CHALCID FORUM

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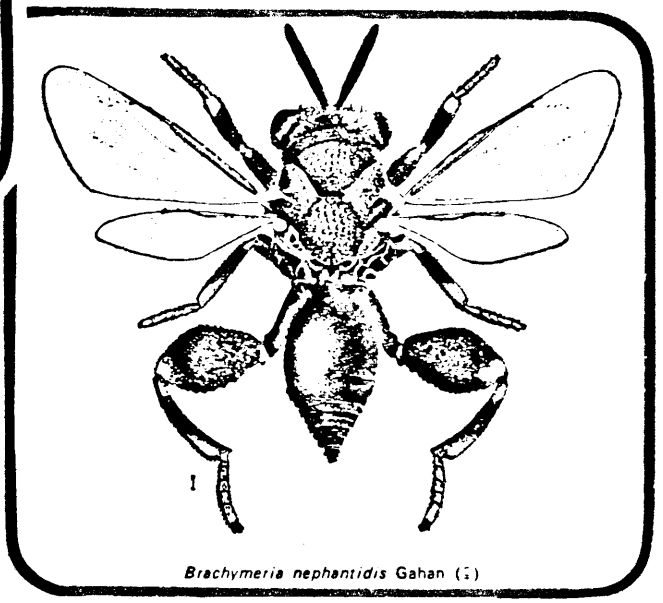
A Forum to Promote Communication Among Chalcid Workers



Brachymeria nephantidis Gahan (♀)

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EDITORS' NOTES

Better late than never. As you may have noticed the "July" issue of CHALCID FORUM is a bit late. There were a number of reasons for this, including a 3 week collecting trip through the eastern USA by the editors in July (see "TRAVEL REPORTS") and the 3rd annual Hymenoptera Workshop (a 10 day course on the recognition of superfamilies and families of Hymenoptera presented by the Hymenoptera unit of BRC), in August. However, autumn is now upon us, the leaves are beginning to turn color, there is a chill in the air and the editors of CHALCID FORUM have returned to their offices to hibernate for the winter (before heading south to Florida in November!!!).

The late issue of CHALCID FORUM resulted in Arnold Menke scooping us in printing parts of "FORUM" in SPHECOS; however, this is not serious as SPHECOS is merely a newsletter for aculeate hymenopterists. FORUM has engendered quite a response lately (though mostly from non-chalcidologists) and we hope that contributions continue to flood in.

To date, there have been 115 responses to the "directory and questionaire" included in the January 1987 issue. The information will be compiled and probably will form the major portion of the January 1988 issue of CHALCID FORUM. If you have not yet returned your questionaire, PLEASE DIG IT UP AND RETURN IMMEDIATELY. Hopefully, the data will not be too out of date before it is issued.

Don't forget to keep sending in reports of what you are doing, trip reports, reports on collections, "peeves", etc. for the January issue. Once again we have compiled a list of RECENT LITERATURE on chalcidoids; if we have

missed one of your papers please let us know (and do not forget to send us reprints of your recent publications). Interestingly, or perhaps worryingly from our taxonomic perspective, most of the recent literature deals with non-taxonomic subjects, and, among the latter papers, a very small number of genera and species. Papers on *Trichogramma* and parasites of synanthropic flies seem to predominate. It is probably because of the economic necessity that so much research time is spent on so few species but we think that a little more study of the great majority of the chalcidoids that are still largely unstudied would prove to be very useful in the long run.

Finally, we want to thank T. C. Narendran for sending in the masthead for this issue. More are welcome.

RESEARCH NEWS

M. S. Abdul-Rassoul. I am primarily interested in Eurytomidae, with additional interests in Torymidae, Ormyridae and Aphelinidae. I am currently working on the taxonomy of Iraqi Ormyridae.

U. C. Abdurahiman. I am curently carrying out work on the biology and ethology of the parasitoid-hyperparasitoid complex of *Opisina arenosella*, the black-headed caterpillar pest of coconut trees. A comparative study of the efficacy of the important parasitoids of this pest has been made (in collaboration with my Ph.D. student, Mr. Snvesh Mohan Ghosh) and a paper of the same has been published.

With my teacher, Prof. K. J. Joseph of this Department, I have recently edited the volume (258 pp.) on "Advances in Biological Control Research in India" - the Proceedings of the National Seminar on "Entomophagous Insects and other Arthropods and their potential in Biological Control", Calicut University, October 9-11, 1985.

Richard R. Askew. I have recently engaged in sorting and analysing the Hymenoptera component of Malaise trap samples from Britain, France, Cayman Islands and Sulawesi with a view to obtaining comparative data on the diversity of Hymenoptera, particularly chalcids, in these regions. My long-term study of chalcid parasitoids of endophytic hosts continues, with recent emphasis on chalcids associated with sawfly galls (with Dr. J.-P. Kopelke of Senckenberg). A study of the chalcids of the Canary Islands also has recently commenced.

Andrew Austin. Current projects are non-chalcidological in scope, including morphology of Scelionoidea and systematics of Australian Braconidae. During September of '86, I visited all main collections in eastern Australia to sort accession holdings of Braconidae. I've also been doing general collecting around Adelaide, with continuously run Malaise traps and pan traps over the 86-87 summer.

Shi Baocai. I am conducting research on parasites of aphids and will investigate the taxonomy of *Pediobius* of Beijing, China.

John W. Beardsley. I am currently working (intermittently) on a revision of the Hawaiian Encyrtidae for inclusion in a proposed volume on Hawaiian Chalcidoidea. I also am intermittently working on Hawaiian Eucoilidae.

Fred D. Bennett. I spent most of November '86 in Guangdong province after attending the 2nd International *Trichogramma* Symposium. I searched for natural enemies of *Parlatoria ziziphi* (Black Parlatoria Scale) and of

cloudy-winged whitefly near Shenzhen and Scinhui. Arrangements for my visit were made by Dr. Li Li-ying, one of the leading researchers on breeding *Trichogramma* sp. on artificial eggs, and Dr. Ren Hui, actively involved in encyrtid taxonomy at Guangdong Entomological Institute. During our field trips Ren Hui and I collected or reared several species that he had not seen before. Some of the encyrtids have been sent to John Noyes who hopes to eventually work up the encyrtids of China with Ren Hui.

Elisabetta Chiappini. I am studying the *Anagrus* specimens of the Debauche collection and I hope that I will soon be able to visit the Naturhistorische Museum of Vienna where Soyka's collection is preserved, and the British Museum of Natural History. I think that I will take part in the "II Conference on the Taxonomy and Biology of Parasitic Hymenoptera" and in the International Symposium on "Influence of environmental factors on the control of grape pests, disease and weeds", where I will present a paper about grape moths' parasites found in our Province.

