



Scarabaeus

A NEWSLETTER FOR THOSE INTERESTED IN SCARABAEIDAE

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CONTRIBUTING EDITORS: R. PAULIAN (W. PALEARCTIC);

J. S. MANN (INDIAN SUBCONTINENT); C. SCHOLTZ (ETHIOPIAN);
P. REYES-CASTILLO (PASSALIDAE)

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With this edition of the SCARABAEUS newsletter, we welcome aboard our new contributing editors, Prof. R. Paulian, Dr. J. S. Mann, Dr. C. Scholtz and Dr. P. Reyes-Castillo. We will feature sections which have been written by these editors, emphasizing their areas of expertise. We also would like to solicit submissions from any reader with something which he would like to have included.

We would like to have additional contributing editors, perhaps from Australia, the Eastern Palearctic or the Orient and South America.

I would like to apologize to Jean Donaldson for indicating under her photo in the last issue that she was from Australia. She resides in The Republic of South Africa.

We have received correspondence indicating a willingness to contribute financially to the production of this newsletter. At present, and for the foreseeable future, the newsletter is published free for us by the California Department of Food and Agriculture, as a service to science. Their willingness to publish is partially dependant upon the availability of resources, such

as computer time, press time, and the like. At present our Department is fighting a major eradication battle with the Mediterranean Fruit Fly, which became established in California late in 1989. To date we have expended approximately \$30 million, and seem to be achieving some success. Many of our Department's scientists have been out of the office for months, resulting in a very hectic time hereabouts lately.

The First International Congress of Coleopterology, Barcelona 18th-23rd September 1989

by Dr. Renaud Paulian

The European Association of Coleopterology convened in September 1989 the First International Congress of Coleopterology.

Thanks to a remarkable organization and to the smiling courtesy of our Spanish hosts, this meeting was quite a success.

About two hundred Coleopterists from North and Western Europe, but also from the United States, Mexico, Chile, Uruguay, India and South Africa, attended the meeting. A

number of Entomologists from Eastern Europe were expected, but due to local conditions could not make the journey, depriving us, for instance, of a lecture by Professor Nikritin from Moscow bearing on "Fossil Scarabaeidae, their evolution and distribution". We may hope that these colleagues will be able to attend the next Congress in three years time.

The list of papers or posters presented at the meeting and bearing on Scarabaeoidea is appended. It is impressive and makes it quite evident that the super-family is a favorite subject for research. The general character of the Congress tended to favor papers on ecology and biology, rather than on purely taxonomical subjects, although these were not wholly absent.

Since several outstanding specialists on Scarabaeoidea were present in Barcelona at the time [Prof. Halffter (Mexico), Lumaret (France) Scholtz (South Africa) and Zunino (Italy)], it seemed a good opportunity to organize a workshop on the super-family during the Congress.

Two problems were discussed during the meeting:

a) Prof. Halffter stressed the disorder affecting the taxonomical level of the various groups placed under Scarabaeoidea by different authors, and even

in the work of a single author, and the corresponding difficulties met in interpreting their work.

Prof. Scholtz agreed to prepare a draft document, to be submitted to the specialists present in Barcelona, and to become the common basis for future work after it was discussed.

b) Facing the rapid growth of the number of papers devoted to Scarabaeoidea and the great difficulty met to keep up with this output, it was decided to support a suggestion made by Dr. Alan Hardy in SCARABEUS and to have regional correspondents cooperating with this magazine. I volunteered to cover Europe and Dr. Mann (Ludhiana Agricultural University, Punjab, India) offered to cover India and the neighboring countries.

