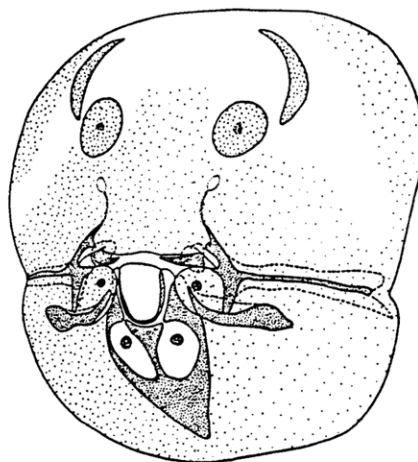


# ICHNEWS

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## November 1992

### EDITORIAL APOLOGIA & COMMENTS

by David Wahl

Well, this issue is somewhat overdue . . . by about 2 years. The fault lies entirely with me. A number of factors, including the death of Henry Townes and increased duties at the AEI, led to a steady postponement. Perhaps one of the most important delaying factors was the daunting prospect of typing up the literature citations that have been a standard feature of this (and other) newsletters. The editors of ICHNEWS, however, extensively discussed this service and have decided, beginning with this issue, to drop it (a selected survey of subscribers supported this move). It appears to us that citing all the literature simply benefits too few people for all the work involved. ICHNEWS should be as a forum of communication among the ichneumonoid research community: trips, activities, requests, etc.

On that subject, I should note that last year's questionnaire was sent out to about 225 people. I explicitly noted that those who did not respond would be dropped from the mailing list. Disappointingly, there was only a 40% response to the mailing, and this includes those who signed only their names on the returned questionnaire. Allowing for known active workers, the mailing list has been trimmed to 150.

A newsletter such as ICHNEWS rises or falls upon the interest of the community. It is up to you to determine the contents and quality of ICHNEWS. Points of view, comments, technical matters, reviews, and reports are all welcome. As Paul Marsh discussed in his Editorial in the last issue, research articles are discouraged; ICHNEWS is not a primary publication source.

The editor for the next issue is Mike Sharkey and all items of interest should be sent to him. Since all the editors use WordPerfect, it will be greatly appreciated if lengthy submissions are sent on a diskette in that format.



### ANNOUNCEMENTS

**CLBRR/Canacoll Foundation Workshop  
on Hymenoptera Identification,  
18-26 Oct. 1993  
Ottawa, Canada**

The Centre for Land and Biological Resources Research and the Canacoll Foundation will sponsor an 8 day workshop on Hymenoptera identification to the family level. This is the fourth such course. Each participant will receive the textbook Hymenoptera of the World, written by six CLBRR taxonomists and colleagues from five other institutions. The course fee is \$400 (Canadian). For further information, contact the course coordinator: Michael

Sarazin; CLBRR; Agriculture Canada;  
Ottawa, Ontario K1A 0C6; CANADA.  
Telephone: (613) 996-1665; FAX:  
(613) 995-1823.



**Taxonomy and Biology of  
Parasitic Hymenoptera;  
28 March-4 April 1993  
University of Sheffield**

The fourth of this series of training courses, similar to those given by Agriculture Canada and the USDA/ University of Maryland, is being offered next year at Sheffield, England. Run jointly by the University of Sheffield and the Natural History Museum, it aims to give a broad overview of parasitic Hymenoptera and provide instruction in their identification. The fee is £550 (fully inclusive). For further information, please contact Dr. Donald Quicke, Department of Animal and Plant Sciences, P.O. Box 601, University of Sheffield, Sheffield S10 2UQ, UK. Telephone: (0742) 76855, ext. 4628; FAX: (0742) 760159.



### Hy-men

Hy-men, an Italian newsletter about Hymenoptera and Italian Hymenopterists started in March 1991. Guido Pagliano and Pier Luigi Scaramozzino are the editors. They would "like to

receive all the materials that you believe helpful for the persuance of our project (announcements of congresses or meetings, new books about Hymenoptera . . .) as well as other news that we could publish in Hy-men." The editors may be contacted c/o Museo Regionale di Scienze Naturali; Vial Giolitti 36 - 10123; Torino; ITALY.

### International Entomology Resource Guide

The third edition of this guide is available for \$7.95 (foreign orders, add \$2.95 for airmail) from: Young Entomologists Society; 1915 Peggy Place; Lansing, MI 48910-2553; USA. This resource guide includes over 550 businesses and organizations offering collecting equipment and supplies, insect traps, insect pins, collection storage equipment, microscopes and laboratory equipment, gifts and "novelty items", consultants, tours and vacations for insect collecting, illustrators and photographers, living and preserved arthropods, etc. It also includes a worldwide listing of insect zoos, butterfly houses, and entomological organizations.

### "Center for Parasitic Hymenoptera"

by David Wahl

The American Entomological Institute frequently receives mail that includes "Center for Parasitic Hymenoptera" as part of the mailing address; this is also sometimes combined with the address of the University of Florida. The "Center for Parasitic Hymenoptera" was the name for the proposed University of Florida research center to be formed about the Townes Hymenoptera collection (Gupta, V.K. 1983. Contrib American Ent. Inst. 20: 1-14). No agreement was ever reached between the Townes and the University of Florida, and consequently no such organization exists. The Townes collection is now part of the American Entomological Institute, which is an independent research organization without ties to the University of Florida or any agency of the State of Florida.

### POINTS OF VIEW

#### Specimen processing

by Robert Wharton  
Texas A & M University  
College Station, Texas

In ICHNEWS 12 (pp. 6-7), Sharkey suggests that chloroform is better than amyl acetate for taking ichneumonids out of alcohol. This has not been our experience, and we prefer the amyl acetate. Chloroform may be more toxic. In either case, specimens taken through freshly prepared solutions tend to be much more pliable than specimens taken through older solutions.

We have noted several problems associated with samples stored in alcohol. Some samples, when dried, are coated with a fine, wax-like substance. This occurs both when samples are taken through a critical point drier or amyl acetate. Samples which are air-dried directly from 95% ethanol seem to be more heavily coated. A number of people have offered suggestions as to what causes this, but does anyone really know? Similarly, what makes alcohol go cloudy and form a precipitate when alcohols from two different sources are added together? [Editor: And does a dog have the Buddha-nature?] We seem to be able to produce this result under a variety of circumstances using only ethanol but never consistently enough to identify the source of the problem.

#### Anterad, posteriad, laterad, mesad, etc.

By Michael J. Sharkey  
Agriculture Canada  
Ottawa, Ontario

It is often difficult to decide which preposition to use in conjunction with adjectives such as anterad, posteriad, etc. Does one use anterad of the leg, for example, or anterad to the leg? The answer is simple: these words do not take a preposition.

Ad is Latin for "to" and the preposition is already built into the word.

Anterad means "anterior to" and adding another "to" or "of" is simply redundant. So, "anterad the leg" is the correct usage.

One sees this mistake to ad-nauseum! (Joke)

#### Tergite or tergum

by Michael J. Sharkey

These two words are used in many systematic works as though they are synonymous. This, however, is not the case. The following definitions are from the new edition of Torre-Bueno's Glossary of Entomology.

Tergite: a dorsal sclerite or part of a segment, especially when such consists of a single sclerite.

Tergum: the upper or dorsal surface of any body segment of an insect, whether consisting of one or than one sclerite.

One often sees references such as "tergite one longer than tergite two". This is correct only if these terga are composed of one tergite each. If there are lateral and medial terga as is usual, one must use tergum (terga). To simply matters, one could use tergum (terga) in all instances since these terms are applicable when there is one or more than one sclerite composing the tergum.

#### Contra Sharkey

by David Wahl

A better source for examining the tergite vs. tergum question is Snodgrass (1935). He defines tergum (p. 71) as a "major segmental plate of the dorsum . . . [s]ubdivision of a principal segmental plate or the component sclerites of a major area of sclerotization, then, becomes tergites, sternites, and pleurites, respectively, since the suffix -ite has a fractional significance." He further states (p. 250) that "[i]n many insects, particularly the larval forms, the dorsal sclerotization of the abdomen may be broken up into groups of segmental tergites. In single cases we may distinguish in each segment a

median tergite . . . and one or more laterotergites . . ." Adult ichneumonids, as well as many apocritans, certainly display this phenomenon, and it may be assumed that separate laterotergites (epipleura sensu Townes) are part of the family's ground plan. If one uses the term "laterotergite", then "tergite" is perfectly acceptable.



