



Scarabaeus

A NEWSLETTER FOR THOSE INTERESTED IN SCARABAEIDAE

EDITED BY A.R. HARDY

c/o INSECT TAXONOMY LABORATORY,
CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
1220 "N" STREET, SACRAMENTO, CALIFORNIA 95814

CONTRIBUTING EDITORS: D.C. CARLSON, W.D. EDMONDS, B.C. RATCLIFFE

NUMBER 14

JANUARY, 1987

As you will notice, this issue of SCARABAEUS contains no photographs of scarabaeologists. This is the result of several factors, including the lack of time at the end of the year to prepare the master from which the printed newsletter is prepared, and the lack of photographs. I would like to again request that you send a photo, if you haven't already done so. More will appear in the next issue.

This number of SCARABAEUS will include a complete listing of the mailing list which we use. There have been a number of changes from the earlier list we printed, as well as a number of additions. If there are any persons who you feel should be included in this listing, but are not, please let us know.

=====

NOTICES AND ANNOUNCEMENTS

WANTED: Need specimens, loans, photos, correspondence on Inca, Golinca. Interested in obtaining C. American Phanaeus and the smaller Oxysternon from the area, have good Phanaeus for exchange. Julius O. Boos, c/o 1234 Westchester Dr. E., West Palm Beach, FLA. 33417, USA

WANTED: Prof. R. Paulian, revising the Scarabaeoid fauna of New Caledonia would greatly appreciate the opportunity of studying available material of these groups from the area. I would like to see as much as possible of any material in collections. R. Paulian, La Rouviere, Port Ste. Foy, F-33220 Sainte Foy la Grande, FRANCE.

TRADE: New, current collections and trading list available upon request. Seek contact with other scarab traders and field collectors worldwide. Send your list for mine. Dr. Ronald M. Young, Systematics Research Collections, University of Nebraska State Museum, W436 Nebraska Hall, Lincoln, NE 68588-0514, USA.

COPIES AVAILABLE- Copies of the complete obituary and bibliography of Dr. S. Endrodi, as announced in the last SCARABAEUS, are now available from the editor of SCARABAEUS without charge.

NEW NEWSLETTER- "The Flyer", a newsletter for those interested in Diptera has just appeared. The first number includes comments about Diptera collections, featuring the United States National Museum of Natural History; information upon several cataloging projects; news of dipterists; other notes, and a questionnaire. For further information, contact Dr. F. Christian Thompson, Systematic Entomology Laboratory., USDA, NHB-168, US National Museum, Washington, D.C., 20560, USA.

REPORT AVAILABLE- A recent report upon newsletters has been published. This research report, undertaken by the British Museum, includes replies from over 100 editors of newsletters, including SCARABAEUS. The published report was described as:

Research Newsletters in the Life Sciences: their scope, advantages and future.
By H. V. Wyatt. British Library R & D Report no. 5897, 77pp. A8 double space typing plus 25 pages of tables and 1 graph. Obtainable from: British Library Publications Sales Unit, Boston Spa, W. Yorkshire LS23 7BQ, England. Available in fiche or photocopy, 2 pounds 95 (fiche) or 17 pounds 70 (photocopy) for seamail.

A summation of the results:

1. Newsletters form a stable, important, inexpensive, democratic and relatively quick means of communication between scientists.
2. Social newsletters perform a useful function and many contain a small portion of research information but are mainly ephemeral.
3. Research newsletters, although they may have some social content, are primarily current awareness and archival in function. They are not usually in the public domain, having mainly a closed, private circulation.
4. In zoology and botany they can form an important link between the Professional scientist and the amateur (who may be a professional scientist in another sphere).
5. Research newsletters are particularly suited for communication within an invisible college with a clearly defined and limited subject e. g. a particular small group of animals or the genetics of a particular organism.
6. The research newsletter is particularly suitable for information not usually suitable for scientific journals: continuing updating of gene symbols and nomenclature, location of mutants, strains and stocks, museum collections, new species, distribution, computer programs and bibliographies of all kinds
7. Short technical notes, short research findings, observations, new ideas and compilations of data are also suitable.
8. Publication of directories of workers with their interests, current research and willingness to perform assays, identifications etc. can be a useful service.
9. The research newsletter can initiate, coordinate and publicize cooperative research efforts.
10. The research newsletter can be the pivot for meetings, collections and exchange of information within a group.
11. Bibliographies of published work, sent in by the members of the invisible college, are a unique and important form of specialized bibliography.
12. By using word-processors linked to typesetting machines and offset litho printing, the production of newsletters can be kept very cheap. By sending the electrostatic masters by airmail overseas for local printing, postage costs can be reduced & more timely delivery made to distant lands.
13. Small subsidies to newsletters to pay for third world subscriptions would be a very efficient form of help.
14. Newsletters can be considered as prototypes for information computer networks. One of the disadvantages of such networks could be partially overcome if a linked newsletter could be used to communicate to those without terminal access.
15. Research newsletters should be encouraged and so far as possible, newsletter editors should be made aware of the variety of items which have been found useful in other newsletters.