Papers or posters bearing on Scarabaeoidea offered at the Barcelona Congress

- Barbero (E.), Palestrini (C.) and Zunino (M.).- Relaciones filéticas y geográficas de algunos grupos australianos de Scarabaeoidea.
- Bosch (R.), Alvarez-Fuster (A.), Juan (C.) and Petitpierre (E.).- Nuclear DNA contents in four species of Scarabaeoidea from the Balearic Islands.
- Favila (M.E.).- Estudios experimentales sobre el efecto de la edad y el alimento en la nidificación y el comportamiento de *Canthon cyanellus cyanellus*.
- García Roman (M.) and Galante (E.).- Actividad espacial y temporal de Escarabeidos en un encinar mediterráneo.
- Halffter (G.).- Relaciones entre alimentación, comportamiento sexual y evolución del comportamiento subsocial en algunos Coleoptera.
- Lumaret (J.P.).- Evolution comparee des communautés de Scarabaeides coprophages après changement de la composition du bétail.
- Lumbreras (C.J.), Galante (E.) and Mena (N.J.).- Biología de *Bubas bubalus* Olivier en un encinar mediterráneo de *Quercus rotundifolia*.
- Mena (N.J.), Galante (E.) and Lumbreras (C.J.).- Actividad de larvas de Scarabaeoidea y Geotrupidae en un medio adhesado de *Quercus rotundifolia*.
- Morelli (E.).- Clave para la identificación de las larvas de tres especies del género del género *Cyclocephala* presentes en Uruguay.
- Mozos (M.de la) and Martín Cano (J.).- Consideraciones ecológicas sobre el género *Chasmatopterus* Latreille 1825.
- Rodríguez Menéndez (H.) and Galante (E.).- Biogeografía de Scarabaeidae en la provincia fitogeográfica Oracantábrica (Cordillera Cantábrica, España).
- Saenz (A.) and Morelli (E.).- Estudio de la

- subfamilia Cetoniinae en Uruguay.
- Sanchez Pinero (F.) and Avila (J.M.).- Colonización y sucesión en excremento de vaca por los Escarabeidos coprofagos en Chiclana de la Frontera (Cadix).
- Sandoval (P.J.) and Avila (J.M.).- Autoecología de las especies de Scarabaeoidea coprofagos de los excrementos de conejo (*Oryctolagus cuniculus* Linnaeus) en la provincia de Granada.
- Scholtz (C.H.).- Phylogeny and systematics of Trogidae.
- Scholtz (C.H.) and Caveny (S.).- Ecology of southern African desert Trogidae.
- Veiga (C.M.), Lobo (J.M.) and Martín Píera (F.).- Biogeographic considerations on dung beetles Scarabaeidae of the Guadarrama Mountains (Central Spain).
- Walter (P.).- Données biocologiques sur les Scarabaeidae forestiers de la région de Bifou (Gabon).

BOOK NOTICES

Woodruff, Robert E. & Beck, Brenda M. 1989. *Arthropods of Florida and Neighboring Land Areas. Volume 13. The Scarab Beetles of Florida (Coleoptera: Scarabaeidae) Part II. The May or June Beetles (genus Phyllophaga)*. Contribution No. 716, Bureau of Entomology, Florida Dept. of Agriculture and Consumer Services, Gainesville, Florida. 223 pp, 609 figs and maps, 8 tables, 40 appendices. Softcover. In English.

This volume, the second in Woodruff's projected series of three volumes, is, as was volume one, well illustrated and extremely detailed throughout. The 225 pages includes nearly 500 photographs; and each species description includes a map. Detailed distributional records for Florida are included in 38 appendices. Species treatments include information on larvae, where available, as well as hosts and many references to published literature.

A must for workers on the North American and Caribbean faunas.
-Alan R. Hardy

Zunino, M. & Halffter, G. 1988. *Análisis taxonómico, ecológico y biogeográfico de un grupo americano de Onthophagus (Coleoptera: Scarabaeidae)*. Monografía IX, Museo Regionale di Scienze Naturali, Torino. 213 pp, 116 figs, 8 maps, 2 color plates. Hardcover. In Spanish.

This book is a monograph of the "chevroleti" group of the genus *Onthophagus*, which includes 30 species and a number of subspecies; 12 species and 7 subspecies are described as new. The first part, 171 pages, is the taxonomic portion, and is typical of that sort of work. In this section, the "chevroleti" group is characterized, and its affinities discussed, the species and subspecies are keyed in Spanish and in English, and the species are treated individually.