## OBITUARIES

### W.R.M. Mason (1921-1991)

by Michael Sharkey

William Richardson Miles Mason died peacefully on December 24, 1991 after suffering a stroke several days earlier. Bill was born in Lucknow, India, on November 29, 1921. He joined the Systematic Entomology Unit of Agriculture Canada (later referred to as the Biosystematics Research Institute) on November 16, 1948.

Bill received his B.Sc. in 1942 from The University of Alberta where he studied under Prof. E. O. Strickland. During the war he was a navigator for the Royal Air Force and participated in many bombing missions over Germany. After the war, he attended Cornell University and received his Ph.D. in 1952.

Bill's scientific interests were centred on the systematics of the Braconidae and Ichneumonidae (Hymenoptera). Of his many scientific publications, perhaps the most significant is his revision of Apanteles s.l. (Mason, 1981), which included a reclassification of the Microgastrinae. This subfamily, with an estimated 15,000 to 25,000 species, is the most important group of Ichneumonoidea in the natural and biological control of insects.

Bill was editor of the Canadian Entomologist for three years in the early sixties; also during the sixties Bill was head of the Hymenoptera section of the Systematic Entomology Unit. He was an avid collector and headed or participated in more than 20 expeditions. His numerous forays to the Arctic and his trips to Mexico and Nepal are especially important for the wealth of material that was collected. About 9% of the Hymenoptera in the

Canadian National Collection was collected by Bill.

In 1986, after 38 years of service, Bill Mason retired. However, he still came to work daily, maintained a busy schedule and published regularly, even after a heart attack and by-pass surgery. Several of Bill's projects will be published posthumously. His contributions to the Hymenoptera of the World (due to be published this year) are outstanding since Bill was the principal author of the superfamily section which is the template for the remainder of the manual.

A good natured fellow, Bill was always willing to discuss any of a wide variety of subjects (entomology, climatology, classical music, theatre, etc.). He continually lifted the spirits of his friends and colleagues and is greatly missed.

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# Bernard Sigwalt (1928-1989)

by C. van Achterberg

Bernard Sigwalt died June 21st, 1989, only 60 years old, after a long struggle for life. The first medical surgery for his lung cancer resulted in a secondary hospital infection, and a fourth medical operation to cure the infection was fatal for his heart. With the death of Bernard, France lost its only specialist of Braconidae. His activ-ities and interests were far more than in reflected in the small number of publi-cations on Braconidae. During his stay in the Paris Museum he went on with re-arranging the Braconidae; hampered by a lack of boxes, he retained his good sense of humor. His broad knowledge of languages helped him considerably in using the available literature. He dis-covered several new taxa, of which only a fraction had been published by him. After his stay in Senegal (1979-1981) he spent most of his time on

phylogenetic research and the use of computers in taxonomy.

He had a life-long interest in entomology, and because of his education in agriculture (1950: "ingenieur agronome, Paris") and tropical agriculture (1954: "ingenieur ESAAT") he devoted a lot of his time to applied entomology in the tropics. His first research was in west Africa (Ivory Coast, 1954-1955) and the Cameroons (1955-1956) on Coccidae and Scolytidae, respectively. Important for his knowledge of Braconidae was his stay in Madagascar (1958-1963), despite the fact that he was working on Delphacidae. He moved to Greece (1970-1975) to work on Tephritidae (Dacus oleae Gmelin). After a short stay in Jordan he started his work in the Entomological Laboratory of the Museum National d'Histoire Naturelle in Paris (1976-1979). He started to work on tropical Curculionidae, but soon he started with the taxonomy of Braconidae. His wide interest was typical for him, including technical questions such as the names of wing veins. His clear reasoning convinced me to change from the old but impractical system of wing nomenclature to the universal system which is being used more and more in Hymenoptera. He planned to work on Phanerotomini and described some new species, but one of his duties was to identify Braconidae, especially Microgastrinae. After his stay in Senegal he changed his interests to Braconinae and Rutelinae, and soon devoted most of his time to the use of computers in taxonomy and phylogeny. The finished manuscript (with the paleontologist D. Goujet) on a new phylogenetic method for comparing apomorphies (especially for the constructions of phylogenetic trees) will be published soon.

Bernald Sigwalt will be remembered as an enthusiastic colleague and as a good friend who had a strong feeling for justice. His death is a severe loss for his family, for the Paris Museum, and for the scientific community in general.

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by B. Sigwalt

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Henry K. Townes, Jr.  
1913-1990

by Robert Wharton

Henry Townes, founder of the American Entomological Institute, was unquestionably the foremost ichneumonid specialist of his time. A fine biographical sketch was published by Gupta in 1983 (Contrib. American Entomol. Inst. 20: 1-14). Wahl furnished an obituary in Sphecos 21 (April 1991). I will therefore limit this to a brief, personal remembrance.

When I think of Henry Townes, three things immediately come to mind: the depth of his knowledge, his singularity of purpose, and his willingness to help young scientists (despite a formidable reputation). The classification he proposed was based on a deeply rooted understanding of ichneumonid nomenclature, thorough knowledge of the collections, types, and publications of early authors, and a careful consideration of the impact of nomenclatural rules on the stability of suprageneric names. It is these features, rather than his classification per se, which have had the greatest impact on me. Considering the size of the family, his knowledge of the individual species was impressive. He used the knowledge (together with an obsessive quest

for maximizing the number of hours/day devoted to his taxon of choice) to build the finest collection of ichneumonids in the world. Yet his seemingly single-minded devotion to the Ichneumonidae did not prevent him from publishing on other groups, and his 1945 paper on chironomids set a standard for taxonomic revisions in that family. His critical assessments of published works on Braconidae and other parasitic Hymenoptera was, for me, one of the most challenging yet enjoyable aspects of my visits with Henry and Marjorie. The collection and Institute remain as a tribute to Henry's determination to leave behind him a place where research can be conducted in a productive setting. But Henry took his greatest treasure with him -- his vast store of unpublished knowledge.

Townes and Townes, Ltd.  
or, professional Thatcherism  
in entomology

by Lubomir Masner

The name of Henry Townes is synonymous with success and excellence in taxonomic entomology. Although he never officially received any major public award he is better known to more professionals than some Nobel laureates. The amount, extent, and depth of his publications, especially in Hymenoptera, will hardly be exceeded by anyone in the near or distant future. Perhaps an even more valuable asset than the numerous published works is the institution he built, the American Entomological Institute (AEI), with its vast collections and a precious library. The latter two treasures will serve posterity as a fantastic springboard to new frontiers in taxonomic entomology. While accepting Townes' legacy almost for granted it occurred to me to ponder about the roots of his unique success. Let us take a brief journey in retrospect, focusing on the values and attributes in Townes' life that made his Taxonomic Miracle happen.

I consider myself lucky for being associated with Henry Townes for many years, as a friend, colleague, and a member of the AEI Board of Direc-

tors. However, my highest respect for Henry did not prevent me from being critical or holding opposite views. This earned me from him a subtitle: "the most philosophical of all my critics." I mention this episode to dispel the impression of being a submissive or biased lackey. Nevertheless, the overall tone of the following lines will be strongly eulogical.