Steve Compton. My major interest is the ecology and evolution of the fig-fig wasp symbiosis. This necessarily includes taxonomic studies of the southern African agaonids, torymids and pteromalids that occur in figs. At present I am combining intensive work on two local fig trees with an attempt to census the faunas of all the 30 or so fig species in the region. My taxonomic interests are centred on the enigmatic subfamily Sycoecinae. Sidelines include a recent collecting trip to the Krakatau Islands to assess chalcid recolonisation and an examination of the suitability of South African bracken fern insects for introduction as biological control agents to the United Kingdom.

Andrew Davis. Can you be an unpaid professional? If professional means a high standard of work then I hope I qualify. If it means getting paid for what I do then I guess I've been an amateur since 1984. My wife's international journalism is not conducive to long term projects, --- we've lived in four countries in the past three years! Not that I've been idle! Most of my time has been taken up with studies of the host finding behaviour of several ichneumonid, braconid and tachinid species. (Yes, Tachinidae aren't even Hymenoptera, but I won't pretend to be partisan.) In consequence I've had only rare moments to spare for my continuing interest in the ixodiphagine tick parasitoids. Apart from a little practical work I've had to be content with literature study, publishing a bibliography of the Ixodiphagini at the end of '86, and assembling the fragments of a catalogue of this handfull of species.

Somebody's going to wonder why I bother, --- part of the reason is that, well --- the ixodiphagines are there! Furthermore they're oddities. When it comes down to it quite a lot of chalcids have strange habits but the ixodiphagines are the only insect endoparasitoids of Acari (should you know of others please tell me, it would be useful to have something to compare biologies with). There are *Tetrastichus* spp. with mite eating larvae but

that's just not quite the same thing. Ixodiphagine larvae consume the entire contents of FED ticks, 60% of which is vertebrate blood! Anybody still clamouring for justification? Well, the ixodiphagines have biological control potential. At this point all the tick experts chorus: 'its been tried; it didn't work!'. Yes it has been, notably by Cooley in the 1930's, in Montana, and no, it didn't work. Perhaps because, going by some of Cooley's donations of material, the work was done with a mixture of two species. Other studies too, indicate taxonomic confusion, and in any case behaviour appears to differ between provenances of the same species. Current research in India and the USA by people with both entomological and acarological skills, (not a common combination, which again is part of the problem), is more encouraging. Simple mass release is probably out because ixodiphagines appear to have short adult lives and be poor fliers. Release may be more effective where domestic stock congregate, like wells and feed troughs; especially if partly enclosed, such as sun shelters (Saudi Arabia and parts of Africa), or milking sheds. No one really knows, though, how tick parasitoids find their hosts, and how the varied life cycles of tick host species fit in with that of the wasp is a puzzle!

Taxonomic clarification would be a good first move. One or two of you taxonomists, I know, already have your eye on this, but I wouldn't mind tackling it myself some day either! Followed by some detailed examination of climatic tolerances, and field host-finding behaviour. But already I'm dreaming! Locally its *Trichogramma* that holds sway and I've no choice but to succumb to the allure --- well, *Trichos*. are about the same size as ixodiphagines, they have spheroid hosts, and they're Chalcidoidea too, aren't they?? Whatever, a professional amateur, if that's what I am, I still need my CHALCID FORUM.

Loyd R. Davis. I am planning a collecting trip to Mexico in May and the Bahamas in June. I also will attend a meeting for Chemical Ecology in London this July. At the same time I will visit the British Museum to examine types of *Orasema* sp., and if possible collect in southern France.

Huang Da-wei. I am now engaged in research on the taxonomy of Pteromalidae of Hengduan Mountain in the southwest of China. I am also interested in morphology of Pteromalidae and am studying some representative species of various subfamilies.

Paul DeBach. I spend 6 months each year in Baja California Sur, Mexico, collecting micro's in yellow pan traps for the most part. The specimens are donated to the Museum of Entomology, University of California, Riverside, c/o Jack Hall.

A revision of my 1974 book, "Biological Control by Natural Enemies" is being completed with Dr. David Rosen of Israel as coauthor. It is scheduled to be published by Cambridge Univ. Press late in 1987 or early 1988.

Miktat Doğanlar. I have been working on the taxonomies of some genera in Chalcididae collected from the central part of the Black Sea region in Anatolia. This work will be ready to publish this year. Some works on the species of *Entedon* and *Chrysocharis* from Turkey will be finished in the next year. I am also collecting many specimens of Chalcidoidea and keeping them in my collection for works in the near future.

Shamsul-Islam Farooqi. I work as a teacher-cum-research worker at the Division of Entomology, I.A.R.I., New Delhi. I teach courses in insect morphology and taxonomy to postgraduate students. As part of my official duties, I carry out identification of Hymenoptera with particular reference to Chalcidoidea for various correspondents within India. Besides, I am interested in the taxonomy of Pteromalidae and Chalcididae. My recent interests include taxonomic studies on phytophagous chalcidoids belonging to Eurytomidae and Torymidae. I am also working to formulate illustrated keys for the identification of parasitic chalcidoids associated with some major agricultural pests in India.

Stanislaw Glogowski. I am very glad that Mymarommatidae were designated as "honorary chalcidoids" in the last issue of CHALCID FORUM. I would like to inform readers that *Palaeomymar anomalum* (Blood and Kryger) is present also in Poland. Soyka found one female near Wroclaw in 1937 (Breslan in Soyka, Nat. Hist. Maandblad, 1937, p.23). Recently (1985) I caught 111 specimens (23 females, 88 males) near Garwolin (60 km from Warsaw). The traps were placed on the herb layer in coniferous forest. I plan to search for the biology of *Palaeomymar* in that place.

Anthony van Harten. Originally, I was an aphid taxonomist and plant virus epidemiologist, having worked in research on those topics in Angola (1968-1975) and the Netherlands (1976-1982). Since May 1982 I have been working with a project on integrated pest control on the Cape Verde Islands, financed by German development aid. My job is the organization and promotion of biological pest control in this country. Until now we had some nice successes and hope to increase the capacity of parasite multiplication during the next years. Besides the routine work of biocontrol, I am trying to complete the inventarization of local parasites and predators and in my very little free time, I am doing some biological and behavioral studies on some of these local parasites.

For the chalcidoids, a very important group of natural enemies here, I have the support of Mr. Gijswijt, the Netherlands, Dr. Gennaro Viggiani, Italy and Dr. Nagaraja, Philippines. Nothing has yet been published, but a first paper has been planned for this year. In 1985 a german entomologist, Mr. Otto Muck, obtained a Ph.D. degree with the University of Darmstadt, with a study on the biology and behavior of a number of local parasites.

Karl-Johan Hedqvist. Now that I am retired I have more time for study of Chalcidoidea. I am working on a revision of the following genera of Miscogasterini from the Palearctic region: *Nodisoplata, Seladerma etc.* to *Sceloceras*. I also am revising the genus *Pirene* and describing some new species of Pteromalidae from Sweden.

