

# Scarabaeus

# A NEWSLETTER FOR THOSE INTERESTED IN SCARABAEIDAE

EDITED BY A.R. HARDY

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We have had a very satisfactory response to the questionnaire included in the last issue of SCARABAEUS, and have received a few photographs, which are most welcome. We have included another copy of the questionnaire to be used by those who have not remembered to send in the first. We will be happy to receive additional photographs as well.

We have presented below a summary of the responses to the questionnaires. There were a few interesting things to note; for instance, many indicated a desire to purchase literature if such were listed, however, not a single individual indicated that they had anything to sell! On the whole, most responses indicated little desire to change the newsletter. Many expressed a wish to have brief biographies and photos of workers on the Scarabaeidae included.

There was a great deal of interest in the "Recent Literature" portion of the newsletter. This is, of course, the most difficult part to keep up. We would like to remind our readers to continue to send copies of their publications to the editor, and to perhaps request that their coworkers do the same. This would be a tremendous help.

It was also suggested that perhaps a listing of papers which could not be located by researchers would be valuable. We will be happy to list requests for any literature in any issue of SCARABAEUS.

There was also a question concerning possible plans for a scarab symposium at the Vancouver International Congress of Entomology in 1988. If there is anyone interested in such an undertaking, please let us know, and we will be happy to help.

An interest was also expressed in a letters to the editor column, and a place for collecting reports, comments and questions. We have always solicited this type of material, and continue to be anxious to provide space for this type of thing.

We would also like to hear the opinions of our readers on the production of a specialty journal devoted to Scarabaeidae. Would you like to see SCARABAEUS become a formal publication, with refereed papers, in addition to a newsletter? Would you be interested in subscribing to such a journal?

#### NEW ADDRESSES AND CORRECTIONS

Julius BOOS, 1234 Westchester Dr. East, West Palm Beach, Fla. 33417 USA Joe CICERO, 740 NE 23 Ave., #42D, Gainesville, Fla. 32609 USA Dr. Robert L. CROCKER, Texas A&M Univ. R.E.C., 17360 Coit Rd., Dallas, Texas, USA Douglas DRYSDALE, 802 Cresthill Rd., San Antonio, Texas 78220 USA Cornell DUDLEY, Museums of Malawi, c/o P.O. Box 211, Blantyre, Malawi M. A. HIELKEMA Veenenburg 6, 2804 WX Gouda, Netherlands Max KUHBANDNER Zool. Staatssammulung, Munchhausenstrasse 21, D-8000 Munchen 60, W. Germany Dr. John F. LAWRENCE, CSIRO Division of Entomology, GPO Box 1700, Canberra City, ACT 2601 Australia Dr. Antonio MARTINEZ, Juan Carreras 508- C.C.21, 4405 Rosario de Lerma. Salta, ARGENTINA Antonio S. P. MARTINS, Depto. de Biologia, Universidade dos Acores, 9502 Ponta Delgada (Acores) Codex, Portugal Dr. N.H. NEWTON, Vector Control Branch, Environmental Health Section. P.O.Box 2091, Raleigh, NC 27602, USA Riccardo PITTINO, Via ZeZon 10, 20124 Milano, Italy Dr. A. REICHENBACH, Carl-Ludwig-Institut f. Physiologie der Karl-Marx-Universitat, 7010 Leipzig, Liebigstrasse 27, DDR Bill RIED, 83 Sunken Meadow Rd., Ft. Salonga, NY. 11768 USA Joachim SCHEUERN, Altcheck 22, D-5482 Grafschaft-Esch, W. Germany Dan SUNDBERG, 480 Circle Dr., Schertz, Texas 78154, USA H. TASHIRO, NYS Agr. Exp. Stn., Cornell Univ., Geneva, NY 14456, USA Ken VICK, USDA-ARS, P.O. Box 14565, Gainesville, Fla. 32604 USA J. F. WAPPES, 90 Placid Hill Cir., Woodlands, Texas, 77381, USA Dr. Karl WELLSCHMIED, Elektrastrasse 58, D 8000, Munchen 81, W. Germany T. A. WEIR, CSIRO Entomology, GPO box 1700, Canberra, ACT 2601 Australia Karl WERNER, Bahnhofst. 7, 8922 Peiting, W. Germany Dr. Ronald YOUNG, Systematics Research Colln., W-436 Nebraska Hall,