To use the phraseology of the 90's, Henry Townes operated the AEI on the principles of a market economy, a 24-hr "on call" professional enterprise. It was effectively a family business, hence Townes & Townes Ltd. Since 1934 Henry and Marjorie worked as a perfect tandem, combining principles of scientific professionalism with those of the market economy championed much later by Margaret Thatcher. The results speak clearly for themselves, in scientific publications, editorial accomplishments, and in curatorial excellence. No time was wasted, seven days a week, 356 days a year. The usual working day in the AEI averaged 15 hours; weekends and holidays blurred with working days. Henry's enterprising mind remained plugged-in even during the periods of seeming rest. He was permanently on the lookout, perhaps never missing a ship of opportunity. This combined with a good sense of reasonable gambling resulted in dividends of various kinds. The extraordinary industriousness of Henry was superimposed on his exceptional memory and ingenuity. With his qualifications and talents he would have been a tycoon in any enterprise, scientific or commercial. Luckily for all of us hymenopterists, he focused on our field. Perseverance and determination, bordering often on stubbornness and inflexibility, were major gears of Henry's success. He was a born leader who had to be his only boss, with enterprise operated strictly on his own terms. In typical American entrepreneurship he strongly cherished competition over cooperation and, as a Darwinist, he adored the idea of the survival of the fittest. He had little love or patience with mediocrity or pseudoprofessionalism pampered by official bureaucracy.

Henry built the best world collection of Ichneumonidae. Starting in

1934 with near-zero holdings, he managed over the years to create an unrivaled pyramid. A good part of this treasure came from Henry's own field work. Careful planning as well as strategy combined with flawless logistics always resulted in the collection of the maximum material. There were no curio-trips or joyrides and virtually no major failures in his field expeditions. Henry's spartan endurance, experience, and good judgement helped to stretch the field dollar to the absolute extreme. His own model of the Malaise trap is an unsurpassed for collecting ichneumonids. Of course, he had to pay top dollar for his traps and so he took the best care of them. I remember a chilling night in the mountains of Venezuela when, after a day's hard work, Henry (pushing nearly 70), returned alone at 10 pm to a long trail in cloud forest to check his trap line; two of us some 24 years younger failed to join him because of fatigue and lack of stamina. Henry supplemented his own collecting with purchases from the world's top professional insect collectors. Here he displayed a very shrewd salesmanship, again stretching the dollar to the maximum. Thanks to his sharp eye and admirable depth of knowledge, he always netted the most valuable part from bulk material in the shortest possible time. As a result his collection attained the highest possible degree of biodiversity. Unlike the majority of entomologists (or scientists in general) Henry was a selfmade financial genius. Monitoring the stock exchange, purchases of stocks and bonds, or watching the international economy and politics were all part of Henry's daily program. This allowed him to generate and increase a considerable personal fortune which together with occasional outside grants made the operations of the AEI truly independent. The bottom line of this effort was the best strategy for "bug-dollar." In other words, Henry kept a close watch on both ichneumonids and bucks flying around. He was his own broker, accountant, salesman, scientist, and BOSS.

Last but not least, I feel it necessary to set one thing quite straight. With all his fervour and extraordinary dedication to professionalism, Henry Townes was not a monk, workaholic,

or ivory tower oddball. On the contrary, he was a happy family man, husband, father, and grandfather, colleague and friend to many, a man of good humour and cheering nature. He recognized the value of a proper lifestyle, with time for swimming, hiking, canoeing, skiing, or just a friendly get-togethers with friends. The house of Henry and Marjorie was full of visitors and friends, full of life and action. Marjorie's good cooking was cherished by all of us frequent visitors. And there was always good classical music in the laboratory and long discussions after dinner on a variety of topics. Perhaps the secret to this success was saving of time more than money, but in both these disciplines Henry was the world champion.

The purpose of this retrospective meditation was to analyze the secret of Henry's success. Perhaps I did not uncover the entire story but I believe that at least some of the points are worth considering and following. I admit that mixing science and money is rather distant to many of us; scientists and bankers seem to live on opposite banks of the river. Henry was a remarkable ferryman who managed to link the two banks in a compromise and coexistence. Perhaps we should all stop and ponder some new ways and approaches for the benefit and prosperity of science.

[Editor: Additional obituaries for Henry Townes are: Buckingham, G.R., V.K. Gupta, & M.C. Townes. 1991. American Entomologist 37: 251-253; Porter, C. 1991. Acta Ent. Chilena 16: 289-290; Wahl, D.B. 1992. Proc. Ent. Soc. Washington 94: 289-292.]

■ ■ ■

# REPORTS

## The Br  thes types of Hymenoptera in the Museo Argentino de Ciencias Naturales

by Jorge F. Genise  
Museo Argentino de Ciencias  
Naturales  
Av. Angel Gallardo 470  
Casilla Correo 220, Sucursal 5  
1405 Buenos Aires  
ARGENTINA

Between 1901 and 1927, Juan Br  thes published 77 papers in which he described 893 new species of Hymenoptera. Most of the types were deposited in the Museo Argentino de Ciencias Naturales (MACN), where he worked. When Br  thes died, nobody paid attention to his collection for about 50 years until M.A. Fritz began to arrange it and make the first alphabetical files.

Br  thes used to put a small label with a number on each insect in his collection. He registered each number in a notebook with a determination; a copy of this notebook is kept at MACN. The number label is critical for determining the "type" status of Br  thes material because he rarely identified specimens with determination labels and his locality labels were usually less complete than information in the original descriptions. Definitive decisions on all "types" will have to be made by specialists after reading the original descriptions.

In the following list, species names are given in their original combination without consideration of subsequent nomenclatorial changes and synonyms. A plus sign (+) at the end of an entry indicates that there is type material in the MACN collection. The absence of a plus sign means that the type has not been found. In some cases such material may simply repose in our collection undetected, or it may have been borrowed without record. Br  thes deposited some types in other collections and these are cited in parentheses at the end of the entry.

[Editor: Because of Townes' cataloging of the Neotropical ichneumonid fauna, I have opted to print only the Bracon-

idae section of Genise's list]

- Agathis versicolor 1909  
Allapanteles cecideptae 1916 (+)  
Apanteles alexanderi 1922 (+)  
    automeridis 1926  
    averza 1920 (+)  
    duplicatus 1922 (+)  
    paraguayensis 1924 (+)  
    riograndensis 1920 (+)  
Aphaereta testaceipes 1913 (+)  
Aphidius brasiliensis 1918  
    chilensis 1917 (+)  
    hubrichi 1913 (+)  
    platensis 1913 (+)  
    porteri 1915 (+)  
Astriphomma albitarse 1927 (Col. Inst. Ent. Alem  n)  
Bracanastrepha argentina 1924  
Bracon pauloensis 1927 (Col. Inst. Ent. Alem  n)  
Catolastes argentinus 1922 (+)  
Chelonus porteri 1923  
Coeloides anastrepe 1924 (+)  
Coelothorax frersi 1917 (+)  
Colastes testaceus 1924 (+)  
Dinocampus dichrous 1918 (+)  
Doryctes bonariensis 1910 (+)  
    testaceus 1913 (+)  
    ridiaschinae 1916  
Doryctomorpha platensis 1913 (+)  
    testaceipes 1913 (+)  
Gyrocampa nigrifrons 1921 (+)  
    pallidinervis 1913 (+)  
Hydrangeocola espinosai 1927 (+)  
Iphiaulax agrorum 1913 (+)  
    amabilis 1913 (+)  
    ameghinoi 1913 (+)  
    arribalzagai 1913 (+)  
    basiliaris 1913 (+)  
    blandus 1913 (+)  
    boutheryi 1913 (+)  
    braconius 1913 (+)  
    cacicus 1913 (+)  
    callidus 1913 (+)  
    cameroni 1913 (+)  
    caridei 1913 (+)  
    caserensis 1913 (+)  
    colluncura 1913 (+)  
    copelloi 1913 (+)  
    corralensis 1913 (+)  
    cuvanus 1913 (+)  
    chacoensis 1913 (+)  
    chubutinus 1913 (+)  
    debilis 1913 (+)  
    democrator 1913 (+)  
    erythrocephalus 1913 (+)  
    erythrosoma 1913 (+)  
    explorator 1913 (+)  
    falcator 1913 (+)  
    friburgensis 1913 (+)  
    fluminensis 1913 (+)  
    hilaris 1913  
    hortulator 1913 (+)  
    hubrichi 1913 (+)  
    huergoi 1913 (+)  
    humilis 1913 (+)  
    jaculans 1913 (+)  
    juiuyensis 1913 (+)  
    laetabilis 1913 (+)  
    lancearius 1913 (+)  
    limitatus 1913 (+)  
    melanopyga 1913 (+)  
    mendozanus 1913 (+)  
    nephele 1913 (+)  
    pacificus 1913 (+)  
    pactus 1913 (+)  
    pamparum 1913 (+)  
    paranensis 1913 (+)  
    parasiticus 1913 (+)  
    pedator 1913 (+)  
    perforator 1913 (+)  
    persimilis 1913 (+)  
    pertinax 1913 (+)  
    platensis 1913 (+)  
    pocitensis 1913 (+)  
    postulator 1913 (+)  
    propinquus 1913 (+)  
    proximus 1913 (+)  
    puber 1913 (+)  
    querandi 1913 (+)  
    quichua 1913 (+)  
    rex 1913 (+)  
    rubriceps 1913 (+)  
    saltensis 1913 (+)  
    secutor 1913 (+)  
    secutor semiventris 1913 (+)  
    spadix 1913  
    spagazzinii 1913 (+)  
    striatulus 1913 (+)  
    strigator 1913 (+)  
    suavis 1913 (+)  
    tacitus 1913 (+)  
    terebrator 1913 (+)  
    testaceator 1913 (+)  
    testaceipalpis 1913 (+)  
    tobarum 1913 (+)  
    tornowii 1904 (+)  
    tucumanus 1913 (+)  
    tuyupareensis 1913 (+)  
    ultor 1913 (+)  
    versicolor 1909  
    victor 1913 (+)  
Ipobracon horni 1927 (Col. Inst. Ent. Alem  n)  
guarujia 1927 (Col. Inst. Ent. Alem  n)  
oeceticola 1920 (+)