The chalcid fauna of the Canary Islands has been of interest to me for a long time (I have collected about 10,000 specimens) and I am going to describe new genera and species from there.

Last year in November I visited Gambia for my 3rd time, for a short collecting trip. I now have a fairly good collection of chalcid flies from there.

Yoshimi Hirose. I attended the 2nd International Symposium on *Trichogramma* and other egg parasites, which was held in Guangzhou, China on November 10-15, 1986, and presented a paper entitled "Competition and Coexistence among *Trichogramma* in Natural Systems."

Tasawwer Husain. Since 1974 I have been engaged in the systematic studies of the parasitic fauna of India, especially of the family Chalcididae. I also have started the revisional study of the genus *Tetrastichus* (Eulophidae) and other related genera of the Oriental region. Therefore, I request the curators of the museums of the world, and also the readers of CHALCID FORUM, to provide me with the types and also unidentified material of the same genus.

With the cooperation of the members of the forum, I want to take an initiative to start publishing a journal specifically for the taxonomy of the chalcids.

Peter Bonde Jensen. For more than 2 years I have been working intensively with the systematics and taxonomy of the Microteryini (Encyrtidae), taxonomically mainly treating the European taxa. I have reached many interesting and important results, both in the systematics and taxonomy. These results will be represented in 7 or 8 papers (about 125 printed pages) that I expect to finish within the next year (if the necessary money is granted, but anyway the papers will come out sooner or later).

Casas Jerome. I am in a Ph.D. program on the searching behaviour of some parasitoids (mainly *Pnigalio* and *Sympiesis*) attacking the leafminer *Phyllonorycter blancardella* on apple trees. The main emphasis is on a detailed study (quantitative ethology) of the search process aiming at:

1) a better understanding of the different senses used during the search and attack process,

2) quantitative modeling of the search process at the individual level,

3) incorporation of the process at the individual level into population dynamics of the species.

Completed to date is a parasitoid list of Switzerland and a detailed video study of the orientation behaviour on the mines.

Huang Jian. Recently I have been working on surveys and identification of hymenopterous parasites (Chalcidoidea) of the citrus armored scales (Diaspididae) from Fujian Province of China. So far I have obtained the species of the genera *Aphytis, Marietta, Prospaltella, Pteroptrix, Aspidiotiphagus, Coccobius* (Aphelinidae) and *Comperiella, Arrhenophagus, Adelencyrtus* and *Thomsonisca* (Encyrtidae). Besides, I have gotten many species of other genera reared from other scale insects of the plants hosts. I would like to study the systematics of Aphelinidae and Encyrtidae from southern China in the future.

Sheng jin-kun. I am collecting specimens of parasites of forest pests in Jiangxi, China. I will study the Eupelmidae (especially *Anastatus*), Eulophidae (especially *Pediobius* and *Tetrastichus*) and Torymidae (especially *Podagrion*). I would like to see any material belonging to these or other genera of the three families from China. I wish to avail myself of this opportunity to extend heartfelt thanks to the following chalcidologists: Dr. Z Boucek, Dr. T. Tachikawa, Dr. T.C. Narendran, and others.

K. J. Joseph. I shall be retiring from the University of Calicut effective May 31, 1987. I shall, however, be actively associated with research on Hymenoptera and other groups of insects, hopefully as an Emeritus Professor in the Kerala Agricultural University, Vellanikkara, Trichur, Kerala, India.

During October 9-11, 1985, I convened the 1st National Seminar on "Entomophagous Insects & other Arthropods and their Potential in Biological Control". This seminar was conducted in 6 sessions:

1) biology of predatory and parasitic arthropods,
2) biology of insect parasitoids,
3) host-finding and host-selection in entomophagous insects & otherr arthropods,
4) morphology, physiology, biochemistry and developmental biology,
5) ecology, population dynamics and behaviour, and
6) entomophagous arthropods and pesticides.

A 'mini-symposium' on "Advances in Biological Control in India" was also held. Nine invited lectures by specialists on various aspects of biological control of insect pests and weeds highlighted the achievements so far made.

The Proceedings of the Seminar have now been published (March 1977) as a volume titled "Advances in Biological Control Research in India", K.J. Joseph & U.C. Abdurahiman (eds.), 258 pp.; published by Prof. K.J. Joseph, Head, Department of Zoology, University of Calicut, Calicut University P.O., 673 635, Kerala, India.

D. Kostadinov. I finished a study of the distribution of the species spectrum of *Trichogramma* in agroecosystems and some natural ecosystems, in which to date I have found 16 species. At present I am studying the distribution of other genera of Trichogrammatidae in Bulgaria.

Ayres de Oliveira Menezes Jr. I am working on my masters degree in the Zoology Department of the Federal University of Parana (UFPR), Brazil. I'm revising the Brazilian species of Leucospidae, and am also studying other Chalcidoidea because this important group has not been worked on enough in Brazil. I would appreciate being in touch with other researchers who work on this group of parasitic Hymenoptera.

Jeffrey C. Miller. Currently, one project of major attraction involves collecting and rearing Lepidoptera larvae (and occasionally galls of all sorts) from native trees and shrubs in western Oregon. The main objective is to discover host-parasitoid records and to associate host plants and larval-adult identifications of the Leps. Future research interests include studies on intrinsic competition between parasitoids of the alfalfa leaf-cutter bee. The species of immediate interest are *Monodontomerus obscurus, Pteromalus apum* and *Tetrastichus megachilidis*.

Ian Naumann. I am currently under siege as co-editor of the revised edition of the textbook, The Insects of Australia; rewriting Riek's Hymenoptera chapter for this textbook; and pottering with Australian species of Diparinae, Cerocephalinae, Chrysolampinae and Asaphinae.

André Panis. I am a big user of systematics, needed for my field of study. Many thanks to chalcid taxonomists who have sent me reprints of their works, or who would be willing to do so in the future, on any family. Current projects are on chalcid ecology, mainly in oliviculture, citriculture and surrounding vegetation, concerning parasitic behaviour and adult distributions for many species. My research includes biological and integrated control of different pests of various cultivated (and wild) plants. Some coccid-inhabiting chalcids have been cultured for field tests or farm practice during five years or more. Stocks now include *Leptomastix dactylopii, L. longipennis, Metaphycus bartletti, M. helvolus* and *Pseudaphycus maculipennis*. Other Mediterranean or tropical species have been bred in the past (mainly aphelinids and encyrtids), with interchanges for biological control projects and help for living material between colleagues of several countries.

V. Pelov. I am now preparing a list of more than 200 species of Eulophidae and other families distributed in Bulgaria. My main interest now is concentrated on *Tetrastichus* and other eulophid genera.