#### QUESTIONNAIRE RESPONSES

Dr. O. P. YOUNG, USDA-ARS-SFCIML, P.O.Box 225, Stoneville, MS 38776, USA

Univ. of Nebraska, Lincoln, Nebraska 68588, USA

In the summaries below, we will have to use a few abbreviations, and a standard format. First will be the NAME of the worker, followed by the GENERAL FIELD OF INTEREST; [(T) taxonomy, (BC) biological control, (Be) behavior, (Bi) biogeography, (LH) life histories, (L) larvae]; the TAXONOMIC AREA OF INTEREST; how many PAPERS PUBLISHED on Scarabaeidae; indication of a PRIVATE COLLECTION, and its size; if there is a desire to EXCHANGE SPECIMENS; if there is a willingness to IDENTIFY MATERIAL; and any further comments.

Please remember that an indication of an interest to identify material should be confirmed in correspondence before sending any specimens.

DR. GARY D. ALPERT, USA; T;Be;LH; Cremastocheilini and myrmecophilous scarabs; 2; colln of 8 drawers; exchange <u>Cremastocheilus</u>; will identify. Involved in the publication of major work on <u>Cremastocheilus</u>.

DR. G. F. BORNEMISSZA, Australia; BC;Be; Morphology, sexual dimorphism, polymorphism, polychromism; Scarabaeinae world-wide; 9; small colln; exchange Lamellicornia; no identifications. Currently retired and writing up backlogs of previous research.

- YVES CAMBEFORT, France; T;Bi; Interested in Ecology in Africa, esp. Scarabaeinae; 45; no colln; no exchanges; no identifications. Interested in the taxonomy and ecology of West African dung beetles and studies on the Egyptian scarab symbol. Would like to borrow material.
- DR. DAVID C. CARLSON, USA; T;LH;L; Scarabaeidae on a world-wide basis; 3; has colln; will exchange; will identify. Involved in generic revisions of Ochodaeus. Gymnopyge, revising the Scarabaeoidea portion of the "Larvae of North American Insects".
- DR. P. B. CARNE, Australia; T; Rutelinae, Dynastinae of Australia; 25; no colln; no exchange; no identifications. Is currently publishing small papers as supplements to earlier revisions of Dynastinae and Rutelinae.
- DR. F. CHALUMEAU, Guadeloupe; T;Be;Bi;LH; Eupariini, and Scarabaeidae of the Antilles; 37; colln of approx 200 boxes; exchange for Antilles Scarabaeidae; will identify. Researching the taxonomy, ethology and biogeography of the Scarabaeoidea of the Antilles and the Eupariini of the Western Hemisphere. Would like to borrow material on a long term basis.
- PAUL M. CHOATE, USA; T;Be;Bi; Most Laprosticti of North America; 1; has colln; will exchange; will identify. Interested in faunal studies on Southeastern US Coleoptera, especially Carabidae, but also Geotrupinae and Aphodiinae. Would like to borrow material.
- DR. ROBERT L. CROCKER, USA; BC;Be;Bi;LH;L; spatial distribution and pheromones; Phyllophaga, Cyclocephala, Pelidnota, Cotinis worldwide; 8; no colln.; no exchange; no identifications. Interested in the sex pheromone of Phyllophaga crinita, and site preferences of Phyllophaga.
- ROGER-PAUL DECHAMBRE, France; T;Bi; Dynastidae of world; 40; no colln; will exchange for Dynastidae; will identify. Interested in the biogeography of Dynastidae, and in Madagascar Dynastinae.
- GIOVANNI DELLACASA, Italy; T; Nomenclature; Aphodiinae of World; 20; colln of 100,000 specimens; exchange Aphodiinae; will identify. Projects are to check on the true identification and limits of the subgenera of the genus Aphodius, and studying the taxonomy of the species types of each group. Will probably need to borrow material.
- J. M. I. DONALDSON, Rep. S. Africa; BC; Be; LH; Dynastidae, Cetoniinae, Rutelinae, mostly african; 7; colln for reference; no exchange; no identifications. Interested in lures for Cetoniinae; rearing and control of <u>Heteronychus arator</u> and <u>Sciobius horni</u>.
- DR. W. D. EDMONDS, USA; T;Be;Bi;LH;L; functional morphology; evolution; subfamily Scarabaeinae of world; 10; colln 5000 spec.; no exchange; will identify. Interested in the systematics and biogeography of <u>Phanaeus</u>.
- ARTHUR V. EVANS, S. Africa; T;Be;Bi;LH;L; Scarabaeidae esp Melolonthinae world-wide; 3; colln of 90 drawers; will exchange esp Melolonthinae; will identify. Working on <u>Coenonycha</u> of Baja California, Afrotropical Pachydemini, Melolonthini, Ochodaeinae, <u>Stegopterus</u> (Trichiinae).