tucumanus 1927 [+]  
Meteorus eumenidis 1903 [+]  
platensis 1913 [+]  
Microdus crossi 1927  
Microgaster duvauae 1916 [+]  
Microplitis averzai 1910 [+]  
Oncophanes argentinus 1913  
Plectobracon testaceus 1927 (Col. Inst. Ent. Alemán)  
minor 1927 (Col. Inst. Ent. Alemán)  
Protopanteles bonariensis 1916 [+]  
marquesi 1924 [+]  
Rhogadopsis miniacea 1913 [+]  
Rhogas nigriceps 1909 [+]  
Seliodus testaceus 1909 [+]  
Sigalphus primus 1925 [+]  
Vipio fiebrigi 1909 [+]



#### Ichneumonoid collecting in Alberta

by Albert T. Finnamore  
 Provincial Museum of Alberta  
 Edmonton, Alberta

About 20,000 ichneumonoids were collected from the riparian habitat at the ecological preserve in Writing-on-Stone Provincial Park. The Milk River is one of the northern-most tributaries of the Mississippi watershed and contains some of the last areas undisturbed by agriculture. Collections were made with pans and Malaise traps from May 1st to September 30th, more or less the season of activity at that latitude. Collections from this site will be compared with those collected from a dry exposed grassland site and also with a boreal peatland where over 650 species of Ichneumonidae have been collected. At this point it appears that the riparian sites act as agricultural refugia in the grasslands.



#### Braconidae in the Canadian National Collection

by Michael J. Sharkey  
 Agriculture Canada  
 Ottawa, Ontario

The following is a very conservative estimate of the Braconidae in the Canadian National Collection in Ottawa,

as of 2 Oct. 1992:

Agathidinae	17,200
Alysiinae	33,900
Aphidiinae	12,000
Apozyginae	7
Blacinae	3,300
Brachistinae	5,800
Braconinae	23,900
Cardiochilinae	1,500
Cheloninae	15,800
Dirrhopinae	7
Dorytinae	13,100
Euphorinae (1)	8,900
Exothecinae	3,700
Gnamptodontinae	350
Helconinae (2)	4,000
Homolobinae (3)	3,000
Hormiinae (4)	3,400
Ichneutinae	2,400
Macrocentrinae	4,500
Meteorinae	18,200
Meteoridiinae	139
Microgastrinae	66,900
Microtypinae	100
Miracinae	1,400
Neoneurinae	250
Opiinae	13,700
Orgilinae	4,600
Rogadinae s.s.	16,000
Rhyssalini & Rhysipolini	2,400
Sigalphinae	130
Xiphozelinae	17
Zellinae	800
misc. braconids	13,200
<b>TOTAL</b>	<b>294,400</b>

- (1) incl. 800 Centistinae
- (2) incl. 1,000 Diospilini and 1,100 Cenocoelius
- (3) incl. 800 Charmon
- (4) incl. Pambolini



#### REVIEWS

**Classification and Biology of Braconid Wasps (Hymenoptera: Braconidae).** M.R. Shaw and T. Huddleston. Handbooks of the Identification of British Insects, vol. 7, part 11. Royal Entomological Society of London. 126 pp.

By Robert Wharton  
 Texas A & M University  
 College Station, Texas

This is a superbly written summary of the Braconidae. The greatest contribution of this volume (for the non-British worker) is the detailed treatment of braconid biology, and the large number of references cited. Considerable effort has been made to treat each of the subfamilies in a comparative fashion, thus making it easier for the interested student to pinpoint gaps in our knowledge (such as the host relationships of Blacini or the putative endoparasitic nature of gnamptodontines). The synthesis presented on pages 7-16 brings a fresh perspective to certain aspects of braconid biology. Not everyone will agree with some of the conclusions drawn or generalities made, but the evidence is generally well presented. Many of the details found at the end of this section and in the treatment of individual subfamilies have not been published elsewhere. These are based largely on the rearing records and observations of the senior author. Since this was written for the handbook of British Insects series, there is a heavy emphasis on voltinism and overwintering stages/strategies. This will provide a useful baseline for comparisons with braconids from tropical localities. Although the authors note that a paper on braconid phylogeny by Quicke & van Achterberg (1990) was published while their work was in press, the treatment of this topic is still quite good, and accurately predicts that much work will still be needed.

One can, of course, find fault with any publication if one looks hard enough. But the following comments really reflect my own biases rather than any real problem with the text. I would like to have seen more references to recent work on biochemical aspects of host finding and host-habitat finding, since there have been a number of studies published subsequent to the review articles cited on page 11. It might have been useful to add one or two sentences describing how the symbols for wing veins can be translated into descriptive names (e.g., IRs = first abscissa of the radial sector?). It seems a bit unfortunate that the au-



thors chose this particular terminology for venation, although they have clearly explained the problems involved, and have opted for uniformity with the recent text by Gauld & Bolton (1988). The vast majority of recently published braconid works, both Palearctic and Nearctic, use either different systems, or the same system but different symbols.



**The Ichneumonidae of Costa Rica, 1.**  
Ian Gauld. Memoirs of the American Entomological Institute 47: 1-589.

by David Wahl  
American Entomological Institute  
Gainesville, Florida

As with Gauld's An Introduction to the Ichneumonidae of Australia (1984), this book deserves to be on the bookshelf of every serious student of Ichneumonidae. While nominally a faunal study of the Pimplinae, Rhyssinae, Poemeniinae, Acaenitinae, and Cyloceriinae of Costa Rica, it includes important classificatory changes and a wealth of biological information. Gauld has incorporated the findings of Eggleton (1989. The phylogeny and evolutionary biology of the Pimplinae (Hymenoptera: Ichneumonidae). 295 pp. Unpublished Ph.D thesis, University of London) and divided the Pimplinae into 4 subfamilies: Pimplinae s.s., Rhyssinae, Poemeniinae, and Diacritinae. This is an important step forward in establishing a phylogenetic classification for the family. Other major changes include the breakup of Delomeristini, with Therion transferred to the Pimplini and the remaining genera to the Ephialtini. Biological data, both from field work in Costa Rica and from the general literature, are presented for each taxon; this alone is worth the purchase price. The book is profusely illustrated with both line drawings and SEM photographs, greatly enhancing the keys and descriptions. I've extensively used the keys on Costa Rican specimens and found that they work quite well. Finally, it might be noted that the nomenclature for certain genera and family-group names follow the ICZN and its Opinions. One hopes that Neotropical ich-

neumonid workers will eschew idiosyncratic Townesian nomenclature in favor of a more stable system based on the rules accepted by the rest of the zoological community.

