

NEAL L. EVENHUIS



The Diptera: Sphaeroceridae Newsletter.

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EDITORIAL

SphaeroNews is intended as a means of communication for all those interested in the dipterous family Sphaeroceridae. It aims to cover all aspects of the taxonomy and ecology, both pure and applied, of this interesting group. It is not, however, a primary journal and nomenclatorial changes cannot be reported.

This is the second issue of SphaeroNews. The response to the first was encouraging with several offers of articles for this issue which unfortunately have not yet materialised. The success or otherwise of SphaeroNews depends on you as contributors. Please submit any material you consider would be of interest to others, such as news, comments and information. If you have not already done so, please send a list of your publications on Sphaeroceridae, including those in press, for inclusion in subsequent issues. Those of you who have already kindly sent a publication list are encouraged to add to this, as and when papers are submitted for publication.

In this issue I have included publications on Sphaeroceridae by Dr Rudolph Bahrmann, Dr Venelin Beschovski, Dr Eliane de Coninck, Dr Walter Hackman, Dr Toshihiko Hayashi, Prof. K.C. Kim, Dr Laszlo Papp and Dr Philip Vernon plus those written jointly by these authors with others. Also included are papers in Darvas, B. & Papp, L. 1986 *Abstracts of the First International Congress of Dipterology*. Biological Section of the Hungarian Academy of Sciences. Univ.Vet.Sci.Press, Budapest. If there are any omissions or errors I would be pleased to hear from you.

Dr Philip Vernon also sent a provisional list of Sphaeroceridae of France and a list of papers on Sphaeroceridae of the sub-Antarctic for which I am most grateful. I have not reproduced these in this issue, although they have been added to the master bibliography on an Apricot microcomputer, which now includes all papers listed in SphaeroNews No.s 1 and 2, plus all references cited my own forthcoming Handbook for the Identification of British Sphaeroceridae and references (A-E) cited in Richards (1930). If anyone has similar lists for other authors or countries I would be grateful for copies. Ultimately, between us, we could produce a world bibliography. Additional references will be published in SphaeroNews and added to those already on the microcomputer. At any point in time a separate complete list of all papers on the microcomputer will be available to all contributors, either as hard copy or on disc, on request.

The mailing list has been revised and extended in the light of comments and suggestions received. Please let me know of anyone else you think would be interested to contribute or receive copies of SphaeroNews. Subsequent issues of SphaeroNews will appear as and when copy becomes available.

Brian R. Pitkin
Department of Entomology
British Museum (Natural History)
London SW7 5BD
U.K.

PROFILES

Dr Rudolf Bahrmann

Dr. Bahrmann has been studying the sphaerocerids and other dipterous families on different, mainly semi-arid grassland-associations such as reservations and areas under industrial stress in Thuringia, the southern part of GDR. The aim of these studies is to gain an overview of the dominant and typical species amongst other dominant arthropod groups in order to analyse the epigaeic arthropod fauna. Flies have been caught using standardised sweep-net sampling and pitfall-trapping over a period of more than ten years and it is now possible to describe some of the ecological factors effecting the studied groups.

Dr Venelin Beschovski

Dr Beschovski of the Bulgarian Academy of Sciences, Institute of Zoology, Sofia published a number of papers on Sphaeroceridae between 1964 and 1975 and is currently working on other groups.

Dr Eliane de Coninck

Dr de Coninck is the Hymenopterist/Dipterist at the Musee Royal de l'Afrique Centrale, Tervuren, Belgium. She has published several papers including one on the Sphaeroceridae. The collections in her charge include many type specimens of sphaeroceridae described by O.W. Richards from central Africa.

Dr Walter Hackman

Dr Hackman retired as Emeritus from the Directorship of the Zoological Museum, University of Helsinki, although he still continues scientific work there. From 1958 he has contributed greatly to our knowledge of the Sphaeroceridae but was forced to abandon work on very small flies in 1974 owing to deteriorating eyesight. He retains a great interest in sphaerocerid taxonomy and it is possible that he will continue to study costal chaetotaxy including that of sphaerocerids, probably in co-operation with some of the younger Dipterists at the museum.

Dr Toshihiko Hayashi

Dr Hayashi is engaged in studies on the taxonomy of Sphaeroceridae from the East Palaearctic and Oriental Region at the Saitama Medical School, Japan. He is currently describing some new species from Japan and Formosa.