DR. G. TRUMAN FINCHER, USA; BC; Scarabaeinae world-wide; 30; colln of 10,000 specimens; no exchanges, no identifications. Interested in the use of dung-burying scarabs as biocontrol agents for dung-breeding Diptera on pasture flies.

EDUARDO GALANTE, Spain; T;BC;Be;Bi; Scarabaeoidea of Palearctic, esp. Iberian Peninsula; 22; colln of 50,000 specimens; exchange desired; will identify. Interested in faunistic and biogeographical information on Scarabaeoidea in the mountains of northern Spain; undertaking ecological studies of the dung beetles of pastures, their effects on the bushfly in Spain.

BRUCE GILL, Canada; T;Be;Bi; all groups, esp Scarabaeinae world-wide; 3; colln of 50 drawers; will exchange Scarabaeinae; will identify. Working on foraging behavior of Scarabaeinae, and taxonomy of Central American Scarabaeinae, esp Canthidium.

JOHN D. GLASER, USA; T;Be;Bi; all Scarabaeidae, esp. Cetoniinae and Trichiinae, all areas, esp. nearctic and neotropical; 1; colln of 60 drawers; exchange for selected groups; no identifications. Interested in Maryland Scarabaeoidea, all aspects.

DR. I. HANSKI, Finland; Be;LH; Ecology; Aphodiinae and Scarabaeinae; 10-15; no colln; no exchanges; no identifications. Interested in the ecology of tropical forest scarabs.

DR. ALAN. R. HARDY, USA; T;Be;Bi;LH; all Scarabaeidae world-wide; 30; colln of approx 35,000 specimens; limited exchanges; will identify some groups. Research on mainly Pleurosticti from Nearctic and Neotropical, esp Melolonthinae and Rutelinae.

PETER HOLTER, Denmark; BC;Be;LH; Coprophagous groups, esp. Aphodiinae; 6; no colln.; no exchange; no identifications. At present not involved in projects on Scarabaeidae.

STEVEN IABLOKOFF-KHNZORIAN, USSR, T;Bi; all groups in Caucasus; 12; yes, about 1000 specimens; no exchange; no identifications. Interested in the Scarabaeidae of the Caucasus, and is preparing a catalog of all Armenian Coleoptera; and papers on Coccinellidae and Ptinidae.

DR. SYED M. H. KABIR, Bangladesh; T;Be;LH; Scarabaeinae, Coprinae, Aphodiinae of Bangladesh; 4; no colln.; yes exchange; will identify. Interested in the breeding behavior of some dung carrying scarab beetles, and white grubs associated with sugarcane.

CARL E. KAMP, USA; T;BC;Be;Bi;LH;L; mainly Dynastinae of tropical and subtropical areas; 0; colln of approx 300 specimens; exchange for Dynastinae; will identify if possible. Interested in morphological variations of species over broad regional areas, both past and present. Also a free-lance artist who may be able to help with research project illustrations.

JIN ILL KIM, Korea; T;LH;L; at present Korean Aphodiidae, in 3-4 years all Laprosticti; 10; colln of Korean material; exchange Laprosticti; will identify. At present involved in taxonomic studies of Korean Aphodiidae.

