*. The latter genus is very similar in habitus to *Homalotylus* (Encyrtinae) but is related to *Anagyrus* (Tetracneminae). Apart from the encyrtids I also noted some interesting looking pteromalids and eulophids.

After a more extended stay in Adelaide than expected [ed. note: the result of a veritable horror story!], I flew to Perth where I picked up a camper and enough supplies for 14 days or so. My first port-of-call was Kalbarri National Park, which is about 650 km north of Perth on the coast. It was constantly windy during my 8 day stay so that collecting was very difficult. My only salvation was the use of a "light box", which allowed me to sweep for about 30 minutes, emptying the sweepings into several spare sweep nets on my belt, and then dumping the contents into the light box and pooting the chalcids as they emerged from the debris at the bottom. After Kalbarri I drove inland to Mt. Magnet and started collecting at 6 a.m. in an attempt to beat the high daytime temperatures. Encyrtids were in abundance on various *Acacia* spp. and *Eucalyptus* spp. After about 3 hrs. I moved south and found a good spot just south of Payne's Find with quite a lot of *Spinifex* grass. Here, the beautiful *Xenanusia pulchripennis* was quite common. It is a curious beast, looking almost identical to the european *Cerapterocerus*

mirabilis (Encyrtinae) but related to *Anagyrus* (Tetracneminae). I also found a very large, undescribed species of *Charitopus*.

I next drove 500 km or so south to Yanchep N.P., a forested area where R.E. Turner had collected in the 1930's. Collecting by sweeping, Malaise traps and yellow pan traps was really good, including about 70 specimens and 30 specimens respectively of 2 apparently undescribed tetracnemine genera. After 2 days I moved 80 km to John Forest N.P. just west of Perth, then to Mundaring, from which I visited Walyunga N.P., Avon Valley N.P., Kalamunda N.P. and John Forrest N.P. I spent most of my efforts in national parks because it was here that I was sure I would find unspoilt, native vegetation, where my traps would be safe, and I was confident that the areas would remain as they are now and therefore be suitable as type-localities for any new species. In all the parks coccids were especially abundant and I crammed the camper full of various jars full of coccids waiting for the emergence of the parasites. After 5 days at Mundaring I set out for Norseman, about 500 km east of Perth. On the way I stopped at Boorabbin N.P., collecting some *Psyllaephagus* and several *Parectromoidella*.

One of the things that encyrtid collectors habitually look for is a good patch of native grass. The sort of vegetation normally harbours untold delights. One of the problems with southwestern Western Australia is that there are no extensive patches of native grass (except in the Charles Peak area) and so it was necessary to keep stopping on my travels, to investigate patches of grasses. A little south of Norseman, about 1/2 km inside the bush by the road I found a patch of grass about 12 m. square, which yielded about 10-15 encyrtid species. Several kilometers south, near Salmon Gums, I found another patch of grass of a different species and this yielded 2 or 3 species of *Anagyrus*, and their attendant *Prochiloneurus* and *Cheiloneurus*.

I next drove to Cape Arid N.P., which is mostly inaccessible by road unless one has a four-wheel drive vehicle. Though I had to be content with collecting in a relatively small area in the south of the park I turned up some really choice encyrtids. I moved next to Fitzgerald River N.P., which was largely closed because of die-back disease, a fungal disease of several species of eucalypts and other plants that is a serious problem because it kills the plant and is transported from one area to another on the tires of vehicles. The vegetation was unbelievable, almost as though it came from another planet, especially the amazing *Hakea victoriae*. I did come across an extensive patch of grass that turned up a species of *Mira* in droves, as well as a species related to *Anagyrus varithorax*. Collecting on the heathland in the Quaalup area of the park also yielded a brachypterous species of *Cryptanusia*. This species really could jump. I thought I had collected at least 10 specimens but subsequent examination revealed only one.

My next port of call was Stirling Range N.P., a mountainous region with several peaks over 1000 m., some with their own unique species of plants. Encyrtid diversity was very impressive, but here again the encyrtids seemed to occur in very small, discrete patches, with each patch having a different composition of species. Here I turned up one of the most primitive extant mymarids known. Depending on one's point of view, *Gonatocerus* (female with 11-segmented antennae, 5-segmented tarsi and short marginal vein), *Arescon* (7-segmented antennae, 5-segmented tarsi and long marginal vein), or *Australomymar* (9-segmented antennae, 4-segmented tarsi and long marginal and

postmarginal veins) are considered as primitive mymarids. The Stirling Range mymarid has the female antenna 12-segmented, tarsi 5-segmented and with very long marginal and postmarginal veins. Some of the encyrtids seemed just as bizarre; one species was minute but with an antenna about as long as the body and massively broadened and flattened as in *Cryptanusia*.