I do have several criticisms. The key to ichneumonid subfamilies of Costa Rica, like the subfamily key in the Australian ichneumonid book, relies heavily upon the number of bullae in vein 2m-cu of the fore wing (couplet 4). My experience, as well as that of beginners that I have queried, is that this is unsatisfactory. Wings are often crumpled and distorted, or the bullae are often quite close together; in either case, beginners attempting to use this key are in for some difficult decisions.

On p. 18, Table 1 gives a comparison of the subfamily classifications of Gauld and Townes. The Microleptinae (consisting only of the genus Microleptes; Wahl, 1986. Syst. Ent. 11: 117-127; Wahl, 1990. J. Nat. Hist. 24: 27-52) is placed in the informal group Pimpliformes. I discussed the larval morphology and placement of Microleptes in the two papers just cited and explicitly concluded that it does not belong in the Pimpliformes; no evidence is presented to justify its inclusion. For the record, the only subfamilies in Pimpliformes (which is defined by a larval character) are: Pimplinae, Rhyssinae, Poemeniinae, Acaenitinae, Cyloceriinae, Diplazontinae, and Orthocentrinae (incl. Helictinae of some authors). On a side note, 2 informal names, the Tryphonoid and Phygadeuontoid subfamily groupings, are introduced in the same table. No supporting characters are given for these groups (and I am unaware of any); perhaps they represent groupings based on similar biologies.

In the introductory discussion for Clistopyga, I am cited as having shown the author an egg nest of a salticid spider from which Clistopyga manni had been reared; the cast skins of the parasitoid were attached to the partially devoured opisthosoma of the spider in the same manner as in Polysphinctini. No egg nest, however, was associated with the spider (an immature specimen of Pelleninae: probably Habronattus or Pellenes; G.B. Edwards, pers. comm.). Since the ovipositor of manni (and related Clistopyga) is identical to that

of polysphinctines, the most reasonable inference is that the wasp developed as a parasitoid, probably koinobiont, of the adult spider.

But these are relatively minor points. The book is a major contribution to ichneumonid studies and will do much to promote research on the Neotropical fauna.



## PERSONAL NOTES

**C. van Achterberg** (National Museum of Natural History; P.O. Box 9517; 2300 RA Leiden; THE NETHERLANDS). Kees' projects include a revision of Palearctic Aleiodes (with Mark Shaw), and a treatment of Palearctic species of Macrocentrinae. In April of 1991, he undertook expeditions to southwest and central Sulawesi; the autumn of 1991 saw further travel to Bali and southwest Sulawesi.

**Rafael Alayo Soto** (Departamento de Zoología; Instituto de Ecología y Sistemática, ACC; Carretera de Varona KM 3 1/2; Capdevila, Boyeros, Apartado Postal 8010; 10800 Ciudad de la Habana; CUBA). Dr. Alayo (the son of Dr. Pastor Alayo, now retired) is starting the study of the systematics and ecology of Cuban braconids. He is interested in obtaining literature on Neotropical Braconidae.

**Jacques F. Aubert** (Musée Zoologique Cantonal; Place Riponne 6; Case Postale 448; CH 1000 Lausanne 17; SWITZERLAND). Dr. Aubert retired in October 1991 and has moved from Paris to Lausanne.

**Andrew Austin** (Dept. of Crop Protection; Waite Agricultural Research Institute; University of Adelaide; P.O. Glen Osmond, S.A. 5064; AUSTRALIA). Current projects are: revision of Trachypetinae (with Wharton); revision of Australian Sigalphinae (with van Achterberg); revision of Australian Betylobraconinae (with van Achterberg); taxonomy of parasitoid hymenoptera associated with the eucalpyt-feeding cerambycid genus Phoracantha (with Paul Marsh). Andy visited northern

South Australia to light-trap cercobarconines in Feb. 1991.

**John Barron** (Biological Resources Division/CLBRR; K.W. Neatby Building, C.E.F.; Agriculture Canada; Ottawa, Ontario; CANADA K1A 0C6). John is currently revising the Nearctic Lathrolestes.

**Carolina D. Berta de Fernandez** (Departamento Zoología; Fundación Miguel Lillo 251; 4000 San Miguel de Tucumán; ARGENTINA) is continuing her studies of Neotropical Cremnops and would like to see more material.

**Sergej A. Belokobylskij** (Zoological Institute; Academy of Sciences; St. Petersburg 199034; RUSSIA) writes that he is "continuing to study the genera of world Doryctinae. I am finishing the MS of the revision of Palearctic species of Clinocentrus. I am studying the Oriental doryctins and exothecins." He would like specimens of the latter from the Oriental region. He took collecting trips to northern Vietnam (1990) and the Primoryan Territory of the Far East of the (former) USSR (1991).

**Ahmet Beyarslan** (Trakya Üniversitesi Fen-Ed.; Fakültesi Biyoloji Bölümü; 22030 Edirne; TURKEY). Dr. Beyarslan collected braconids from the Trakya area. He spent Oct. 1990 - Feb. 1991 in the Vienna Natural History Museum, studying braconids.

**George E. Bohart** (Biology Dept.; Utah State University; Logan, UT 84322-5305; USA) writes that "Utah State University has very large numbers of ichneumonoids begging for studies to be made on them. The collection is particularly rich in intermountain and Neotropical material but has a scattering from all parts of the U.S. and from all continents (none from Antarctica) . . . I recall particularly the rich ichneumonid fauna of Monte Verde, Costa Rica but we have lots of other specimens from Costa Rica as well as many other Latin American countries." Of particular interest to ICHNEWS readers is that fact that Dr. Bohart's son-in-law, Brad Nelson, has a beautiful set of slides of Megarhyssa icterosticta in all stages of oviposition.

**Santiago Bordera** (Universitat de Valencia; Departamento de Biología; Dr. Moliner, 50; 46100 Burjasot (Valencia); SPAIN) continues his faunistic studies of the Phygadeuontinae of Spain. He is interested in exchanging Palearctic specimens of that subfamily. Santiago visited the American Entomological Institute in Nov.-Dec. 1991 in order to study the holdings of phygadeuontines.

**Miloje Brajković** (Institute of Zoology; Faculty of Science; University of Belgrade; 16, Studentski trg., 11000 Belgrade; YUGOSLAVIA) requests help with identifications of Bracon and Apanteles from Yugoslavia.

**Miroslav Čapek** (Boettingrova 38; 636 00 Brno 36; CZECHOSLOVAKIA) requests reprints of papers on Braconidae.

**Jim Carpenter** (Dept. of Entomology; American Museum of Natural History; Central Park West at 79th St.; New York, NY 10024; USA) reports that he has "recently returned from Berlin -- the Humboldt Museum, neglected for 60 years, should be considered by anybody working on the world level."

**Chao Hsiu-fu** (Biological Control Research Institute; Fujian Agricultural College; Fuzhou, Fujian 350002; PEOPLE'S REPUBLIC OF CHINA) has been working on Agriotypinae for some years. He still has some new material on hand for publication. Agriotypines parasitize prepupae and pupae of Trichoptera; the parasitized host larval case has a very characteristic ribbon-like appendage about 1-5 mm long at one end of the case. Parasitized larval cases may be found most parts of the year. He would like to borrow any parasitized larval cases and adult specimens for his research.

**Chen Jia Hua** (Department of Plant Protection; Fujian Agricultural College; Fuzhou, Fujian 350002; PEOPLE'S REPUBLIC OF CHINA) is working on the taxonomy and biocontrol potential of Braconidae, including Aphidiinae. He requests literature.

**Chou Liang-yih** (Dept. of Applied Zoology; Taiwan Agricultural Research Insti-

tute; Wufeng, Taichung, Taiwan 413; REPUBLIC OF CHINA) is studying the taxonomy of Taiwanese Homobolinae, Orgilinae, Alysiinae, Opiinae, Blacinae, and Xiphoselinae.