- P. J. KUIJTEN, Netherlands; T;Be;Bi;LH; all Scarabaeidae, for research only Hybosorinae and <u>Parastasia</u>, interested in Hybosorinae of Old World, all others on a worldwide basis; 10; colln of approx 6000 sp.; will exchange; will identify. Research on Hybosorinae and <u>Parastasia</u>.
- DR. PAUL K. LAGO, USA; T; Melolonthines, Scarabaeidae in general, mostly Nearctic; 3; colln of approx 15.000 specimens; will exchange; will identify. Working on a revision of the Nearctic <u>Serica</u> and the Scarabaeidae of Mississippi.
- DELBERT A. LA RUE, USA; T;Be;Bi;LH;L; preservation of endangered or relictual species; Interested in Scarabaeidae in general, with esp. interest in Rutelinae and Melolonthinae; 1; colln of 3-5000 specimens; will exchange; no identifications. Interested in the distributions and biologies of US Cotalpa and related genera.
- DR. JOHN F. LAWRENCE, Australia; T;L; Scarabaeoidea of world; 3; no colln; no exchanges; no identifications. At present not researching on this superfamily exclusively.
- RANDALL LUNDGREN, USA; T;Be;Bi;LH; Scarabaeidae of North and Middle America; 0; colln of under 500; no exchange; no identifications. Working on nomenclatural problems in Staphylinidae.
- ANTONIO S. P. MARTINS, Portugal; BC; Be; L; Scarabaeidae; 3; yes, small; yes exchange; no identifications. Interested in the integrated control of the Japanese Beetle in the Azores, needs to borrow material for this work.
- SCOTT McCLEVE, USA; T;Be;Bi;LH; <u>Diplotaxis</u>; 0; colln. of 30,000 specimens; yes exchange; yes identify. Interested in <u>Diplotaxis</u>, several papers in progress, would like to borrow material.
- PETER McQUILLAN, Australia; T;Bi;L; Phylogeny; economic species in grasslands; all groups from Australia and Gondwana fragments; 4; colln of 5000 larvae; exchanges desired for larvae; will identify. Interested in the taxonomy of scarabaeoid larvae in Tasmania, the use of resistant cultivars and pathogens to control pasture damage by Adoryphorus couloni.
- G. H. NELSON, USA; T; Scarabaeidae of North America north of Mexico; O; colln of approx 6500 specimens; will exchange; no identifications. Main interests are in the taxonomy of the Buprestidae.
- GARY L. PARSONS, USA; T;Be;Bi; evolution and function of horns on beetles; all groups, esp Dynastinae; 0; colln of 2000-3000 specimens; will exchange all beetles; will identify. Work on the distribution, diversity and abundance of litter Coleoptera in the western Cascades Mountains of Oregon.
- DR. ALAIN PAULIAN, France; T;Bi; Cetoniinae, mainly the exotic fauna and new world; 4; colln of 50 cartons; will exchange Cetoniinae; will identify. Currently studying the fauna of the New World. Would like to borrow material, and wishes correspondents for exchanges of beetles and bibliographical material.

DR. RENAUD PAULIAN, France; T;Bi;L; Scarabaeidae, Aphodiidae; Orphnidae, Hybosoridae, Ceratocanthidae, Cetoniidae; approx 200; no colln; no exchange; will identify. Interested in Ceratocanthidae, and Scarabaeoidea from the Malagasay area and New Caladonia, would like to borrow material.

RICCARDO PITTINO, Italy; T;Bi; Laprosticti in general, but esp Aphodiidae, Trogidae, Geotrupidae, Onthophagus, world-wide; 30; colln of approx 300,000 specimens; will exchange; will identify. Working on revisions of Palearctic and Oriental Trox, old world species of Pleurophorus and allies, old world Rhyssemus, taxonomy of the Psammodiini world-wide. Would like to borrow selected material in the near future.

DR. MILOSLAV RAKOVIC, Czechoslovakia; T; Aphodiinae, esp. Psammodiini on a world-wide basis; 15; has colln; exchange Aphodiinae; will identify. Working with Pittino on a revision of the Psammodiini.

DR. BRETT C. RATCLIFFE, USA; T;Bi;LH;L; Phylogeny; All Scarabaeidae world-wide; 35; colln of 100 USNM drawers; will exchange; will identify. Revisions of Dynastinae of Panama, new world Gymnetini, and new neotropical Dynastinae all in progress.

ALEX REIFSCHNEIDER, USA; T;Be;Bi;LH;L; Scarabaeinae of New World; 0; colln of 3500 specimens; exchange for new world material; will identify. Interested in the biology of <u>Onthophagus knausi</u>, pitfall trapping with temperature and precipitation relationships.

PEDRO REYES-CASTILLO, Mexico; T;Be;Bi; Passalidae, Aphodiinae-Rhyparini of the world, esp. neotropical; 25 Passalidae, 1 Lucanidae, 1 Scarabaeidae; colln for reference of approx 30,000 specimens; no exchange; will identify. Interested in biosystematic revisions of groups of Passalidae, also interested in biology and taxonomy of Rhyparini.