INTERNATIONAL YOUTH/AMATEUR ENTOMOLOGIST ORGANIZATION- We have received the following:

I would like to take this opportunity to tell you about a unique and outstanding international entomological organization that caters to the special needs of youth and amateur entomologists, but is also worthwhile for Professional entomologists. The organization is Y.E.S.- the YOUNG ENTOMOLOGISTS' SOCIETY. Our Programs and services are made Possible by affiliation with the United States Department of Agriculture, Michigan State University, the Entomological Society of Canada, and the American Entomological Society. Major financial support comes from our membership.

Y.E.S. has many useful Programs. For example, we assist all entomologists in establishing contact with colleagues in other geographical regions who share similar entomological interests, so that they might learn from one another by sharing information, advice, literature, and specimens. We offer an opportunity for youth and amateur entomologists to become involved in the actual operation of a society, and to publish their articles and illustrations in a journal free of page charges. We also sponsor activities such as illustration, Photography and writing competitions for youth members. Y.E.S. has something for everybody!

The Society journal, Y.E.S. QUARTERLY, is well worth the nominal membership fee. It is one of our primary methods of informational exchange among members and is full of informative articles, as well as illustrations, Society news, field notes, puzzles, poems, and much more. We also publish an annual member Directory and other special publications.

Professional entomologists are encouraged to become involved in Y.E.S., as members or volunteers, because they serve as role models and teachers to guide the personal and educational development of other members. I encourage YOU to become involved! If you are not personally interested in this type of Program, I hope you will put in a good word for us whenever possible (personal communications, newsletters, etc.). Y.E.S. has activities, Programs and services that are ideal for all types of entomologists, science and biology teachers, naturalists, museum personnel, and other interested individuals.

Additional details about our programs, services, and enrollment procedures (including scholarships and exchange memberships) are contained in a Y.E.S. brochure. If I can provide you with further information, copies of the brochure, or a sample copy of our journal, please don't hesitate to contact us at Y.E.S. International Headquarters, Department of Entomology., Michigan State University, East Lansing, MI 48824-1115 USA. Thank you. Gary A. Dunn, Extension Entomologist, USDA, Y.E.S. Advisor and Editor.

QUESTIONNAIRE RESPONSES

In the summaries below we have used 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) larval]; 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 a willingness to identify material should be confirmed in correspondence before sending any specimens.

JULIUS O. BOOS, USA; T;Be;Bi; Dynastinae, Trichiinae of world, Scarabaeinae (esp. Phanaeus, Oxysternon); 1; collection of 2000; will exchange some; some identifications; working on Inca, Golinca. Would like to exchange, borrow specimens, photos.

RICHARD ALLEN CUNNINGHAM, USA; T;Be;Bi;Lh;L; all groups, nearctic, neotropical; 4,000 specimens; 0; no identifications, will exchange all groups. California Phyllophaga.

ANGUS MACQUEEN, Australia; BC;LH;Community structure; Scarabaeinae; no collection; 2; no identifications; no exchanges. Biological control of Buffalo Fly.

MIGUEL ANGEL MORON, Mexico; T;Be;Bi;LH;L; Melolonthinae, Rutelinae, Dynastinae, Cetoniinae, Trichiinae, Orphninae, Hybosorinae, Scarabaeinae, from Neotropical region; 40; 30,000 specimens; will identify, will exchange for worldwide fauna. Revision of Plusiotis, Chrycina, revision of Mexican Phyllophaga, description of larvae and pupae of the above subfamilies, faunistic studies of selected Mexican localities. Wishes to borrow material.

VASANA SUKAPANPOTHARAM, Thailand; T;BC;Be;Ecology; Scarabaeoidea, worldwide; 1; small collection; will identify; will exchange in future. Will be studying bruchids on mungbeans and Dynastids. Wishes to borrow material.

SCARABAEUS MAILING LIST

Acorn, John H., Department of Entomology, University of Alberta, Edmonton, Alberta, T6G 2E3, CANADA
Ahart, Don, 12433 N 47th Dr., Glendale, Arizona, 85304, USA
Allen, Bob L., 27081 Segovia Circle, Mission Viejo CA, 92691, USA
Alpert, Dr. Gary, 46 Oxford Street, Cambridge, MASS., 02138, USA
Anderson, Robert S., Department of Entomology, University of Alberta, Edmonton, Alberta, T6G 2E3, CANADA
Andrews, Dr. Myron, Professor, Veterinary Science, North Dakota State University, Fargo, ND, 58105, USA
Arnett, Jr., Dr. Ross, Florida State Collection of, Arthropods, P.O. Box 1269, Gainesville FLA, 32602, USA
Ashworth, Dr. Alan, Department of Geology, N. Dakota State University, Fargo, ND, 58105, USA
Bacchus, M. E., Entomology, British Museum (Natural History), London, ENGLAND
Badr, S. A., Taxonomy Department, Plant Protection Research Institute, Dokki, Giza, 12611, EGYPT
Banzhof, Christopher, 680 Switzer, 10th Ave., Marine Terminal, San Diego CA, 92101, USA
Baranowski, Richard, Zool. Inst./Dept. of Systematics, Helgonavagen 3, S-223 62 Lund, SWEDEN
Baraud, Jacques, Faculte des Sciences de Bordeaux, 351, Cours de la Liberation, 33-Talence, FRANCE
Bezark, Larry, 521 46th Street, Sacramento CA, 95819, USA
Boos, Julius, 1234 Westchester Dr. East, West Palm Beach, FLA, 33417, USA
Bornemissza, Dr. G. F., CSIRO Entomology, Hobart, Tasmania, 7000, AUSTRALIA
Branco, Dr. Tristao, Rua de Camoes, 788, 2o Dto., P-4000 Porto, PORTUGAL
Brey Meyer, Dr. A., Inst. Geog. Spat. Org., Polish Academy of Sciences-00-927, Warszawa, Krakowskie Przedmiescie 30, POLAND