Part II is a "biogeographical-evolutionary" analysis, and includes the maps as well as a discussion of hypothetical origins. The relationships with *Onthophagus* lineages from areas outside North America are discussed, as are relationships within the group. The American monophyletic groups which are recognized are three; the "vespertilio" complex (monophyletic and most primitive), the "hippopotamus" complex (with nine species), and the "chevroleti" complex. The "chevroleti" complex is discussed in detail, and taxon distributions are analyzed in terms of patterns, related to the climatic and geologic characteristics of the regions where the taxa occur.

For those who have ever attempted to identify the difficult Mexican *Onthophagus*, this work is welcome for the assistance and insight it gives. An important addition to the libraries of those who work with Scarabaeinae or the Mexican fauna. -Alan R. Hardy.

NOTICES

WORKSHOP ON PATHOGENS IN SCARAB PEST MANAGEMENT

An international workshop on the role and use of pathogens in scarab pest management is to be held from August 15-17, 1990, at Lincoln, New Zealand. Lincoln has been the centre of many years research on the grass grub, *Costelytra zealandica* (Melolonthinae), which is currently focused on the development of a bacterial patho-

gen, *Serratia entomophila*, as a commercial biological control agent for grass grub control. The workshop will include diagnostic and field sessions as well as discussions on the current status of pathogens in scarab biological control systems in several parts of the world. The meeting is timed to directly precede the Society for Invertebrate Pathology Colloquium to be held in Adelaide, Australia.

For further information contact Trevor Jackson, MAFTech, P.O. Box 24, Lincoln, Canterbury, New Zealand. Ph (03) 253 011. Fax 0064 (03) 252 946.

NEOTROPICAL INSECTS TAXONOMIST LIST

Dr. G. Wilson Fernandes is working on compiling a list of taxonomists who are working on the taxonomy of neotropical insects. He indicates that he has at present a listing of approximately 400 taxonomists. He plans to publish this list in August, 1990. He indicates that a copy of the final list will be made available to those who respond.

For a copy of his questionnaire contact:

G. Wilson Fernandes
Department of Biological Sciences
Box 5640
Northern Arizona University
Flagstaff, AZ 86011 USA
Phone (602) 523-2933

WANTED TO BUY

Luginbill, P. & Painter, H. R. 1953. May Beetles of the United States and Canada. United States Department of Agriculture Technical Bulletin No. 1060. Contact Frank-Thorsten Krell, Im Brühl 27, D-7409 Dußlingen, West Germany.

LITERATURE WANTED

I wish to obtain the publications of S. Panin on Scarabaeidae, specifically the Fauna Republicii Populare Romine,

Insecta Volume X, Fascicule 3, No. 11, Melolonthinae, and No. 12 Rutelinae. Please contact Alan Hardy, 1220 "N" Street, room 340, Sacramento, California, 95814, USA.

SHORT NOTE

ADDITIONS TO THE LIST OF PUBLICATIONS OF DR. VICTOR ALLENSPACH (1895-1987)

In 1987 Wittmer published an obituary notice of the Swiss veterinarian and coleopterist Victor Allenspach, together with a compilation of his publications. However, Wittmer missed the following, published in the *Mitteilungen* of the *Entomologischer Verein Stuttgart 1869 e.V.*

Allenspach, V. 1967. Polyphylla fullo L. in der Schweiz. *Mitteilungen Entomologischer Verein Stuttgart* 2(2):59-61 [published Aug. 1st, 1967].

Allenspach, V. 1968. Die Hoplia-Arten der Schweiz. *Mitteilungen Entomologischer Verein Stuttgart* 3(2):111-112 [published July 12th, 1968].

Allenspach, V. 1969. Arten der Mittelmeerfauna unter den Melolonthinae der Schweiz. *Mitteilungen Entomologischer Verein Stuttgart* 4:40-44 [published Oct. 4th, 1969].