THOMAS JAMES RIDSDILL-SMITH, Australia; BC;Be;Bi;LH; Scarabaeinae; 22; no colln; no exchanges; no identifications. Interested in the introduction of Scarabaeinae dung beetles to Australia to control bush fly in cattle dung.

JULIEN M. P. ROGGEMAN, Netherlands; BC;Bi; All Scarabaeidae; 0; colln of 100 african; no exchange; no identifications. Interests in Scarabaeidae are only of amateur interest.

D. & C. ROUGON, France; T;Be;Bi;LH;L; Scarabaeidae of the Sahel region and Palearctic; 15; no information on colln; no exchange information; no identifications. Working on the Scarabaeidae of the Sahel region.

GUIDO SABATINELLI, W. Africa; T; Melolonthinae s.l., Rutelinae, Hopliinae, Cetoniinae of Palearctic and Oriental regions; has colln; will exchange for Melolonthinae, Rutelinae, Cetoniinae; will identify. Working on the Rutelinae of the Himalayan subregion, collecting in W. Africa.

- KIRK A. SMITH, USA; T;Bi;LH; Melolonthinae and Pleocominae of the Americas; 1; colln of approx 10,000 specimens; will exchange; will identify. Working on descriptions and a revision of <u>Coenonycha</u>.
- CHARLES L. STAINES JR. USA; T;LH; all Scarabaeoidea; 1; has colln.; no exchange; will identify. Interested in the Scarabaeidae of Maryland.
- DR. JOH. STAMATOV, USA; T; Be; Dung beetles and Cetoniidae; 0; colln of approx 20 Schmidt boxes; no exchanges; no identifications. Main interests are in the Cicindelidae, but desires to keep abreast of progress in Scarabaeidae.
- DR. TERESA STEBNICKA, Poland; T;Be;Bi; comparative morphology of mouthparts of the Scarabaeidae of the world; interests in world Aegialiini, Palaearctic and Oriental Aphodiini and Eupariini, North American Eupariini; 36; no colln; will exchange selected groups; will identify. Working on the Aphodiinae of Nepal, supplement to the Scarabaeidae of North Korea, a study on the comparative morphology of the mouthparts of the world species of Scarabaeidae. Would like to borrow material for this work.
- DR. T. BONNER STEWART, USA; Nematode larvae and mites on dung beetles; Scarabaeidae attracted to mammal dung; 6; no colln; no exchange; no identifications. Projects on collecting mites and their dung beetle hosts on specific pastures across time.
- DR. BARNEY D. STREIT, USA; T;Be;Bi;LH; Scarabaeidae of world; 0; colln of 22 drawers; will exchange; no identifications. At present not doing research on Scarabaeidae.
- DAN SUNDBERG, USA; T;Be;Bi;LH; Scarabaeidae, esp. Scarabaeinae, Dynastinae, Rutelinae, mainly US; 0; colln approx 450 sp.; will exchange; no identifications. Interested for exchanging US species.
- TERRY TAYLOR, USA, Bi; mercury vapor and blacklight as attractants; all Scarabaeidae of the neotropical; 0; has colln; wants exchanges in selected genera; no identifications. Currently involved with neotropical collecting.
- J. E. WAPPES, USA; T; Scarabaeidae of N. and Central America; 0; colln of 5000 specimens; will exchange; no identifications. Currently not working on Scarabaeidae.
- WILLIAM B. WARNER, USA; T;Be;Bi;LH;L; all, esp Scarabaeinae, Melolonthinae, Cetoniinae, Rutelinae of New World, esp N. America; 1; colln approx 15,000 specimens; will eschange; will identify. Working on a revision of Cremastocheilus, and new species of Copris and Genuchinus, would like to borrow material.
- T. A. WEIR, Australia; T; Scarabaeinae, Aphodiinae of Australia; 0; no colln; will exchange; will identify. Working on a catalog of the Scarabaeoidea of Australia, new Australian species of Onthophagus and other Scarabaeinae.