From Stirling Range I made 2 excursions to Porongorup N.P., my first taste of Kari forest, which is an impressive tall-growing eucalypt that is limited to the wetter parts of S.W. Australia. Pteromalidae and chalcidids were reasonably common on acacia and on the flowers of an unidentified shrub.

My last stop was Walpole-Nornalup N.P., where I stayed at the delightful Coalmine Beach caravan park. At first sight I wondered how on earth I was going to be able to do any collecting; this area has the highest rainfall in WA and consequently the vegetation is very lush and the forest absolutely impenetrable. However, one area of the park was full of peppermint trees that were just ending flowering and sweeping was very productive. There was also some *Melaleuca* in flower which produced several interesting encyrtids, including a genus intermediate between *Cryptanusia* and *Epanusia*. After nearly being caught up in a bush fire I began my return to Perth, first stopping off at Dwellingup forest park. *Acacia* spp. for the first time were pretty useless but I did collect some fine *Neocladia*, *Paracladella* and *Anagyrodes*, which are probably all parasitoids of membracid nymphs (Homoptera).

It is very difficult to know whether I was in western Australia at the best time of year. My own feeling is that southwestern WA has 3 distinct seasons: October/November, December/January and February/March. Few species probably occur in more than one season. This hypothesis is supported by the fact that a previous trip to WA by Ian Nauman and Jo Cardale in the same areas visited by myself, but in October and November, turned up many interesting encyrtids, none of which I collected subsequently.

RESPONSE TO "HELP!"

by Jeffrey A. Halstead

(2110 N. Hayes, Fresno, CA, USA 93722)

In CHALCID FORUM no. 9, Dr. Udo Sellenschlo requested literature on a *Brachymeria* sp. he reared from lepidopteran cocoons found on bananas shipped into Germany from Panama. I briefly looked into the literature and found that *Brachymeria comitator* (Walker) might be the species that Dr. Sellenschlo reared. Burks (1960) states that "*B. comitator* is often taken at U.S. ports of entry in debris from bananas originating in Central America. Specimens have been reared both in quarantine in the U.S. and in Central American countries from *Ceramidia* sp. (Lepidoptera) pupae on bananas. Other specimens have been reared in Columbia from the pupae of *Alabama argillacea* (Hbn.) on cotton, and in Brazil from *Pieris* sp." This wasp is reported from Texas, Mexico south through Central America to Columbia and Brazil (Burks 1969).

A couple of useful references are:

Burks, B.D. 1960. A revision of the genus *Brachymeria* Westwood in America north of Mexico (Hymenoptera: Chalcididae). Trans. Amer. Ent. Soc. 86: 225-273.

Harrison, O.J. 1963. The natural enemies of some banana insect pests in Costa Rica. J. Econ. Ent. 56(3): 282-285.

HELP!

Steven Heydon (Systematic Ent. Lab., c/o U.S. National Museum, NHB 168, Washington, D.C., U.S.A. 20560).

I am completing a cladistic analysis of the genera of Trigonoderini (Pteromalidae: Miscogasterinae) and need to see specimens of the following:

Eutelisca chilensis Hedqvist (males)
Gastracanthus nigricens Kamiijo (males)
Susteraia acerina Boucek (males)
Trigonoderoides nigricans (Masi) (males)
Erdoesia tessellata Boucek (males or females)

Please send specimens to me at the above address. I am also willing to trade alcohol vials or North American Chalcidoidea or literature for pteromalids from anywhere outside of North America.