Bernard Pintureau. I should complete my thesis in May, titled "Evolutionary biosystematics of the genus *Trichogramma* Westwood (Hym. Trichogrammatidae) in Europe". The thesis includes data on nomenclature, synonymy, interbreeding, morphology, enzymes, zoogeography, specificity, speciation and physiology. In the future I plan to study, with *Trichogramma*, genetics of

adaptation of host-parasite complexes, coevolution, population structure, and the systematics of some species.

Andrew Polaszek. I am currently researching the systematics of *Encarsia* with a view to dividing the genus into a number of species-groups. This should make life easier for workers in biological control, for whom rapid and easy identification is often necessary. I recently spent a month working at the University of Naples, Portici, under Prof. Viggiani. From this useful and highly enjoyable visit I found that many of the species-groups described in the valuable preliminary study by Viggiani and Mazzone (1979) are in great need of revision. (See "HELP!")

Gerhard L. Prinsloo. I have recently completed a revision of the sub-Saharan species of *Ooencyrtus*, which should be out towards the end of the year. The study deals with some 35 species. A large part of the work involved the unravelling of a number of Risbec inventions, some of which in the end proved to include no less than 4 distinct species.

With the aid of a new personal computer, a catalogue of Afrotropical Chalcidoidea is slowly starting to take shape. This is a part-time project which will take a few years to complete, but I hope to publish it in parts so that at least some of the information will become available in the not to distant future. My biggest problem is the large number of taxa in some families which at present are misplaced and which have not been revised in recent times. As revisionary studies on these groups are unlikely to be done in the near future, many species will unfortunately have to be catalogued without regard to their true taxonomic placement.

Small projects that are nearing completion include a revision of the Afrotropical species of *Anthemus* and a study of the southern African Signiphoridae.

Alexander P. Rasnitsyn. I have no projects concerning chalcids this year, except for a recently completed manuscript of "An outline of the evolution of the hymenopterous insects" for Oriental Insects. Included is a cladogram of the families, or sometimes superfamilies (sorry, but chalcids are discussed at the superfamily level only).

David Rosen. Current projects include:

1) biosystematic studies of the Aphelinidae, Encyrtidae and Aphidiidae of Israel,

2) selection for pesticide resistance in species of *Aphytis*,

3) the pyriform scale and its natural enemies on avocado in Israel,

4) crawler dispersal of the Florida wax scale and the pattern of infestation of citrus groves by airborne crawlers.

Ramon R. Selove. My work involves the description of the basic biology of *Uscana semifumipennis* (Trichogrammatidae) and investigation of host seeking strategies. *Uscana* is an egg parasitoid of bruchid beetles. I am currently working on a masters degree at Ohio State University under Roger Mitchell and Jerry Downhower.

Samuel W. Skinner. I work on the behavior and genetics of *Nasonia vitripennis* and, to a lesser extent, *Muscidifurax zaraptor* and *Morodora armata*.

Yoshito Suzuki. I am currently working in Indonesia on epidemiology and forecasting of rice tungro disease whose causal viruses are transmitted by the green leafhopper (*Nephotettix* spp.). Chalcidoid wasps are major mortality factors of *Nephotettix* eggs and their contribution to the population dynamics of the latter is under analysis. I have been suffering from the shortage of taxonomical, biological and ecological information on chalcidoids that attack *Nephotettix* in paddy fields. My colleague who is studying the brown planthopper has a similar problem. I would be grateful for any information on Trichogrammatidae, Mymaridae and Eulophidae attacking harmful planthoppers and leafhoppers.

Yu-qing Tang. Although my current work is about taxonomy of Chinese Ophioninae (Ichneumonidae), my main research interest is in Chalcidoidea, particularly Eulophidae, Encyrtidae and Signiphoridae. I also work on biological control of citrus pests.

Gennaro Viggiani. My main taxonomic work is a world basis revision of the genus *Encarsia* Foerster. Biological studies are in progress on several *Encarsia* and *Archenomus* species. Current projects also include the Italian species of *Anagrus*, alternate host for *Calesnoachi*, competition between *Tetracnemoidea* species and control of mealybugs.

Veli Vikberg. I am presently studying the world species of *Asaphes* and *Hyperimerus* and the Finnish species of *Perilampus*. On March 2-5, 1987, I visited the Leningrad Museum. I took part in a symposium dealing with the relationships of the insect faunas of northern Europe and Siberia. My topic was "On the eastern component of Finnish sawfly fauna". At the museum I met many Russian specialists on Hymenoptera, e.g., Dr. V.A. Trjapitzin and Dr. A. Zinovjev. With their help I also studied specimens of sawflies and Chalcidoidea. One lovely evening was spent at the home of Dr. and Mrs. Trjapitzin, where some ten guests were invited, including three of us from Finland. My deep thanks for the generous Russian hospitality!

Anthony Watsham. For the moment I have defected to proctotrupoids under the guidance of Lubomir Masner. The illustrations being produced of African proctotrupoid genera should be ready for the International Congress. When Zdenek gets out of the grips of Girault and Australia I hope to do more illustrations of the chalcidoids. I have done some collecting with yellow pan traps and Malaise traps, but it is not a good year for anything but flies. I also have been neglecting chalcidoids found in figs, and more observations ought to be carried out, I hope in the near future.

How about Sugonyaev doing a drawing of Mongolocampinae for the front picture? [we wholeheartedly agree!!! - eds.]

John H. Werren. I am currently studying the genetics and ecology of *Nasonia vitripennis*. This species has an assemblage of sex ratio distorting elements which are extremely unusual, and of general interest to genetic and evolutionary questions. One of these factors is transmitted through the sperm and subsequently causes destruction of the paternal chromosome, thus converting a diploid egg into a haploid, which develops into a male. A second factor is a bacterium which causes lethality of unfertilized eggs. These have potential as biological control agents. In addition to the extrachromosomal factors, I am studying the ecology of sex ratio control in natural populations of this wasp.

Valentina A. Yasnosh. Last year, June 24-28, I participated in the 5th International Symposium of Scale Insect Studies, Portici (Napoli), Italy. I think a detailed report about that interesting meeting should be included because chalcid study and utilisation in biological control of scale insects was one of the principal questions of discussion [see "ETCETERA"]. I should like to express my deep gratitude to the External Advisory Committee, and especially its head - Michael Koztarab (USA), the members of the Local Organizing Committee - Gennaro Viggiani, Ermengildo Tramblay (Institute of Agricultural Entomology), Antonio Tranfaglia (University of Naples), for the useful and vey pleasant meeting.

FORUM

Antennal Segments
A "mere" matter of flagellation

by Arnold Menke FRES, R&LHS*, CISCA**, etc.
(USDA, SEL, Washington, D.C.)

After reading the pieces by Graham and Gibson in CHALCID FORUM (8:8-10) I decided to throw in my two cents. Readers of SPHECOS are already used to my fits of pique, otherwise described as my view of the rational world of insect taxonomy and procedure, so I may as well let the readers of this rag [hate mail from outraged readers of CHALCID FORUM can be sent directly to Arnold, eds.] have a sample of my screed.