- RICHARD WESTCOTT, USA; T;Be; General Scarabaeidae, esp <u>Pleocoma</u> of USA and Mexico, esp Baja California; 1; colln of several thousand specimens; exchange for Buprestidae; no identifications. Research on Pleocoma.
- WALTER WHITFORD, USA; Be;LH; dung beetles, desert areas of southwest US; 0; no colln; no exchange; no identifications. Interested in the decomposition and nutrient recycling in the desert ecosystem.
- GEOFF WILLIAMS, Australia; T;Bi; Scarabaeidae esp Scarabaeinae of Pacific Basin littoral rainforests; 6; colln of medium size Australian material, small foreign; will exchange; will identify. Working on Aphodiinae, Hybosorinae and Scarabaeinae from small wet forests of coastal New South Wales and a general survey of rainforests.
- DONALD A. WILSON, USA; T; <u>Cremastocheilus</u>, <u>Onthophagus</u>, <u>Phanaeus</u>, <u>Pleocoma</u>, Trichiinae of the Northeast US; 0; colln of approx. 1000 specimens; will exchange; no identifications. Interested in collecting the Northeastern fauna.
- DR. J. S. YADAV, India; Cytogenetics; All Scarabaeidae; 10; no colln; exchanges for special material; no identifications. Interested in chromosome studies on Coleoptera with special reference to chromosomal polymorphism, sex-chromosome mechanisms and evolution of karyotype. Would like to exchange for testicular material fixed in 1:3 acetic alcohol.
- DR. DANIEL K. YOUNG, USA; T,Bi,L; all groups; 0; yes, several thousand specimens; yes exchange; no identifications. Primarily interested in heteromerous Coleoptera.
- DR. ORREY P. YOUNG, USA; T;Be;LH; Scarabaeinae, Troginae; 10; colln of 20 drawers; will exchange; no identifications. Interested in the population structure and dynamics of forest dung beetle communities.
- DR. RONALD M. YOUNG, USA; T;Be;Bi;LH; <u>Polyphylla</u>, Dynastinae, Cetoniinae of the world; 6; colln of 12 drawers; will exchange; will identify. Working on publishing a revision of the <u>Polyphylla</u> of America north of Mexico.
- DR. RICHARD ZUR STRASSEN, W. Germany; T;Bi; Scarabaeinae of old world; 7;no colln; no exchanges; no identifications. At present other duties prevent activities with Scarabaeidae.

## RECENT LITERATURE

- Boos, J. & B. C. Ratcliffe. 1985. A new subspecies of <u>Inca clathrata</u> (Olivier) from Trinidad, West Indies, and range extensions for <u>Inca clathrata sommeri</u> Westwood (Coleoptera: Scarabaeidae: Trichiinae). Coleopt. Bull. 39(4):381-389.
- Carne, P. R. 1985. <u>Saulostomus monteithi</u> sp. n. from Queensland (Coleoptera: Scarabaeidae: Rutelinae). J. Aust. Entomol. Soc. 24:73-74.



## SOME SCARABAEOLOGISTS

TOP ROW, L to R; Zdzislana Stebnicka, Poland; Syed Kabir, Bangladesh; Dan Sundberg, USA; Eduardo Galante, Spain. BOTTOM ROW, L to R; Riccardo Pittino, Italy; T. Bonner Stewart, USA; V. Balthasar, Czechoslovakia (deceased); Art Evans, Rep. S. Africa (USA).

#### NOTICES

FREE: Numerous copies of the Ferreira's scarab and cerambycid works available simply for the asking and postage, including the massive Os Escarabadideos de Africa (Sul do Saara). I, Revta Entomol. Mocambique, 11:5-1088, 1968-69. Works on the Curculionidae will be considered in exchange for postage. Dr. Schalk Louw, Nasionale Museum, Posbus 266, Bloemfontein 9300, Republic of South Africa.

EXCHANGE: Scarabs from southern Africa for scarabs of the world, particularly Neotropical Melolonthinae (Macrodactylini, Sericini, Pachydemini) and Palearctic Pachydemini. All inquiries promptly answered. Arthur V. Evans, Dept. of Entomology, Univ. of Pretoria, Pretoria 0002, Republic of South Africa.