MEETINGS AND SYMPOSIA

XVIII INTERNATIONAL CONGRESS OF ENTOMOLOGY
University of British Columbia, Vancouver, B.C., Canada
July 3 to 9, 1988

Biosystematics of Insects in Canada. Your editors and other taxonomists from the Biosystematics Research Centre (BRC) will be at the International Congress in Vancouver from 3-9 July. One of us (JH) is on a committee that will organize an exhibit on the theme "biosystematics of insects in Canada". Several other Canadian institutions, including provincial museums and universities, have been asked to participate in the exhibit with their own displays. A room is reserved for this in the conference centre. We plan to have a short (4 minutes or so) audiovisual slide show entitled "a day in the life of the BRC" and a display of 8 panels dealing with past and present BRC and Canadian National Collection (CNC) history, statistics, expeditions, and collecting methods, as well as partners in the CNC and a display of some of the artwork done by BRC artists. We will also have a table displaying some of the scientific and artistic output by BRC staff. This material will not be for sale at the conference but order forms will be available for those interested in obtaining certain publications. There will also be a daily draw for Volume I of the Nearctic Diptera manual, for anyone visiting the exhibit and signing an entry form. Louise Dumouchel of the BRC Hymenoptera Unit will be on hand at the desk and slide show to answer any questions you might have about the BRC and CNC in English, French or Spanish.

We hope to see many of you at our exhibit on the Canadian National Collection of Insects in Vancouver. This will be a good time to put faces on many of the names that are becoming familiar to us through correspondence and contributions to CHALCID FORUM.

Biology of Insect Parasitoids from a Phylogenetic Perspective. The International Society of Hymenopterists is sponsoring a symposium on the theme of "biology of insect parasitoids from a phylogenetic perspective". The symposium is being co-organized by M. Sharkey and M. Wood (both BRC) and is scheduled for the afternoon of Monday, July 4, and Tuesday, July 5. PLEASE NOTE: a meeting of the Society will be held in the same room as the symposium immediately after the first day's talks. The tentative list of papers and speakers is as follows:

- C. VAN ACHTERBERG (Leiden, The Netherlands). The phylogeny of the subfamilies of Braconidae in relation to biology;
- BYRON ALEXANDER (Ithaca, N.Y.). A phylogenetic analysis of the subfamily Nomadinae (Anthrophoridae);
- R. R. ASKEW (Manchester, England). Hymenopteran profiles in temperate and tropical latitudes;
- FERDINANDO BIN, I. NUNZIO, S. MARIO and V. BRADLEY. Antennal structures in *Trissolcus basalis* (Woll.) (Scelionidae): morphology, hypothetical function and potential for biotaxonomy;
- DENIS J. BROTHERS (Pietermaritzburg, Rep. S. Africa). Patterns in the biology of Mutillidae and their relatives;
- D. CHRISTOPHER DARLING (Toronto, Canada). THE EVOLUTION OF HOST ASSOCIATIONS AND MODE OF PARASITISM IN PERILAMPIDAE (CHALCIDOIDEA);
- GARY GIBSON and HENRI GOULET (Ottawa, Canada). New insights for the phylogenetic reconstruction of Symphyta and the origin of Apocrita;
- ERIC E. GRISSELL (Washington, USA). THE RELATIONSHIP OF BIOLOGICAL FACTS TO PHYLOGENETIC FANTASY IN THE TORYMIDAE (CHALCIDOIDEA);
- JOHN M. HERATY (College Station, USA). OF EUCHARITIDS AND ANTS: BIOLOGICAL CONSERVATISM AND MORPHOLOGICAL EXPLOSION;
- NORMAN F. JOHNSON (Columbus, USA). Host specificity and evolution of the Telenominae (Scelionidae);
- LYNN S. KIMSEY (Cambridge, USA). Hosts, functional morphology and phylogeny of the Chrysididae;
- LUBOMIR MASNER (Ottawa, Canada). Convergent chromatic mimicry among some neotropical Hymenoptera;
- DONALD QUICKE (Sheffield, England). Host range and the evolution of the Braconinae (Braconidae);
- A.P. RASNITSYN (Moscow, USSR). Paleontological succession of the Hymenoptera;
- MICHAEL SHARKEY (Ottawa, Canada). Phylogeny and biology of the Braconidae, with the introduction of two new family concepts;
- EUGENY S. SUGONYAEV and N.D. VOINOVICH (Leningrad, USSR). ADAPTATIONS OF PARASITIC CHALCID WASPS TO THEIR HOSTS IN THE ARCTIC;
- HENRY TOWNES (Gainesville, USA). Correlations of host preferences with taxonomic classification in the Ichneumonidae;
- E. TREMBLAY (Portici, Italy). The known types of embryonic development in endophagous Hymenoptera as strategies towards adaptation to parasitism;
- S. BRADLEIGH VINSON (College Station, USA). The various strategies for host utilization among the parasitoid Hymenoptera;
- DAVID WAHL (Gainesville, USA). Phylogenetic relationships within the Ichneumonidae: significance for understanding biology;
- ROBERT WHARTON (College Station, USA). Host relations as a means of defining opiine and alysiine Braconidae;