Anyone that has read Snodgrass' Insect Morphology should know that true segments have intrinsic musculature. On that basis, the antenna in Hymenoptera is only 3 segmented. In aculeates at least, the first of these is traditionally called the scape. It is usually larger and longer than the next segment, called the pedicel. The third segment in Hymenoptera is typically subdivided into segment-like units, and the entire structure is called the flagellum. In order to avoid using the incorrect word "segment" for these units, aculeate taxonomists usually refer to them as flagellomeres. Other terms are antennomeres or simply articles. Individual flagellomeres are numbered from I through XI or however many there are. Thus, for example, one can say that flagellomere II is twice as long as III, or that the last four flagellomeres are swollen and form a club.

It seems to me that Marcus Graham and Gary Gibson are doing things backwards in chalcid antennal descriptions. Instead of starting out by using basic antennal morphology (i.e., scape, pedicel and flagellum) and then describing the condition of each (in this instance the flagellum is the basic bone of contention), they simply try to describe what they see using a variety of terms or descriptors. Furthermore, Gary can't seem to decide whether he wants to call everything a segment or an antennomere. He even goes as far as calling the scape an antennomere! Seems to me that we should stick to basic morphology and describe the condition. In chalcidoids the basic problem seems to center on the condition of various components of the flagellum: whether some are tiny, ring-like units, or swollen club-forming units. Using a theoretical example, it is more correct to say: flagellomeres I-III ring-like (II sometimes barely discernable), IV-VI swollen, forming a club.

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** member, Cast Iron Seat Collectors Association

A response to Menke's screed

by Roy R. Snelling (L. A. Co. Mus. Nat. Hist., Los Angeles)

Arnold Menke sent me a copy of his screed on antennal segmentation. Presumably he did so because of his assumption that I have an opinion about very nearly everything. Far be it from me to disillusion him. I do think that hymenopterists should strive toward uniformity in naming morphological structures, but this will not happen quickly, for we are conservative.

The first segment is the scape, a term pretty generally accepted; the following segment is usually the pedicel. The following portion, of course, is the focus of the problem. Aculeate people generally refer to this as the flagellum (but to myrmecologists it, together with the pedicel, constitutes the funiculus!). Arnold objects to designating flagellar segments beyond the first as "segments" because they lack internal musculature; he designates segment 3+n the flagellum and the individual components as "flagellomeres".

Well, I don't care for "flagellomere", because it is a hybrid word, a bastard, if you will: flagellum (Latin, dim. of *flagrum*, whip) + meros (Gr., part). Maybe "flagellitem" would be better. Or, "mastigomere". But not "flagellomere". We are advised to avoid linguistic bastardizations in names for taxa; that injunction should apply to morphological terminology, as well.

The objection to "segment" that Arnold brings up is valid, but narrow. A segment is, after all, merely a piece or part in most dictionaries. This definition is generally accepted and understood. Since Arnold is content to use "thorax" for the mesosoma, even though it really is the thorax + abdominal segment I, why should he balk at flagellar "segments"? I don't expect any of this to change Arnold's mind, though; he is as determinedly inconsistent and illogical as I am (i.e., wholly rational!).

Prosoma Revisited - the FINAL word

by J. Carpenter (MCZ, Harvard Univ., Cambridge)

I have decided to take up the gauntlet Menke threw down regarding use of the term prosoma. I believe that his argument claiming that use of the term head along with mesosoma and metasoma is "absurd, or at least inconsistent" can be countered. As Kojima put it in his note, "the head is the head." The use of the same morphological nomenclature across insect orders is intended to connote homology in Arthropoda. The composition of the primitive hexapod head is disputed, that is, the number of segments comprising it is unclear. But no one doubts that, however many segments there are, all insects have the same number. Since the composition of the head is the same in all insects, use of the term head across orders refers to the same thing. This is manifestly not true of the primitive thorax and abdomen in Apocrita, and use of specialized terms for these is justified. It would, ironically, in fact be inconsistent to use the term prosoma, which is not used in insects. It is used in arachnids, for a very different tagma. Touche. And, by the way, as Kojima also indicates, metasoma is preferable to gaster for general use, since its meaning is unclear. Ant workers use gaster for what is only part of the metasoma, but the term metasoma is unambiguous.

Yet more much ado about nothing; or, -gasterinae vs gastrinae

by W.R.M. Mason (BRC, Ottawa)

I note with interest the series of letters on the formation of the stem for "gaster-". I went through it all about ten years ago before changing Microgasterinae to Microgastrinae. The pertinent articles of the Code are 29(b)i, 32(b) and 32(c)iii. Change, i.e. correction of an incorrectly formed stem of a generic name used as the base for a family group name is obligatory; tradition, usage and priority do not enter the question. Since I do not suppose any of the disputants wish to ignore the code, the only issue is how to form the correct stem of gaster.

If one consults a really big Greek lexicon (I mean a ten-pounder, not a pocket dictionary) it will be seen that the second stem of gaster, namely "gaster-" appears only in poetry, never in prose nor is it used in making compounds with gaster. Greek poets took numerous liberties with the stems of third declension -er nouns. Since we cannot ask them why we can only guess that is was in order to fit the stress (which shifts back and forth with different case endings) to the rythm of the music. In modern English our calypso singers put the accént upon the wrong syllable when singing a tropical

song to fit the music and we let them get away with it because it is amusing. But not correct.

I concluded that we should follow the correct prose root "gastr-" in nomenclature. If the pull of the other stem is so strong then we had better publish in poetical form- who knows, we might get away with it.

In honor of the occasion I submit some conciliatory poetry:

Viennese workers could write all their papers in dactyls,
Míscogastéridae beating their delicate wings,
Led by the famous and beautiful waltzes of Strauss

Slavics may prefer their work in trochees,
Míscogástrids searching for their hosts in polkas,
Written by that self-genius, Strauss.

W. M.

Pleuron versus Pleurum

by H.K. Townes (AEI, Gainesville)

In my papers I use the term "pleurum" rather than "pleuron". A few other authors favor the same useage. Without trying to prosolitize, I wish to give the reason for this preference.

The Greek ending on is for a neuter singular noun (usually). When a neuter singular Greek noun is Latinized the on is converted to the Latin neuter singular ending um. Thus the Greek noton (back) is Latinized to notum and the Greek sternon (breast, of males) becomes the Latinized sternum. But the Greek pleuron (side) is usually not converted to the Latinized pleurum. For consistency, I prefer to convert it and use pleurum.

I do not claim that we should always or can always choose terms for consistency. Recent discussion in this same forum show that inconsistent terms are frequently used, are usually the most practical, and that real consistency of terms is often not attainable.