## RECENT LITERATURE

- Carne, P. B. 1985. A new genus and species of Dynastinae from North Queensland (Coleoptera: Scarabaeidae). J. Aust. Entomol. Soc. 24:75-76.
- Carne, P. B. 1985. Neonastes uptoni sp. n. from the Northern Territory, with notes on the holotype and distribution of N. glabricollis (Macleay) (Coleoptera: Scarabaeidae: Dynastinae). J. Aust. Entomol. Soc. 24:69-72.
- Chalumeau, F. & H. F. Howden. 1984. Le genre Euparia (Coleoptera: Scarabaeoidea: Aphodiinae) Saint-Fargeau & Serville, 1828. Mitt. Schweizr. Entomol. Gesells. 57:85-94.
- Donaldson, Jean M. I. 1982. A laboratory rearing technique for black maize beetles <u>Heteronychus</u> spp. (Coleoptera: Scarabaeidae), and notes on their life cycle. J. Entomol. Soc. S. Africa 45(2):159-162.
- Donaldson, Jean M. I. 1984. Observations on <u>Pachnoda sinuata</u> var. <u>flaviventris</u> and other Cetoniinae (Coleoptera: Scarabaeidae) in compost heaps. Phytophylactica 16:57-60.
- Donaldson, Jean M. I. 1985. The life cycle and biology of <u>Pachnoda</u> <u>sinuata flaviventris</u> (Coleoptera: Scarabaeidae) under laboratory conditions, with field notes. Phytophylactica 17:89-94.
- Galante Patino, Eduardo. 1985. Una nueva especie de la región Paleartica: <u>Homaloplia baraudi</u> sp. nov. <u>(Col. Scarabaeoidea)</u>. Actas II Cong. Iberico Entomol. pp. 499-505.
- Galante, E. 1985. Descripción de la hembra de <u>Rhizotrogus angelesae</u> Galante, 1983 (Col., <u>Scarabaeoidea</u>, <u>Melolonthidae</u>). Bol. Assoc. Esp. Entomol. 9:183-185.
- Halffter, Violeta, Yrma Lopez-Guerrero & Gonzalo Halffter. 1985. Nesting and ovarian development in <u>Geotrupes cayicollis</u> Bates (Coleoptera: Scarabaeidae). Acta Zool. Mex. (ns) 7:1-28.
- Hardy, Alan R. 1985. Scientific Note. <u>Pelidnota punctulata</u> in Costa Rica-A correction. (Coleoptera: Scarabaeidae). Coleopt. Bull. 39(3):199.
- Howden, Henry F. 1985. A revision of the South American species in the genus Neoathyreus Howden and Martinez (Coleoptera, Scarabaeidae, Geotrupinae). Cont. Amer. Entomol. Institute 21(4):1-95.
- Howden, H. F. & B. Gill. 1984. Two species of <u>Neoathyreus</u> Howden and Martinez from Costa Rica with distributional notes on other Athyreini from Mexico and Central America (Coleoptera: Geotrupinae). Can. Entomol. 116:1637-1641.
- Kabir, S. M. H., M. A. Rashid & M. Z. R. Majumder. 1983. A faunistic study of the scarab beetles II. Rutelinae, Dynastinae and Aphodiinae (Coleoptera: Scarabaeidae) from certain districts of Bangladesh. Dhaka Univ. Studies B, XXXI(2):1-16.
- Kabir, S. M. H. & A. K. M. Faruquzzaman. 1977. Beetles associated with cattle manure in Dacca City and its suburbs. Dacca Univ. Studies XXV(1):1-5.