JAMES B. WHITFIELD (Columbus, USA). Comparative biology and phylogeny of the cyclostome groups of Braconidae: the polyphyletic origin of endoparasitism;
MONTY WOOD (Ottawa, Canada). Reproductive strategies in Tachinidae (Diptera) and their effects on host-parasitoid relationships;
JAMES B. WOOLLEY (College Station, USA). EVOLUTION OF LIFE HISTORY STRATEGIES IN THE APHELINIDAE.

Beltsville Symposium XIII: BIOTIC DIVERSITY AND GERMLASM PRESERVATION - GLOBAL IMPERATIVES

(Beltsville Agricultural Research Centre, Agricultural Research Service, U.S. Department of Agriculture, Beltsville, Maryland, May 9-11, 1988).

In recognition of the accelerating threats to biotic diversity, Beltsville Symposium XIII will focus on the needs and opportunities for preservation and utilization of our natural heritage.

The primary purposes of this Symposium are to discuss recent research results and to identify future research needs for diversity and preservation, in relation to major national and international agricultural issues. Speakers will include leading researchers, policymakers, and other experts from Beltsville and from around the world. Biotic diversity aspects of the symposium will include all organisms important to agriculture - plants, animals and microorganisms - germplasm preservation will emphasize plants.

The 3 day program will consist of 26 invited papers, invited and contributed poster presentations, and demonstrations of computer applications. Visits to specific laboratories and tours of the Beltsville Agricultural Research Centre and the National Arboretum will be held. To receive the first and second announcements with more information on the program, registration and local accommodations, please write to Mrs. J. Weirman, Room 127, Building 001, Beltsville Agricultural Research Centre-W, Beltsville, MD 20705.

PRELIMINARY PROGRAM

Monday, May 9: Session I. Introduction and delineation of issues.
Session II. Basic research and germplasm status.
Tuesday, May 10: Session III. Frontiers in germplasm utilization.
Session IV. Germplasm collection and data management.
Wednesday, May 11: Session V. International issues and linkages.

ETCETERA

CATALOG OF PALEARCTIC HYMENOPTERA (from 9th report of International Society of Hymenopterists, March 1988).

The last world catalog of Hymenoptera was compiled and edited by C.G. de Dalla Torre during the years 1892-1902. Subsequently, comprehensive works have been published for only a few families on a world-wide level. Most of these have appeared in the series *Catalogus Hymenopterorum*. In the past few decades, Diptera catalogues covering all zoogeographic regions have been published, and the catalog of Nearctic Hymenoptera has been updated. The success of these various undertakings has stimulated us to initiate a "Catalog

of Palaearctic Hymenoptera." The catalog will consist of 16 volumes, with editorship and publication undertaken by the Hungarian Academy of Sciences (appointed editor and organizer: Dr. J. Papp). The first circular announcing this project was distributed to potential collaborators in December of 1985. Two additional circulars were subsequently mailed out. To date, 39 hymenopterists have indicated an interest in participating in this project. However, there are still several groups which are not covered. These are: Ichneumonidae (in part), CHALCIDIDAE, LEUCOSPIDAE, PERILAMPIDAE, EUCHARITIDAE, PTEROMALIDAE, APHELINIDAE, TRICHOGRAMMATIDAE, SIGNIPHORIDAE, Heloridae, Proctotrupidae, Megaspilidae, Ceraphronidae, Figitidae, Cynipidae (in part), Andrenidae and Megachilidae. This cataloging effort will not begin until specialists for these families are found, since the purpose is to create a modern, comprehensive manual to the Palaearctic Hymenoptera within a reasonably short period of time. New recruits to the project (the call is also out for collaborators for colleagues already active in the project, particularly for larger families) are invited to contact Dr. J. Papp, Zoological Department, Hungarian Natural History Museum Baross utca 13, Budapest VIII, H-1088, Hungary. A list of current participants in the project is available from Dr. Papp.

JOURNAL FOR HYMENOPTERISTS (from 9th report of International Society of Hymenopterists).