RESEARCH INSTITUTES

BIOLOGICAL CONTROL LABORATORY (Chinese Academy of Agricultural Sciences, 30 Bai Shi Qiao Road, Beijing, People's Republic of China).

by: Dr. Qiu Shibang

Our laboratory, one of the 33 institutes of the Chinese Academy of Agricultural Sciences (CAAS), was established in 1980 and currently has 40 technical staff members. It is now the only institute of national level soly devoted to research groups in the lab working on the biology, mass production, and use of such natural enemies as *Trichogramma*, *Encarsia formosa*, entomopathogenic nematodes, predacious mites, *Beauveria bassiana*, *Chrysopa* spp., *Orius* spp., etc. The laboratory is authorized by the Chinese Ministry

of Agriculture, Animal Husbandry and Fishery to coordinate the nation's foreign exchange of beneficial organisms for biological control. We have a small quarantine facility to serve this purpose. Permissions for exporting living natural enemies to foreign countries are also issued by our laboratory.

Besides the forementioned research and administrative activities, this laboratory produces a quarterly CHINESE JOURNAL OF BIOLOGICAL CONTROL, myself being the chief editor. All the research reports in the journal have English summaries, as we intend to provide our foreign colleagues with a source of information about biocontrol in China. Up to date, we have established publication exchanges with over 60 institutions/individuals of various countries.

A list of the principle scientists of the Biological Control Laboratory, with their major research interests are as follows:

QIU Shibang	Professor, Director Emeritus, Advisor
BAO Jianzhong	Director; Professor, Entomologist
YE Zhengchu	Vice Director; Biocontrol of soybean pests
ZHANG Naixin	Prof.; Predacious mites, biocontrol of fruit tree pests
SHEN Mingzhu	Prof.; Reutilization of agricultural wastes, agricultural environment protection
TIAN Yuqi	Assoc. Prof.; Biocontrol of vegetable pests
DONG Huifang	Assoc. Prof.; Predacious mites, biocontrol of ornamental pests
ZHOU Weiru	Assoc. Prof.; Mass rearing and use of *Chrysopa* spp., augmentation of native natural enemies
LI Pingshu	Assoc. Prof.; Entomopathogenic nematodes
XIE Deling	Assoc. Prof.; Selection and use of agricultural antibiotics against plant diseases
WANG Ren, Ph.D.	Assist. Prof.; foreign exchange of beneficial insects and quarantine, biological weed control
YANG Huaiwen	Assist. Prof.; Entomopathogenic nematodes
GOU Xueqi	Assist. Prof.; Bionomics and use of *Trichogramma*
WU Zhenkai	Assist. Prof.; Screening and use of *Beauveria bassiana*.

HELP!

Jeffrey A. Halstead (Kings River Conservation District, 4886 E. Jensen Avenue, Fresno, CA, 93725 USA).

I would like to see specimens identified as *Hockeria* = *Haltichella perpulcra* (Walsh). This species was described in 1861 by Walsh from Champaign County, Illinois (USA). The type was destroyed in the Chicago Fire of 1871. My revision of the North American *Haltichella* (Chalcididae) is complete except for this 'minor' problem.

Paul Hanson (Escuela de Biologia, Universidad de Costa Rica, San Pedro, San José, C.R.).

I would greatly appreciate receiving reprints of publications in the areas

of systematics and biological control from fellow readers of CHALCID FORUM because the library here lacks many of the more specialized entomology journals. I would be happy to reciprocate by keeping an eye out for particular taxa which you might desire from the Neotropics, including rearing of particular hosts.

D.S. (Woody) Horning, Jr. (The Macleay Museum, The University of Sydney, NSW 2006, Australia).

I am interested in finding someone who is willing to identify large series of Chalcididae and Leucospidae from Cuba. This material was collected between 1826 and 1836 by William Sharp Macleay, while he was a judge on a Cuban court.

I also would be most interested to know which chalcidoids are being cultured and where. There should be spare material of reliably identified material that people might want to send to other collections. This would be most useful to me so that I could get a better understanding of the different families of Chalcidoidea. Also, we have the largest foreign insect collection in Australia and I would like to add further foreign specimens.

Andrew Polaszek (Dept. Entom., British Museum (Nat. Hist.), London S.W.7 5BD, United Kingdom).

For my study of the species-groups of *Encarsia* (Aphelinidae) I require as much material, of as many species as possible, from all over the world, with host records. I therefore appeal to colleagues for such material. The best quality slides can be made from freshly killed specimens sent to me dry, in gelatine capsules packed with cotton-wool. Whenever possible, identified material will be returned to the sender, if requested. With thanks in anticipation.

Mike Schauff and Eric Grissell (Systematic Ent. Lab., USDA, c/o U. S. National Museum, NHB 168, Washington, D.C., 20560 USA).

We are in the process of completely recurating, and cataloging our collection of chalcidoid type slides. As you can imagine, this is driving us crazy (a short ride, we know). One problem is that in the past, type slide material was not necessarily distinguished from pinned type material on loan forms. IF you have any USNM primary type material on slides AND you have had it for more than 6 months, PLEASE write and let us know what you have. We will not use this information against you, we promise. Our only interest is in making sure that we are not inadvertantly leaving out slides that we should be including.

Udo Sellenschlo (Hygienisches Institut, Marckmannstr. 129 a, D-2000 Hamburg 28, West Germany).

I am looking for literature about *Brachymeria* from Middle America. In our department we got bananas with lepidopteran (moth) cocoons from Panama. Instead of moths one specimen of *Brachymeria* sp. hatched, all other cocoons were also parasitized but inside I found only dried up puparia.

TRAVEL REPORTS

Eric Grissell. In 1986 I was able to combine a 3 week trip to India with 2 weeks of study at the British Museum. The period covered 15 September to 18 October. The India part came first. I arrived in New Delhi at 3 a.m. in the morning and got up 4 hours later to face paperwork at the U.S. embassy! [pity the poor buerocrats - Eric is not a pretty sight after a good 10 hour sleep!] The next day I took a plane to Cochin (in south-west India) where I was kindly met by Dr. T.C. Narendran who arranged a 5.5 hour death ride up the west coast to Calicut University in the District of Malappuram. (The city of Calicut, oddly enough, is in the District of Kerala. I think this sort of diversion was invented by the British to confuse invaders.) Here I was lodged in the university guest house, where, for a small sum per day, I was made to feel comfortable. After spending a day at the university, Narendran and I (along with our driver and field assistant) took off for the hills -- the Western Ghats, that is. We drove to the Nilambur Substation of the Kerala Forest Research Institute (founded in the 1840's) where collecting was swamped by slightly unseasonable, torrential downpours. The next day we did a little collecting along a scenic river bank and in some pasturage, but again the rain plagued us. The pasture was good for encyrtids, chalcidids, eulophids, and one common species of torymid (*Torymoides*). We left Nilambur a day later, still accompanied by rain, and drove to the town of Udagemandalam (elev. 2240 m) in the state of Tamil Nadu. Here we spent several days fighting cool weather accompanied by heavy siege of rain, floods and intermiitent auto failure. After several days of disappointment we decided that since all of India was new to me, collecting at the university could be as interesting as anywhere else. Here I spent five days alternately collecting between rain storms and sorting material from alcohol in the laboratory. My main area of focus was the botanic garden which sits a hundred yards or so from the Zoology Department. I cannot say that the collecting was satisfying for my own research, but I did obtain a few species of torymids which our collection did not have. Other material from the trip is in the process of being dried and mounted. Dr. Narendran deserves special mention for having helped me in many ways. After another 5 hour drive from Calicut University to Cochin I flew to New Delhi where I spent a day completing paperwork for the embassy, and because the next day was an Indian holiday, I took time off to visit the Taj Mahal (an exhilarating 8 hour round-trip bus ride). The next day I left India for England where I spent 2 uneventful weeks (in terms of entomology) studying specimens at the British Msueum.