- Kabir, S. M. H., M. Z. R. Majumder & M. A. Rashid. 1983. A faunistic study of the scarab dung beetles. I. Scarabaeidae: Scarabaeinae from certain districts of Bangladesh. Dhaka Univ. Studies B, XXXI(1):73-92.
- Kabir, S. M. H., A. Jabbar Howlader & Jahanara Begum. 1985. Effect of dung beetle activities on the growth and yield of wheat plants. Bangladesh J. Agric. 10(1):49-55.
- Kuhbandner, Max. 1982. Diceros Gory & Percheron, 1833- ein gueltiger Gattungsname (Coleoptera, Cetoniinae). Entomofauna 3(10):141-143.
- Kuhbandner, Max. 1984. Beschreibung des bisher unbekannten Weibchens von Protaetia kuehbandneri Miksic, 1983 (Insel Romblon, Philippinen) (Coleoptera, Scarabaeidae, Cetoniinae). Entomofauna 5(6):209-212.
- Kuijten, P. J. 1985. Revision of some Hybosorine genera from the Indo-malayan subregion: <u>Microphaeochroops</u>, <u>Microphaeolodes</u>, <u>Mimocoelodes</u>, <u>Pantolasius</u> and <u>Phaeochridius</u> (Coleoptera: Scarabaeidae: Hybosorinae). Zool. Verhand. 222:1-39.
- Lumaret, J. P. & M. Bertrand. 1985. L'"Effet de reposoir" sur les arthropodes edaphiques consequence d'une accumulation excessive d'excrements dans les zones pâturées. Bull. Ecol. 16(1):55-62.
- Moron Rios, Miguel Angel. 1985. Revision del genero Phyllophaga Harris, en Mexico (Insecta, Coleoptera, Melolonthidae). Tesis para Doctor de Ciencias (Biologia), Univ. Nac. Autonoma de Mexico. pp. 1-371.
- Reyes-Castillo, Pedro & Gonzalo Halffter. 1984. La estructura social de los Passalidae (Coleoptera: Lamellicornia). Folia Entomol. Mexicana 61:49-72.
- Sabatinelli, G. 1984. Scarabeidi dell"Himalaya (Coleoptera, Scarabaeidae, Cetoniinae, Trichiinae, Valginae). Entomol. Basiliensia 9:158-167.
- Sabatinelli, G. 1983. Revisione delle Hoplia himalayane (Coleoptera, Scarabaeidae). Entomol. Basiliensia 8:165-210.
- Sabatinelli, Guido. 1984. Due nuove <u>Popillia</u> Serv. della Birmania e del Tonkino. Boll. Soc. Entomol. Ital. 116(8-10):168-171.
- Sabatinelli, Guido. 1984. Studi sul genere <u>Oxythyrea</u> Muls.: Note sulle specie del gruppo <u>cinctella</u> (Schaum) (Scarabaeidae Cetoniinae). Boll. Soc. Entomol. Ital. 116(4-7):102-104.
- Stebnicka, Z. 1985. A new genus and species of Aulonocneminae from India with notes on comparative morphology (Coleoptera: Scarabaeidae). Rev. Suisse Entomol. 92(3):649-658.
- Stebnicka, Z. 1981. New species of <u>Aphodiinae (Coleoptera, Scarabaeidae)</u> from Thailand. Bull. Acad. Polonaise Sci. (II) XXIX(7-8):327-331.

- Stebnicka, Z. 1981. New species of <u>Aphodius</u> Illig. <u>(Coleoptera. Scarabaeidae)</u> from the Himalayas. Bull. Acad. Polonaise Sci. (VI) XXIX(7-8):333-339.
- Stebnicka, Z. 1983. New species of <u>Caelius</u> Lew. (Coleoptera, Scarabaeidae, Aphodiinae) from Himalayas. Rev. Suisse Zool. 90(2):317-323.
- Stebnicka, Z. 1984. New species of Eupariini (Coleoptera, Scarabaeidae, Aphodiinae) from Papua-New Guinea. Rev. Suisse Zool. 91(3):595-602.
- Stebnicka, Z. 1985. Descriptions of the new species of Aphodiini from Himalayas with notes on other taxa (Coleoptera, Scarabaeidae, Aphodiinae). Rev. Suisse Zool. 92(2):359-366.
- Stebnicka, Z. 1984. <u>Aphodius rufus Moll</u>, 1782 and <u>Aegialia rufa</u> Fabricius, 1792 (Insecta, Coleoptera): Proposed conservation under the plenary powers by supression of <u>Aphodius scybalarius</u> Fabricius, 1792.Z.N.(S.)2318. Bull. Zool. Nom. 41(4):265-266.
- Stebnicka, Z. 1985. A revision of the Palaearctic species of the subgenus <u>Erytus</u> Muls. et Rey <u>(Coleoptera. Scarabaeidae. Aphodiinae)</u> Acta Zool. Cracov. 28(5):221-244.
- Stevenson, B. G. & D. L. Dindal. 1985. Growth and development of <a href="https://doi.org/10.1036/nd.1985"><u>Aphodius</u> beetles (Scarabaeidae) in laboratory microcosms of cow dung Coleopt. Bull. 39(3):215-220.</a>

# QUESTIONNAIRE

Please return to: Alan Hardy, Insect Taxonomy Laboratory, Room 340, 1220 "N" Street, Sacramento, California, 95814, USA. Information contained
on this sheet may be used in the SCARABAEUS newsletter. Thank you.
NAME:
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My interests in the Scarabaeidae are (more than one may be marked):
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In which groups of Scarabaeoidea are you interested?
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Approximately haw many papers on this/these group(s) have you published?
Are you willing to identify material if requested?NoYes.  Do you maintain a private collection of specimens of Scarabaeoidea?
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Are you actively collecting literature?NoYes.
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