Professor K. C. Kim

Professor Kim has been Professor of Entomology at the Pennsylvania State University since 1979. He is also the Curator of the Frost Entomological Museum, senior member of Faculty of the Graduate School and member of the Faculty of the Graduate Program in Ecology and on the University Committees on Systematics Collections and on Tropical Studies. He is also Chairman of the Council on Systematics and Society, Association of Systematics Collections and a Co-operating Scientist, U.S. Department of Agriculture, Beltsville Agricultural Research Center, Maryland.

He has published or jointly published over 125 papers including 15 on the taxonomy of Sphaeroceridae, particularly on the subfamily Sphaerocerinae. He and his new graduate student from Korea, Mr Ho-Yeon Han, are aggressively redoing work on *Ischiolepta* and *Lotobia*. They are also studying *Safaria* and hope to complete these by the end of the year. Following these revisions Professor Kim would like to consider a study of the phylogeny of the sphaerocerinae.

Mr Ho-Yeon Han has a BS and MS degree in biology from the Korea University, Seoul. Prior to his graduate work in Pennsylvania State University he worked for the Asian Parasites Laboratory, U.S.D.A. Agricultural Research Service located in Seoul. Although his primary interest is Tachinidae taxonomy, he wishes to broaden his expertise in dipterology and systematics.

Dr A.L. Ozerov

Dr Ozerov studies carrion flies, including Sphaeroceridae, at the Zoological Museum, State University of Moscow. He is publishing a list of carrion flies in forests of the Far East. In the future he is planning to examine details of their biology and immature stages.

Dr Laszlo Papp

Dr Laszlo Papp of the Department of Zoology, Hungarian Natural History Museum has published over 120 papers on Diptera, including over fifty papers on the Sphaeroceridae. He continues to add greatly to our knowledge of the family and contributed many of the acalyprate families for the Catalogue of Palaearctic Diptera for which he was Assistant Editor with Dr A. Soos. Dr Papp was also one of the Secretaries of the Organising Committee of the highly sucessful First International Congress of Dipterology held in Budapest last August for which he also edited, with Dr B Darvas, the Abstract Volume.

Dr Philip Vernon

Dr Vernon is studying the biology and ecology of the wingless Sphaeroceridae of the sub-Antarctic Islands of the southern Indian Ocean. In the field, on Crozet and Kerguelen Islands, he has been examining the structure and functioning of the dipterous community and the part played by sphaerocerids (*Siphloteryx* and *Anatalanta*), the life histories of *Anatalanta aptera* Eaton and *A. crozetensis* Enderlein, the variability in habitats and modes of living, morphological variation, reproductive strategies and competition. In the laboratory (Station Biologique de Paimpont, University of Rennes) he is occupied with the development of rearing installations, ecophysiological studies on adaptation of *A. aptera* and *A. crozetensis* to the sub-Antarctic environment, taxonomy and biogeography of the sub-Antarctic sphaerocerids, wing reduction and loss, and evolutionary aspects of winglessness in *Anatalanta*.

NEWS

Dr Jindrich Rohacek and his assistant Miss Kuckova have been working on the eggs of Copromyzinae and Sphaerocerinae. Miss Kuckova completed a thesis on "Pre-imaginal stages of Sphaeroceridae (Diptera) with particular reference to eggs" which contains a review of previous investigations and bibliographies of all immature stages, a review of the morphology of all immature stages and a systematic part describing the eggs of ten species and providing a key, based on eggs, to the subfamilies. A complete bibliography of the immature stages has now been compiled by combining this with a similar bibliography in my own thesis and this will be published in my forthcoming Handbook for the Identification of British Sphaeroceridae.

The second volume of the Manual of Nearctic Diptera edited by Dr J.F. McApine has now been published (\$56.95 in Canada and \$68.35 elsewhere from Canadian Government Publishing Centre, Supply and Services Canada, Hull, Quebec, Canada K1A 0S9). This contains a chapter on Sphaeroceridae by Dr Stephen Marshall and the late Professor O.W. Richards which includes a key to Nearctic genera and some excellent illustrations by Mr Ralph Idema.