The following note was published concerning the depository of the Allenspach collection:

Brancucci, M. 1985. Baselerhält die Käfersammlung Allenspach. *Basler Stadtbuch* 1984, 105:70-72.

Literature Cited

Wittmer, Walter. 1987. *Gesellschaftschronik*. Victor Allenspach Dr. med. vet. *Mitteilungen der Entomologischen Gesellschaft Basel* 37(3):133-135. 1 fig.

-Frank-Thorsten Krell, Zoologisches Institut, Auf der Morgenstelle 28, D-7400 Tübingen 1, West Germany.

INDIAN SCARABAEIDAE

by Dr. Jasbir S. Mann

Preliminary investigations show that not much has been done on Indian Scarabaeidae. There are some scattered references on the biology, behavior, genitalia and taxonomy. Much of the published information is mainly from Northern India. Two new genera, twenty new species and three new combinations have been reported in various published works. Five species have been redescribed and illustrated, out of which 2 species each belong to the genera *Schizonycha* Blanchard 1845 and *Holotrichia* Hope 1837; and one species to the genus *Autoserica* Brenske 1897.

Studies on the biology, host-plants and control of *Hilyotrogus holoserica* Redt. and a short note on the response to different colours of light by 13 scarabaeid species belonging to 9 genera, are other significant contributions.

LIST OF GENERA AND SPECIES OF SCARABAEIDAE RECORDED AS NEW TO INDIA

Apogonia haryanavi Mittal 1988:157
Articephala himachali Mittal 1988:158
Asactopholis dehradunus Mittal 1988:159
Autoserica carinata Khan & Ghai 1980:25
Autoserica perpendicularis Khan & Ghai 1980:29
Autoserica poonensis Khan & Ghai 1980:26
Cyphonoxia delhiensis Anand 1988:15
Cyphonoxia gitashri Mittal 1988:160
Hemiserica mayarami Khan & Ghai 1980:42
Hemiserica trilobatata Khan & Ghai 1980:41
Holotrichia akolana Khan & Ghai 1980:39
Holotrichia longilamellata Khan & Ghai 1980:41
Holotrichia nagpurensis Khan & Ghai 1980:38
Holotrichia setosifrons Khan & Ghai 1980:36
Holotrichia undulata Khan & Ghai 1980:43
Mimela kalesarensis Ghai, Chandra & Ramamurthy 1989:115
Paragynaecoserica Khan & Ghai 1980:61
Paragynaecoserica pubescens Khan & Ghai 1980:63
Schizonycha impressa Khan & Ghai 1980:37
Serica khajiaris Mittal 1988:157
Subpeltonotus Ghai, Chandra & Ramamurthy 1988:19
Subpeltonotus anadamae Ghai, Chandra & Ramamurthy 1988:21

NEW COMBINATIONS

Holotrichia rufus Arrow 1919) Khan & Ghai 1982:29

- Holotrichia pallens* (Arrow 1919) Khan & Ghai 1982:29
Trichoserica umbrinella (Brenske 1898) Khan & Ghai 1978:214

REDESCRIBED SPECIES

- Autoserica bimaculata* (Hope 1831): Khan & Ghai 1980:29
Holotrichia consanguinea Blanchard 1850: Khan & Ghai 1982:34
Holotrichia serrata (Fabricius 1787): Khan & Ghai 1982:34
Schizonycha fuscens Blanchard 1850: Khan & Ghai 1980:35
Schizonycha ruficollis (Fabricius 1791): Khan & Ghai 1980:34