**Clement Dasch** (160 Montgomery Blvd.; New Concord, OH 43762; USA) has retired from Muskingum University since the last issue of *Ichnews*. His revision of Nearctic Helictinae, Microleptinae, Cyloceriinae, and Oxytorinae has been completed as a recent Memoir of the American Entomological Institute. Presently, he is working on curatorial backlogs in his private collection.

**Francisco A. Diaz** (Urbanización Chucho Briceno; II Etapa, Carrera 11, no. 282; Cabudare 3023, Lara; VENEZUELA). Francisco is working on systematics of Ichneumonidae, as well as biological control of Plutella xylostella (using an introduced braconid, Cotesia plutellae).

**Fernando Fernandez C.** (Apartado Aereo 77038; Santa Fe de Bogota 2 D.C.; COLOMBIA) is organizing the ichneumonid collection of the Museo de Historia Natural (MHN), Universidad Nacional de Colombia, and is engaged in: 1) a long term study of the ichneumonids (and other Hymenoptera) of Parque Nacional Natural Hamcayacu in Amazonas, and 2) a long term study of the Hymenoptera of the Reserva La Macarena. He needs literature on Neotropical ichneumonids, as well as assistance in identifying the MHN ichneumonids, at least to genus.

**Albert Finnamore** (Provincial Museum of Alberta; 12845 102nd Ave.; Edmonton, Alberta; CANADA T5N 0M6). Although Bert works on sphecids, he is working up large numbers of ichneumonids from his biodiversity studies of several sites in Alberta. See his comments under **Reports** for more details.

**Maximilian Fischer** (Naturhistorisches Museum; 2. Zoologische Abteilung; Burgring 7; A-1014 Wien; AUSTRIA) has been working on the Opiinae of Finland (with Koponen), the Opiinae of Turkey (with Beyarslan), as well as doing general research on Opiinae and Alysiinae of the Old World. 1991 collecting trips were in Austria and Fin-

land. On a personal note, he has recovered from a serious illness in the Fall of 1991; we wish him the best of future health and a full return to research.

**Mike Fitton** (Dept. of Entomology; The Natural History Museum; Cromwell Road; London SW7 5BD; UNITED KINGDOM). Mike is head of the Department's Collections Management Division; at present he is not working on revisionary taxonomy but he has a number of projects including studies of host associations and comparative morphology (the latter with Quicke). In conjunction with Annette Walker, he is working on parasitoids of the Diamond-back Moth (*Plutella xylostella*) and they are trying to build up a collection of reared material at the NHM. Donations of reared material (especially with host data and full data) would be much appreciated.

**Manfredo A. Fritz** (Instituto Entomológico "Inesalt"; 9 de Julio 14; 4405 Rosario de Lerma; Salta; ARGENTINA). Dr. Fritz and his colleagues are building up their institution's parasitoid collection. Besides the usual trapping and sampling methods, Cerambycidae are reared from timber and hosts are thus obtained. Help is needed with determinations; specimens will be sent on request.

**Ulf Gärdenfors** (Dept. of Biology; University of Lund; S-223 62 Lund; SWEDEN) has almost completed a revision of the European *Pauesia*. He is in more material of this genus, particularly reared specimens.

**Vladimir Gohkman** (Plant Protection Division; Botanical Garden; Moscow State University; Moscow 119899; RUSSIA). Dr. Gohkman works on the systematics (including karyology) of Ichneumoninae, particularly Phaeogenini. Specimens of that tribe from the Palearctic, particularly the Far East, are desired for loan or trade.

**Virendra & Santosh Gupta** (Department of Entomology and Nematology; University of Florida; Gainesville, FL 32611; USA) are working on identification manuals on the ichneumonids of Flori-

da. Virendra is maintaining and updating a database of ichneumonid references from 1970 onward. Note that the address has changed and Virendra's office is no longer at the American Entomological Institute.

**Hubert Hilpert** (Zoologische Staatssammlung; Münchhausenstr. 21; W-8000 München 60; GERMANY) is working on a revision of Palearctic *Ichneumon*, and type-revisions of Palearctic Ichneumoninae. A revision of *Barichneumon* and related genera is planned. Specimens of ichneumonines from around the world are desired.

**Rolf Hinz** (Fritz-Reuter Str. 32; D-3552 Einbeck; GERMANY) continues his work on the biology of Ichneumoninae, as well as the taxonomy and biology of Palearctic *Dusona*.

**Klaus Horstmann** (Zoologisches Institut; Röntgenring 10; D-8700 Würzburg; GERMANY) is quite busy! Due to the late date of this *Ichnews*, several projects (revision of ichneumonid types of Rudlow; revision of western Palearctic Phygadeuontinae with brachypterous females; revisions of several genera of Phygadeuontini) are published or in press. Klaus is also studying the ichneumonid fauna of a Mediterranean habitat in southeastern Spain. Several trips have been made to the Museum National d'Histoire Naturelle in Paris.

**T. Huddleston** (Dept. of Entomology; The Natural History Museum; Cromwell Road; London SW7 5BD; UNITED KINGDOM) is working on Palearctic and Old World *Chelonus* and *Ascogaster*. He and Mark Shaw have published "Classification and Biology of Braconid Wasps" (Handbooks for the Identification of British Insects 7(11)); see the review in this issue.

**Dimitri R. Kasparyan** (Zoological Institute; Russian Academy of Sciences; St. Petersburg 199034; RUSSIA). While continuing with his interest in Palearctic Ichneumonidae, Dimitri is especially interested in Ctenopelmatinae and other parasitoids of Symphyta.

**Martti Koponen** (Dept. of Agricultural and Forest Zoology; University of Hel-

sinki; Vliikki; SF-00710 Helsinki; FINLAND) is working on a checklist of the Braconidae of eastern Fennoscandia.

**Dolly M. Lanfranco** (Instituto de Silvicultura; Universidad Austral de Chile; Casilla 567; Valdivia; CHILE) has been working on biological control of *Sirex noctilio*, as well as maintaining her interest in labenine systematics. She would very much appreciate help with the literature on *Sirex* and *Rhyacionia* biological control, as well as the evolutionary biology of parasitoids.

**John C. Luhman** (Minnesota Dept. of Agriculture, PID; 90 W. Plato Blvd.; St. Paul, MN 55107; USA) has changed his address from Pennsylvania State University.

**Jozef Lukáš** (Zoological Institute; Comenius University; Mlynska dolina, B-2; 842 15 Bratislava; CZECHOSLOVAKIA) works on the taxonomy and host-parasitoid relationships of Czechoslovakian Alysiinae.

**Kaoru Maetô** (Hokkaido Research Center; Forestry & Forestry Products Research Institute; Hitsujigaoka-1, Toyohira-ku; Sapporo 062; JAPAN). Dr. Maetô is working on phylogenetic relationships within Microgastrinae, revisional studies of microgastrines from Japan and Far East Asia, Braconidae of the Kurakatau Islands, and description of a new *Aridelus* associated with a subsocial acanthostomatid. Any information and reprints on Microgastrinae and related subfamilies would be welcome.

**Paul M. Marsh** (Systematic Entomology Laboratory/USDA; Smithsonian Institution NHB 165; Washington, D.C. 20560; USA). Paul is continuing a study of *Aleiodes* ("*Rogas*") with Scott Shaw, as well as starting a phylogenetic analysis of Doryctinae. He hopes to finish a revision of North American *Heterospilus* that has been on hold for some time. He also is involved in the cooperative effort to produce an identification manual for Western Hemisphere genera of Braconidae. Specimens of *Aleiodes* with associated host mummies would be welcomed.

**Pat Matyot** (P.O. Box 321; SEYCHELLES) reports that he has developed an interest in the taxonomy and biology of ichneumonids occurring in the Seychelles. So far he has concentrated on collecting specimens coming to lights at night. Any help on identification or literature of the western Indian Ocean fauna would be welcome. Specimens can be sent to interested parties.