Udo Sellenschlo. During February 1985 I spent 3 weeks in Khartoum, most of the time I studied visitors to the milkweed *Calotropis procera*. Only some specialized insects are able to attack the poisonous plants. On some parts of the shrubs I found some chalcid flies (*Dirhinus sp., Brachymeria podagrica, Proconura sp., Tetrastichus (s. str.) sp.,* and *Stilbula* sp.). It seems that some of these are new species. Later I spent 3 weeks on Lanzerote (Canary Islands) in March 1985. Near the villages I found shrubs with galls from *Asphondylia conglomerata*. Some larvae of the gall makers were parasitised only by *Torymus* sp. Opening some galls I found different larval

stages of *Torymus*. In March 1987 a colleague of mine collected galls of *A. conglomerata* from another place on the island. Because of the aridity in that year only a few torymids and some other chalcid species were hatched out of the galls.

Andrey V. Sharkov. Last year I and V.A. Trjapitzin had the opportunity to spend two months (April-May) in three northern provinces of Vietnam as members of the zoological expedition of the Zoological Institute, Academy of Sciences of the USSR. The main goal of our expedition was to start studying the practically unknown fauna of the country together with the specialists from the National Centre of Scientific Researches of Vietnam (NCSRV).

The first week we spent in Hanoi, where I was very much surprised by exotic oriental bazaars with tropical fruits and vegetables, alive birds and animals, hand-made goods, adornments, etc., etc., that is impossible to enumerate or even imagine. In the streets I was almost stupefied by the abundance of bicycles and practically the absence of motor cars. The bicycle traffic was so intensive that sometimes it was impossible to cross the road. However, collisions were very rare, which was very difficult to understand why.

From Hanoi we went to Tamdao (a small locality in Tamdao mountains, about 80 km northward of Hanoi, prov. Vinh Phu). A temperature of 13-15 °C and frequent mists and rains were not very favorable for good chalcidoid collections and material collected there by us was quite poor.

From Tamdao we moved to Quang Chu, a small village in the province of Bac Thai, about 20 km northward of Thai Nguyen-city. Perfect dry weather coupled with excellent landscape conditions (closeness of jungles from one side and of dry hills with very rich herbaceous and shrub vegetation) led us to very good results. During two weeks spent there we collected a rich material of practically all families of Chalcidoidea (including 2 specimens of Tanaostigmatidae).

We spent the beginning of May in Hanoi, discussing plans of work with our colleagues from NCSRV. Then, during two weeks we visited different localities in the province of Son La. The nature of this province has suffered considerably from human activity, especially from the fire agriculture on the slopes of the mountains, which have led to a reduction of forests and to soil erosion. A great number of the slopes are now covered only with bamboo brushwoods. Collections made in Son La were not so rich as in Bac Thai, caused by the beginning of the rainy period. During foul rainy days only a large amount of delicious banana at a fabulously low price helped us to keep good spirits. In the village of Song Ma (prov. Son La) I also tried for the first time a very good plate made from green mango with sugar, which helps very well to shake a thirst.

From Son La we returned to Hanoi and spent the last two days near Haiphon bathing in the South-Chinese Sea, which was as warm as fresh milk!

In conclusion, I want to acknowledge the kindness of the people we met everywhere. Everybody from our colleagues from NCSRV to country people (some of them seeing Europeans for the first time) tried to help us in our work and to facilitate our life in unusual conditions.

Our entire trip was very nice and fruitful. But "East or West, home is best", and we were very glad when we returned to Leningrad.

After only one month home I was off again to the Northern Karelia at White Sea coast, where I spent a week with Natalia Voinovich and E.S. Sugonjaev, also collecting chalcids and bathing in the sea, which was, however, "a little" colder than in Vietnam.

John Huber. From July 6-18, Gary Gibson, Louise Dumouchel (who looks after the CNC Apoidea collection) and I went on a collecting expedition to the eastern U.S.A. (West Virginia, Virginia, N. & S. Carolina, Georgia and Florida). Although we did a small amount of active collecting here and there (screen sweeping by JH, photoeclector by LD and separation bag by GG) the main purpose was to empty 27 Malaise and flight intercept traps that were installed in late March by the previous collecting (or mostly trap setting) crew made up of Lubomir Masner, Henri Goulet and Louise Dumouchel. The net result was 147 samples of mass collected material in alcohol, to be sorted for Hymenoptera this coming fall and winter. The success and comfort of the trip was in large part due to the excellent and faithful cooperation of colleagues in each of the states mentioned and their uniformly gracious hospitality (we camped only 2 nights in the entire trip). Details of the trip will be given in another issue when, hopefully, we will have some results of our sorting to report. Presently, the third collecting expedition, including a Lepidopterist, is on its way south to empty the traps again. Undoubtedly they will come back with another 150 or so samples. The fourth and final crew will bring back the final samples and traps in late November on their way to the Parasitic Hymenoptera workshop in Gainesville and, on the way back, the Ent. Soc. America meetings in Boston.

ETCETERA

IOBC Working Group on "Physiology and behaviour of plant-host-parasitoid relationships".

The International Organization for Biological Control of Noxious Animals and Plants (IOBC) is aimed at stimulating scientific activities around the world in order to develop effective and harmless methods of controlling pest species. The research operations concentrate on the use of biological control agents, whether alone or in combination with other control measures in the general frame of integrated pest management. Most scientific actitivties of the global IOBC are carried out through Global and Regional Working Groups, the former of which are: WG on the quality control of mass-reared arthropods, WG on the biological control of *Heliothis* spp., WG on fruit flies of economic importance, WG on *Trichogramma* and other egg parasitoids, WG on *Ostrinia nubilalis* and WG on the bruchids attacking pulsus. Some of these have been extremely useful over the last few years in organizing meetings, publishing and distributing scientific documents, etc., and in developing a high level of expertise that is now widely recognized. The IOBC has received a proposal from S.B. Vinson (Dept. of Entomology, Texas A&M Univ., College Station, Texas, USA, 77843) to establish a Working Group on "Physiology and behaviour of plant-host- parasitoid relationships". No doubt that many

specialists are likely to be enthusiastic about the project and should express their support or otherwise give comments in writing to S.B. Vinson or the Secretary-General of the IOBC (J.P. Aeschlimann, CSIRO Biological Control Unit, 335, av. P.-Parguel, 34100 Montpellier, France) [more information about IOBC, including membership, can also be obtained by writing the Secretary-General].