SELECTED PUBLICATIONS ON SPHAEROCERIDAE

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- BESCHOVSKI, V.L. 1964. Beitrag zum Stadium der Halobionten und halophilen Diptera Brachycera vom Bulgarischen Küstenbereich des Schwarzen Meeres. *Zool.anz.* 172 (4): 261-264. [*Leptocera (Thoracochaeta) brachystoma* Stenh. & *Leptocera lutosa* Stenh.]
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- BESCHOVSKI, V.L. 1975. The Black Sea coast inundated by waves and its dipterous fauna (Diptera - Brachycera). *Hydrobiology* 2: 3-18. (In Russian with English summary) [Eleven species of Sphaeroeridae recorded.]
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ADDRESSES

Dr. R. Bahrmann,
Maxim Gorki Strasse 129
6900 JENA, GDR.
GERMANY

Dr Venelin Beschovski,
Zoological Institute,
Bulgarian Academy of Sciences,
Boulo.Rouski 1,
1000 Sofia,
BULGARIA.

Dr Miguel Carles-Tolra,
General Mitra 203 bis,
08023 Barcelona,
SPAIN.

Dr J.M. Debry,
Laboratoire d'Ecologie,
5 Place de la croix du Sud,
Louvain-la-Meuve,
BELGIUM.

Mr John Deeming,
National Museum of Wales,
Cardiff, CF1 3NP.
Wales, U.K.

Dr Yang Din
Beijing Agricultural University
Beijing
CHINA

Mr Folke Floren,
Zoo-Tax,
Naturhistoriska Riksmuseet,
Box 50007,
104 05 Stockholm
SWEDEN.

Dr Walter Hackman,
Jahannesvagen 2 B 10,
Helsinki 12,
FINLAND.

Mr Ho-Yeon Han
Department of Entomology,
Pennsylvania State University,
106 Patterson Building,
Pennsylvania 16802,
U.S.A.

Prof. R.A. Harrison,
12 Roberta Drive,
Spreydon,
Christchurch 2,
NEW ZEALAND.

Dr Toshihiko Hayashi,
Department of Parasitology,
Saitama Medical School,
38 Mohorongo,
Moroyama, Iruma-Gun,
Saitama, 350-04,
JAPAN.

Prof K.C. Kim,
Department of Entomology,
Pennsylvania State University,
106 Patterson Building,
Pennsylvania 16802,
U.S.A.

Dr Friedrich Kuhlhorn
Zoologische Staatsammlung
Maria-Wrad-Str. 1b
D-8000 Munchen 19
FRG (West Germany)

Dr N. Kuznetsova
226050 Riga
ul. Kr. Barona 4
Muzej Prirody
L.S.S.R.

Dr B.R. Laurence,
2 The Loke,
Norwich,
NORFOLK NR5 8QG
U.K.

Dr Stephen A. Marshall,
Dept. of Environmental Biology,
Ontario Agricultural College,
University of Guelph,
Ontario,
CANADA N1G 2W1.

Dr Hans Meyer,
Zoologisches Institut der
Universitat Kiel,
Biologiezentrum,
Olshausenstrasse 40-60,
D-2300 KIEL, FRG.
GERMANY

Dr L. Munari,
Museo Civico di Storia Naturale,
Fontego dei Turchi - S.Croce,
1730,30125 Venezia,
ITALY.

Dr E. Nartshuk,
Zoological Institute,
Academy of Sciences of the U.S.S.R.,
University nab. 1,
Leningrad,
U.S.S.R. 199034.

Dr Allen Norrbom,
Systematic Entomology Laboratory,
c/o U.S.National Museum,
Washington D.C. 20560.
U.S.A.

Dr A. Ozerov,
Zoological Museum,
State University of Moscow,
Moscow,
U.S.S.R.

Dr Laslo Papp,
Department of Zoology,
Hungarian Natural History Museum,
H-1088 Budapest,
Baross ut. 13,
HUNGARY.

Dr Brian R. Pitkin,
Dept. of Entomology,
British Museum (Natural History),
Cromwell Road,
London SW7 5BD,
U.K.

Dr Jindrich Rohacek,
Slezke Muzeum,
CS-746 46 Opava,
CZECHOSLOVAKIA.

Prof. Dr. R. Schuster,
Institute of Zoology,
University of Graz,
Universitätsplatz 2,
A-8010 Graz, AUSTRIA.

Dr John Sivinski,
U.S. Department of Agriculture,
Insect Attractants Laboratory,
P.O.Box 14565,
Gainesville,
FL 32604 U.S.A.

Dr Philippe Vernon,
U.A. 696 C.N.R.S.,
Université de Rennes 1
Station Biologique de Paimpont,
35380 Plelan le Grand,
FRANCE.

Mr Terry Wheeler
Dept. of Environmental Biology,
Ontario Agricultural College,
University of Guelph,
Ontario,
CANADA N1G 2W1.

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