**Glavendekić M. Milka** (Forestry Faculty of Belgrade University; Kneza Višeslava 1; YU-11030 Beograd; YUGOSLAVIA). Ms. Milka is interested in Pimplinae, Phygadeuontinae, Tersilochinae, and Diplazontinae. She needs help identifying Campopleginae, Ichneumoninae, and Hemigastrini.

**André Moussa** (9 Cours de la Libération; F38100 Grenoble; FRANCE) reports that he is an amateur interested in ichneumonids and other Hymenoptera; he is willing to send his collection of French ichneumonids to specialists (no charges, please).

**P.K. Nikam** (Dept. of Zoology; Marathwada University; Aurangbad 431 004; INDIA) has been working on Heliothis armigera and its parasitoids. Literature is needed on the taxonomy of parasitoid Hymenoptera and biological control of different crops pests, especially Helicoverpa armigera and Spodoptera litura.

**Simon van Noort** (Entomology Dept.; South African Museum; P.O. Box 61; Cape Town; 8000; SOUTH AFRICA) is working up his Ph.D on the systematics of sycoecine figwasps; after Jan. 1992, he will be employed by the South African Museum where he will working on braconids (which group is still unknown), amongst other responsibilities.

**Sergio Marcelo Ovruski** (CIRPON; Pasaje Caseros 1050; C.C. 90 - 4.000 - S.M. de Tucuman; ARGENTINA) works on the biology and taxonomy of parasitoid Hymenoptera attacking fruit-flies, especially Opiinae. He needs literature and specimens of Doryctobracon, Opius, Biosteres, etc.

**Jenő Papp** (Zoological Dept.; Hungarian Natural History Museum; Budapest VIII, Baross u.13, H-1088; HUNGARY). Dr. Papp is involved with many projects on the Palearctic Braconidae. These include: Microgastrinae, Macrocentrinae, Homolobinae of Hungary; Braconidae of Korea, part 15; revisions of Zetterstedt and Costa braconid species; Braconidae of Greece, part 4; revision of Bracon of Europe. He would like to see as much European Bracon as possible, both unnamed material and determined specimens from Europe and North Africa. He is also ready to identify braconids from the Mediterranean area. In May and June 1991 he visited museums in Brussels, Leiden, Lund, Eberswalde, and Brno.

**F. Pennacchio** (Dipartimento de Entomologia e Zoologia agraria; Università degli Studi di Napoli; Facoltà di Agraria; Via Università, 100; 8055 Portici (Napoli); ITALY) works on in vitro rearing of endophagous larval parasitoids (Braconidae) and host-parasitoid physiological interactions.

**Angelica Maria Penteado-Dias** (Universidade Federal de Sao Carlos; Departamento de Ecologia e Biologia Evolutiva, CP 676; 13 560 Sao Carlos, SP; BRAZIL). Dr. Penteado-Dias works on Neotropical Braconidae, and is studying the genera of Alysiinae occurring in forest and savanna ("cerrado") areas of Brazil.

**Donald Quicke** (Dept. of Animal and Plant Sciences; University of Sheffield; Sheffield S10 2TN; UK). The indefatigable Dr. Quicke has projects too numerous to list individually (44 at last count, and no doubt more since then); some of the highlights are: revisions of Yelicones, Philippines and Indonesian Iphiaulax, Indian Iphiaulax (with Bhuiya), Acanthodoryctes, Trichiohelcon, Pedinopleura, Bathyaulax, Compsobracon; biology of Cassidoca (with Bhuiya); new antennal sensillae features; venom apparatus of Opiinae and Alysiinae (with C. Godfray); ichneumonoid systematics (with M. Fitton); key to Afrotropical braconine genera. Requests for help: any reared tropical braconines; live tropical braconines; danaid pupae with Philomacroploea parasitoids or their remains.

**Alexandr P. Rasnitsyn** (Paleontological Institute; Russian Academy of Sciences; Profsoyuznaya ul 123; 117868-7 Moscow; RUSSIA) writes that "during my US trip in 1989-90 I've spent 3 weeks in Washington, D.C., identifying insects in the Smithsonian collection of Dominican amber (MS describing the results in near completion). Later on I spent two weeks at the American Entomological Institute, Gainesville, FL, identifying Palearctic Ichneumoninae (no results worth publishing). Since that time I unfortunately worked on subjects less interesting for ICHNEWS."

**Jean-Marc Revol** (Pharmacie; Couze-Saint-Front; F-24150 Lalinde; FRANCE) is interested in the parasitoid complexes of various insects and spiders; he is presently working on Hymenoptera parasitoids of Pterophoridae and other low- or grass-feeding Lepidoptera. Any reared parasitoids of Pterophoridae would be welcome.

**Carmen Rey del Castillo** (Museo Nacional de Ciencias Naturales; Departamento de Biodiversidad; José Gutiérrez Abascal, 2; 28006 Madrid; SPAIN) continues her research on the systematics of Banchinae and Pimplinae, as well as the biodiversity of Hymenoptera and the use of various traps to evaluate differential trap catch efficiency.

**Pier Luigi Scaramozzino** (Museo Regionale di Scienze Naturali; Via Giolitti 36; 10123 Torino; ITALY) continues work on Tryphoninae and Ophioninae, as well as cataloging and collecting Italian ichneumonids. He needs help identifying Metopiinae, Campopleginae, Orthocentrinae, and Cremastinae.

**Willis C. Schaupp, Jr.** (Dept. of Entomology; 219 Hodson Hall; University of Minnesota; St. Paul, MN 55108; USA). Bill is studying the reproductive biology of Pimpla disparis (Viereck) and releasing it in Minnesota in anticipation of the gypsy moth; it has been recovered from sentinel wax moth pupae. He has also been surveying for parasitoids of the eastern tent caterpillar, fall webworm, and whitemarked tussock moth.

**Heinz Schnee** (Birkenweg 18; 0-7113 Markkleeberg; GERMANY) is working

on the taxonomy and biology of Palearctic Anomaloniinae, and the parasitoid complex of the spruce needleminer (*Coleotechnites picaella* (Kearfoot)) in Saxonia. He would be very interested in seeing Anomaloniinae from the southern and eastern parts of the Palearctic, as well as literature on the biology and parasitoids of *C. picaella* in America.

**Martin Schwarz** (Institut für Zoologie; Hellbrunnerstr. 34; A-5020 Salzburg; AUSTRIA) is revising the western Palearctic wingless species of *Gelis*, and various genera of Mesostenini of the western Palearctic. He is interested in getting western Palearctic specimens of *Gelis* (wingless specimens only).

**Jesus Selfa** (Avinguda de Beniopa; 59-B. 46700 Gandia; Valencia; SPAIN). Dr. Selfa is working on a synopsis of the Ichneumoninae of Spain. He would like to know of Spanish ichneumonine specimens in foreign collections.

**Michael J. Sharkey** (Biological Resources Division/CLBRR; Agriculture Canada; K.W. Neatby Building, C.E.F.; Ottawa, Ontario; CANADA K1A 0C6). Mike has the following projects either in press or near completion: cladistics of Ichneumonoidea (with Wahl); cladistics of Agathidinae, a critique of the Achterberg & Quicke phylogeny of Braconidae (with Wharton *et al.*), and the braconid section of the Agriculture Canada manual *Hymenoptera of the World*. As part of the project to write keys to New World braconid genera, Mike will be dealing with the Agathidinae, Ichneutinae, and Helconinae s.l. It might be noted that Mike spent April 1989 - May 1990 in Japan at the National Institute of Agro-Environmental Sciences. He collected extensively in Hokkaido, Honshu, and Kyushu. The resulting specimens are in the Canadian National Collection and the American Entomological Institute.

**Mark Shaw** (Royal Museum of Scotland; Chambers Street; Edinburgh EH1 1JF; UK). Mark continues his work on the biology and taxonomy of Ichneumonoidea, parasitism of Lepidoptera and spiders, and host range/community structures of parasitoids. He is currently working with Kees van Achterberg

on European *Aleiodes*. Reared specimens of western Palearctic *Aleiodes* are desired.