Fifth International Symposium of Scale Insect Studies (ISSIS-V).

The fifth international symposium of scale insect studies was held in Portici, Italy, June 24-28, 1986. Presentations were grouped into five major sessions: I-Phylogeny and Taxonomy, II-Morphology, III-Faunistics, IV-Scale Insects of Economic Importance and their Natural Enemies, and V-Poster Presentations. Session IV was cochaired by D. Rosen and V. Yasnosh and included 10 presented papers, 6 of which dealt with parasites of scales:

1. Rosen, D. (Israel) - Natural enemies of Diaspididae and their utilization in biological control;
2. Yasnosh, V.A. (USSR) - Integrated control of scale insects in citrus groves in the USSR;
3. Viggiani, G. and A. Garonna (Italy) - Preliminary observations on the biology of *Archenomus orientalis* Silvestri (Hymenoptera: Aphelinidae), parasite of white peach scale, *Pseudaulacaspis pentagona* Targ.-Tozz.;
4. Podsiadlo, E. (Poland) - Interrelations of scale insects of the genus *Asterodiaspis* Signoret and their encyrtid parasites in Poland;
5. Battaglia, D. and G. Viggiani (Italy) - Natural enemies of the holly scale *Dynaspidiotus britannicus* (Newstead) in Italy;
6. Laugonia, S. and G. Viggiani (Italy) - Natural enemies of the citrophilus mealybug, *Pseudococcus calceolariae* Maskell, in Campania, Italy.

Papers presented in the symposium will be published as part of the Symposium Proceedings. Further information about the Symposium or Proceedings can be obtained from: Michael Kosztarab, Dept. Entomology, Virginia Poytechnic Inst. & State Univ., Blacksburg, VA, USA 24061.

Organization for Tropical Studies by Henry A. Hespenheide.

The Organization for Tropical Studies is a consortium of 40 U.S. and Costa Rican institutions whose goals are to promote biological research and offer graduate level courses in pure and applied tropical biology. As part of these missions OTS operates a field station, La Selva Biological Station (formerly "Finca La Selva") in the Caribbean lowlands of Costa Rica. Recently there has developed an interest, supported by the Board of Directors of OTS, in "developing a faunal and habitat study of La Selva insects and related arthropods". Dr. K.C. Kim of Pennsylvania State University is charged with developing such a study, which he has indicated should include four major components: field collecting, taxonomic studies, collection management, and publication. Because of my interest in beetles and parasitic Hymenoptera (as well as an OTS Board member), I am enthusiastic about the project and have been collecting certain taxa - including chalcidoids - during annual trips there for a variety of specialists [I can attest to the value and interesting nature of the specimens Henry collects, but beware, based on the eupelmids be

prepared to receive species that are virtually all undescribed! GAPG]. Anyone interested in participating in the faunal inventory or in studying chalcidoids from La Selva should write me about it. Additionally, OTS provides logistic services to researchers working in Costa Rica (vehicles, obtaining permits, etc.) and operates other field stations there. Inquiries can be directed to OTS' North American Office, P.O. Box DM, Duke Station, Durham, N.C. 27706 USA.

International Society of Hymenopterists, 7th Report (June 1987) by Robert A. Wharton, Secretary.

The society now has 356 members. A committee has been formed to look into the possibility of developing a journal for the society. The major problem at present is finding someone willing to be editor-in-chief. If anyone would like to volunteer in this capacity, or if you can suggest someone with appropriate editorial experience, please contact Dr. James Carpenter at the Museum of Comparative Zoology, Harvard University, Cambridge, MA, 02138 USA. For more details see CHALCID FORUM no. 8 or contact the secretary.

A new slate of officers is needed for the 4 year period 1988-1992. We are currently without a president, since Lubomir Masner stepped down last fall after assuming more administrative duties at the Canadian National Collection. The terms for the remaining officers (Charles Michener, James Woolley, Robert Wharton) expire in July of 1988 (during the International Congress), and they do not wish to be considered for re-election. Please send your suggestions now for potential officers. Ballots will be sent to members at the end of this year or the beginning of next year. It is our feeling that the secretary and treasurer should be located at large institutions and/or large cities. This would alleviate problems with foreign currency exchange for the treasurer and would make it easier for the secretary to keep abreast of current developments. We have also found it very helpful to have the secretary and treasurer at the same institution, though this may not be as important now that the society is more firmly established.

Our society's symposium "Biology of parasitic Hymenoptera from a phylogenetic perspective" has been approved by the organizing committee of the International Congress of Entomology in Vancouver, Canada, for July, 1988. The symposium will include about 25 speakers, and cover 1 1/2 days. Congratulations to Mike Sharkey for doing such a splendid job on this. Two additional symposia have been organized for the International Congress, one on parasitoid physiology and one on parasitoid ecology. More information will be provided on these later.

Plans for the 2nd conference on the taxonomy and biology of parasitic Hymenoptera, to be held in Gainesville, Florida, November 19-21, 1987, are being finalized. Virendra Gupta already has a full slate of speakers for the time slot originally devoted to biologists, so please contact him now if you plan to participate in either the biology or the taxonomy sections.

The annual meeting of the Entomological Society of America (ESA) will be held shortly after the Gainesville Conference. This year's meeting will be held in Boston, Massachusetts, and Jim Carpenter will host an informal conference of the hymenopterists society at the Museum of Comparative Zoology. More details later. As a special added attraction, Scott Shaw has organized a symposium at the meetings under ESA's section A (systematics,

morphology and evolution). The symposium title is "Origin and evolution of parasitic Hymenoptera". Scott has lined up 9 speakers, covering most of the parasitic groups, with a lead-in on symphytan evolution and the sister group of Apocrita by Gary Gibson.

Successful meetings were held recently in Guangzhou, People's Republic of China (2nd International Symposium on *Trichogramma*, Nov. 1986) and College Park, Maryland (International Workshop on Parasitoid Biology, Apr. 1987) and others in the same series are being planned. If you know of other gatherings, please send notices to the secretary.

[NOTE: Membership in the International Society of Hymenopterists can be obtained by sending $5.00 (in U.S. funds) to the treasurer: Dr. James Woolley, Dept. Entomology, Texas A & M University, College Station, Texas, 77843 USA. Individuals in countries with currency exchange restrictions may request a waiver of the dues.]