The publication of a journal has been recognized by the International Society of Hymenopterists as a means of focusing the activities of hymenopterists. A committee consisting of Jim Carpenter (as chair), George Eickwort, Jim Johnson, Norm Johnson, and Mike Schauff was formed at the Entomological Society of America meetings in December, 1986, and it has looked into the matter in some detail. They have made the following recommendations: 1) semi-annual appearance (at least initially); 2) editorial control consisting of a managing editor (responsible for putting issue together and final authority for acceptance of papers) and subject editors (responsible for review process) (4 subject areas are suggested for the initial editorial board: aculeate taxonomy, parasitic and sawfly taxonomy, behaviour and ecology, and biological control); 3) publication by established publisher, who does billing for the journal, with no page charges to authors; 4) a subcommittee be formed to investigate prospective publishers, with managing editor and society treasurer serving on negotiating committee and empowered to negotiate a contract; 5) society incorporate forthwith, to facilitate negotiations with publishers, protect the officers from liability and for tax purposes.

Incorporation will require a constitution, which G. Eickwort and M. Sharkey have agreed to prepare, to be put to a vote by the membership when ready. Suggestions for sites of incorporation include Delaware and Washington, D.C. (other suggestions welcome). The title "HAMULI" has been suggested for the journal (other suggestions welcome).

Readers of CHALCID FORUM are invited to submit their comments concerning establishment of a separate journal for hymenopterists, or their willingness to contribute to this project, to Dr. R. A. Wharton (Secretary, International Society of Hymenopterists), Dept. of Entomology, Texas A&M University, College Station, Texas, U.S.A. 77843.

IDAHO ENTOMOLGY GROUP (IEG).

The IEG is in its 15th year of service to the entomological community. It is composed of professional and non-professional people interested in the study of insects, other arthropods, and all facets of natural history, including environmental issues associated with such organisms. Interest is not restricted to Idaho and members are scattered around the globe. Membership dues are \$4.00 domestic (\$8.00 overseas), used to cover the costs of a monthly newsletter. The group holds monthly meetings and/or field trips. Materials for publication in the newsletter are welcome.

Address: Idaho Entomology Group,
Museum of Natural History,
College of Idaho,
Caldwell, Idaho, 83605 U.S.A.

LATE-BREAKING NEWS

Paul E. Hanson (Escuela de Biologia, Universidad de Costa Rica, San Pedro, San Jose, Costa Rica).

As reported in a previous issue of CHALCID FORUM, I am employed by the Universidad de Costa Rica as a visiting professor, hopefully with a good chance of longer-term employment. My official responsibilities are teaching and research in biological control. Since successful biocontrol is dependent on sound taxonomy, my initial emphasis will be to build a good reference collection of parasitic Hymenoptera (and perhaps parasitic Diptera, ugh). Toward this end, the curator of our university insect collection, Luis Fernando Jiron, has put me in charge of the parasitic Hymenoptera. Since we basically have nothing at this point, there is a lot of work to do. Fortunately, Chris Darling and I have established a plan whereby I send all (or nearly all) of my screen sweepings and Malaise trap material directly to him at the Royal Ontario Museum in Toronto. There the Hymenoptera will be sorted and the various groups distributed for study with ROM material (residues will be incorporated into the ROM residue collection). Individuals who obtain such material by this method should eventually return representatives for our collection, again via ROM.

Chris and Brad Hubley have 3 Malaise traps and 15 pan traps in the Monteverde cloud forest, and 2 Malaise traps in Penas Blancas valley. We also have a permanent Malaise trap in the southern part of the country, at Las Cruces (an OTS field station), as well as a couple in the foothills around San Jose. Eventually, I hope to set traps in La Selva, and other areas, the idea being to cover the wide range of habitats present in Costa Rica.

Chris already has some of my screen sweepings, including some from my recent collecting trip to Nicaragua. Most of my collecting in Nicaragua was in the Matagalpa area, which is about as far north as it is safe to go. This area is botanically interesting because it is the southern distributional limit of such plants as pine and sycamore (*Platanus*). While in Leon I had the opportunity of meeting Jean Michael Maes, a Belgian who has been living and collecting in Nicaragua for over 4 years (his group is beetles but he collects all insects); he recently founded a new periodical, Revista Nicaracuense de Entomologia.

I can offer taxonomists -- especially microhymenopterists -- a place to stay while in San Jose.