**Scott Shaw** (Dept. of Plant, Soil, and Insect Science; P.O. Box 3354; University of Wyoming; Laramie, WY 82071; USA) is researching Neotropical Euphorinae, Meteorinae, Cheloninae, Rogadinae, and Neoneurinae for the New World braconid identification manual. His joint revision of *Aleiodes* with Paul Marsh proceeds apace. He is also studying the Yellowstone Hymenoptera fauna, comparing burned vs. unburned areas. Any North American *Aleiodes* with associated host mummies are welcome. Exchanges of Braconidae with foreign museums are desired.

**Rajendra Singh** (Aphid Biocontrol Laboratory; Dept. of Zoology; University of Gorakhpur; Gorakhpur - 273 009, U.P.; INDIA). Dr. Singh is working on faunal surveys of aphidiine braconids, studies of the population dynamics of aphid parasitoids and hyperparasitoids, factors affecting the sex ratios of the offspring of parasitoids, and other topics. He notes that his research team has demonstrated that semiochemicals emanated by aphids increase not only the retention period of parasitoids on the host locale, but also increase the reproductive potential of the parasitoid up to 50%.

**Petr Stary** (Institute of Entomology; Czechoslovak Academy of Sciences; Branišovska 31; 370 05 Ceske Budejovice; CZECHOSLOVAKIA) continues research upon eastern Palearctic Aphidiinae, parasitoids of the Russian wheat aphid, and adaptations of indigenous parasitoids to exotic immigrants.

**Tang Yu-qing** (Biological Control Research Institute; Fujian Agricultural College; Fuzhou, Fujian 350002; PEOPLE'S REPUBLIC OF CHINA). is working on taxonomic revisions of Chinese Ophioninae and *Netelia*, as well as biocontrol studies of other parasitoid groups. He would like to see specimens of Chinese Ophioninae and *Netelia*. Copies of his 1990 monograph on Chinese *Encospilus* may be ordered from him at the above address (\$60.50 + \$3.50 P&P, or \$7.50 airmail for a

single copy).

**Camille Thirion** (Zoologie générale et appliquée; Faculte Sciences agronomiques; B-5030 Gembloux; BELGIUM) continues her studies of the Diplazontinae and Ichneumoninae of Belgium and adjoining areas.

**Wolfgang F. Völkl** (Bundesforschungsanstalt für Naturschutz; Konstantinstrasse 110; D-5300 Bonn 2; GERMANY). Dr. Völkl investigates searching strategies in Aphidiinae, ant-aphid-parasitoid interactions, inter- and intra-specific competition in parasitic wasps; systematics of Aphidiinae; related topics.

**David Wahl** (American Entomological Institute; 3005 SW 56th Ave.; Gainesville, FL 32608; USA). I've just finished cladistic analyses of labenine genera (in press) and mesochorine genera (submitted). The ichneumonid section of the Agriculture Canada manual *Hymenoptera of the World* is in press. Minor ongoing projects include biology and larvae of Adelognathinae and Eucerotinae (with Mark Shaw), and systematics of Stilbopinae. Ian Gauld and I are looking into Poemeniinae and the relationships of the pimpliform subfamilies. My major preoccupation, however, is finding enough time to finish the long-delayed generic revision of Alomyini.

**A. and W. H. Walter** (Gerberstr. 5; A-4190 Bad Leonfelden; AUSTRIA) continue their studies of Ichneumoninae.

**Wang Deng Yuan** (Dept. of Plant Protection; August 1st Agricultural College; Nan Chan Road 42, Wulumugi; Xinjiang 830052; PEOPLE'S REPUBLIC OF CHINA). Mr. Wang works on the taxonomy of adult and mature larvae Diplazontinae from Xinjiang.

**Wang Shu-fang** (Institute of Zoology; Academia Sinica; Beijing 100080; PEOPLE'S REPUBLIC OF CHINA) is investigating the classification of Chinese *Bombus* and Ichneumonidae. At present, he is conducting studies on some genera of Chinese Pimplinae. He plans to work on Xoridinae. Exchange of specimens would be welcome.

**James B. Whitfield** (Dept. of Entomology; University of Arkansas; Fayetteville, AR 72701; USA). Jim has three main projects: phylogenetic relationships among polydnviruses and the wasps that carry them (with Stoltz); reclassification of cardiochiline genera with emphasis on New World fauna; reanalysis of microgastrine phylogeny. He is also rearing several hundred species of oak-feeding Lepidoptera for parasitoids and continuing some faunistic studies of prairie Braconidae. He would especially appreciate hearing about availability of abundant reared material of Cotesia spp., other than glomerata, congregata, melanoscela, and marginiventris; also LIVE material of campoplegine genera other than Hyposoter, Olesicampe, Campoletis, Campoplex, and Venturia. He would also like to see any unusual Neotropical microgastrines or cardiochilines before the sections on these groups are finished for the Neotropical manual.

**Dicky S. Yu** (Agriculture Canada Research Station; P.O. Box 3000 Main; Lethbridge, Alberta; CANADA T1J4B1) is computerizing the publications on Ichneumonidae from 1900 to the present. The data set currently includes 33,000 scientific names and 2,000 references.

**Herbert Zettel** (Naturhistorisches Museum; 2.Zoologische Abteilung, Burgring 7; A-1014 Vienna; AUSTRIA) is revising the Phanerotomini and Pseudophanerotomini, as well as working on the agathidine fauna of Austria and Turkey, the Proctotrupidae of Central Europe, and Hymenoptera of the Hundsheimer Kogel of Lower Austria. He requests help in identifying ichneumonids from Lower Austria (particularly Campopleginae). He is willing to identify world Phanerotomini, but long loan periods are necessary.

**Bob Zuparko** (Division of Biological Control; University of California; 1050 San Pablo Ave.; Albany, CA 94706; USA) is investigating the impact of Trioxys curvicauda importation on linden aphid in California. The present primary parasitoid complex includes T. curvicauda, tenuicaudis, pallidus, and at least two Aphelinus species. He is

trying to develop a key to males of Trioxys (as the only extant keys are to females); any ideas or suggestions for useful characters?

**K.W. Robert Zwart** (Dept. of Entomology; Agricultural University; P.O. Box 8031; 6700 EH Wageningen; THE NETHERLANDS) has started cooperation in a research project on the parasitoids of pyralid and noctuid stem borers of African graminaceous crops. He will be working on the ichneumonids. In addition, he is interested in African Cremastinae, especially Temelucha and Pristomerus. Any African ichneumonids reared from Chilo, Coniesta, Eldana, Maliarpha, and Scirpophaga (all Pyralidae), and from Busseola and Sesamia (Noctuidae) would be welcomed. He is probably able to name Pristomerus and Temelucha species from Africa.



## MISCELLANEA

[Editor: Mike Sharkey found the following document in his mailbox, with the attached note: "Dear Colleague: Please include the attached announcement, without alteration or comment, in the next issue [of ICHNEWS]. Sincerely yours, First Weeniator." In compliance with this very mysterious and scary directive, the announcement is reprinted below as requested, although it should be noted that the copy I received was partially illegible due to considerable staining. Some errors may have crept in.]

De Weeniati van der Odd Rinderpest are a new secret society devoted to the twin passions of Hymenoptera and Systematics. Our guiding beacons are A.A. Girault and Fatty Arbuckle. At the center of our coat of arms (the details of which we are ignorant) is a limp double manticore, from whose heads issue old rags proclaiming "Please don't hurt me" and "Gradism and ignorance forever."

We are pledged to uphold Hymenoptera and Systematics when convenient and in all non-rigorous aspects and "prance and dance a little jig, as if

our souls were truly big." While strategy is set by an inner council of Grand Weenatissimi, each Weeniato/a is expected to show initiative in keeping the faith.

It is vain to contact der Weeniati van der Odd Rinderpest. If we deem you worthy, we will pester you. We are watching.

In Silliness,  
First Weeniator@



## The Adventures of IchMan



"IF A FACT IS TO BE A PICTURE IT MUST HAVE SOMETHING IN COMMON WITH WHAT IT DEPICTS," MUSED ICHMAN

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