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 Ghai, S., Chandra, K. & Ramamurthy, V. V. 1988. A new genus *Subpeltonotus* and a new species *S. andamanae* from India (Insecta, Coleoptera, Scarabaeidae, Rutelinae). *Reichenbachia Mus. Tierkunde. Dresden* 26(5):19-24.
 Ghai, S., Chandra, K. & Ramamurthy, V. V. 1989. A new Ruteline species, *Mimela kalesarensis* from India (Insecta, Coleoptera, Scarabaeidae). *Reichenbachia Mus. Tierkunde. Dresden* 26(20):115-117.
 Gupta, B. P., Rai, K. M. & Joshi, K. C. 1976. Studies on the biology & control of *Hihytrogus holoserica* Redt. (Coleoptera: Melolonthidae). *Proceedings of the Academy of Natural Sciences of India* 46(B)(1-2):335-340.
 Khan, K. M. & Ghai, S. 1978. Notes on the genus *Trichoserica* Reitter (Sericini: Melolonthinae: Scarabaeidae) and a new combination for *Serica (Ophthalmoserica) umbrinella* Brenske. *Indian Journal of Entomology* 40(2):214.
 Khan, K. M. & Ghai, S. 1980. Taxonomic studies on the genus *Autoserica* Brenske (Sericini: Melolonthinae: Scarabaeidae), with descriptions of three new species from India and Pakistan. *Redescription of Autoserica bimaculata* (Hope) and three new combinations along with a key to the species. *Bulletin of Entomology* 21:23-32.
 Khan, K. M. & Ghai, S. 1980. *Schizonycha impressa*, a new species from India (Melolonthini: Melolonthinae: Scarabaeidae) and redescription of two species. *Bulletin of Entomology* 21:33-39.
 Khan, K. M. & Ghai, S. 1980. Notes on the genus *Hemiserica* Brenske (Sericini: Melolonthinae: Scarabaeidae) with description of two new species and a key to the species. *Bulletin of Entomology* 21:40-43.
 Khan, K. M. & Ghai, S. 1982. Taxonomic studies of the genus *Holotrichia* Hope (Melolonthini: Melolonthinae: Scarabaeidae) with descriptions of five new species from India along with redescription of two poorly described species and a key to

- the species. *Bulletin of Entomology* 23:28-45.
 Khan, K. M. & Ghai, S. 1982. *Paragynaecoserica*: a new sericine genus from India (Sericini: Melolonthinae: Scarabaeidae). *Bulletin of Entomology* 23:61-64.
 Mittal, I. C. 1988. New species of Sericinae and Melolonthinae from India (Insecta, Coleoptera, Scarabaeidae). *Reichenbachia Mus. Tierkunde. Dresden* 25(31):157-160.
 Sewak, R. 1987. Male genitalia of Indian *Onthophagus* Latr. (Coleoptera; Scarabaeidae) and its taxonomic importance. *Journal of Animal Morphology and Physiology* 33(1-2):135-140.

RECENT LITERATURE

by Dr. Renaud Paulian

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 Anon. (K. Harz) 1987. In Memoriam René Miksic. *Articulata* 3(1):71. [no bibliography]
 Antoine, Philippe. 1989. Contribution à l'étude des *Cetoniinae* de Côte d'Ivoire (Coleoptera Cetoniinae). *Rev. franç. Ent. (n.s.)* 11(1):29-35.
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 Avila, J. M. & Pascual, F. 1987. Contribución al estudio de los escarabeidos (Col. Scarabaeoidea) copróphagos de Sierra Nevada. I. introducción e inventario de especies. *Boletín de la Asociación Española de Entomología* 11:81-86.
 Avila Sanchez-Jofre, José M. & Pascual Torres, F. 1987. Contribución al estudio de los Escarabeidos copróphagos de Sierra Nevada (Granada). VI. Autoecología de las especies. *Familia Aphodiidae* (Coleoptera: Scarabaeoidea). *Boletim da Sociedade Portuguesa de Entomologia* 3(20):1-18.
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 Biström, Olof & Väisänen, Rauno 1988. Ancient-forest invertebrates of the Pyhä-Häkki national park in Central Finland. *Acta Zoologica Fennica* 185:1-69. [8 species of Scarabaeoidea, 2 of Lucanidae]
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 Boulet, G. [????]. *Odontaeus armiger* (Scop.) dans les départements méridionaux, une rareté! (Col. Scarabaeidae). *L'Entomologiste*, 45(3):156.
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RECENT LITERATURE ON PASSALIDAE

by Dr. Pedro Reyes-Castillo

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