Britton, Dr. E. B., Division of Entomology, CSIRO, P.O. Box 1700, Canberra, ACT
 2601, AUSTRALIA
 Brooks, Robert, 21621 Rio Verde, El Toro, CA, 92630, USA
 Buntin, G. David, Univ. of Georgia College of Agric., Experiment, Georgia,
 30212, USA
 Cambefort, Yves, Department of Entomology, Museum Nat. d'Hist. Nat., 45, Rue de
 Buffon, Paris, 75005, FRANCE
 Carlson, Dr. Dave, 5229 Butterwood Cir., Orangevale CA, 95662, USA
 Carmenes, Agustin, Av. Gral. Flores 991, Las Piedras (Depto. de Canelones),
 URUGUAY
 Carne, Dr. P. B., Division of Entomology, CSIRO, Canberra A.C.T., 2601,
 AUSTRALIA
 Carpaneto, G. M., Instituto di Zoologia dell'Univer., Viale dell'Universita,
 32, Rome, 00100, ITALY
 Carr, J. L., 23 Dalrymple Green, N.W., Calgary, Alberta, T3A 1Y2, CANADA
 Cazier, Dr. Mont, Zoology Department, Arizona State University, Tempe AZ,
 85281, USA
 Chalumeau, F., Inst. Recherces Ento. de la Caribe, B.P. 119, 97152 Pointe-a-
 Pitre, GUADELOUPE
 Chandler, T. L., Department of Zoology & Entomology, Iowa State University,
 Ames, IA, 50010, USA
 Chandra, Dr. Kailash, Division of Entomology, Indian Agricultural Research
 Inst., New Dehli, 110012, India
 Choate, Paul, USDA SEA IAML, P.O. Box 14565, Gainesville, FLA, 32604, USA
 Cicero, Joe, 740 NE 23rd Ave., #42D, Gainesville, FLA, 32609, USA
 Coe, Dr. M. J., Animal Ecology Research Group, Department of Zoology, South
 Parks Road, Oxford, OX1 3PS, ENGLAND
 Coffman, John, Route 1, Box 331, Timberville, VA, 22853, USA
 Cook, David, 51 Kathleen Street, Triggs, 6020, WEST AUSTRALIA
 Cornell, J. F., 2033 S. Blvd, Charlotte, NC, 28203, USA
 Crandall, Bob, 1992 N Mar Vista, Altadena CA, 91001, USA
 Crins, W. J., Department of Botany, University of British Columbia, Vancouver,
 British Columbia, V6T 1W5, CANADA
 Crocker, Dr. Robert L., Texas A & M University, R.E.C., 17360 Coit Rd., Dallas
 TEXAS, 75252, USA
 Crouetti, A., Instituto di Entomologia Agraria, dell'Universita di Sassari,
 ITALY
 Cunningham, Richard, 536 N. Meeker, La Puente CA, 91746, USA
 D'Hotman, Miss M. D., Fakulteit Wis- & Natuurkunde, University of Pretoria,
 0002 Pretoria, Republic of South Africa
 DeWailly, P., 3, rue de l'Eglise, 92100 Boulogne, FRANCE
 Decelle, J., Museum of Central Africa, Tervuren, BELGIUM
 Dechambre, Dr. R. P., 13 Bd. St. Marcel, Paris, 75013, FRANCE
 Dellacassa, Giovanni, Casella Postale 921, I-16121, Genova, ITALY
 Desiere, Dr. M., Lab. Morph. Syst. Ecol., Universite de Liege, Institut Ed. Van
 Beneden, B-4020 Liege, BELGIUM
 Domek, John M., University of Arkansas, Department of Entomology, Ag. Bldg.
 320, Fayetteville, Arkansas, 72701, USA
 Donaldson, Jean, Vegetable & Ornamental Plant, Research Institute, Private Bag
 X293, Pretoria 0001, SOUTH AFRICA
 Drysdale, Douglas, 802 Cresthill Rd., San Antonio TEXAS, 78220, USA
 Dudley, Cornell, Museums of Malawi, c/o P.O. Box 211, Blantyre, MALAWI
 Duff, Bob, 9519 Casanes Ave, Downey, CA, 90240, USA
 Duffels, J. P., Librarian, Bibliotek der Neder. Ent. Veren., Plantage
 Middenlaan 64, 1018 DH Amsterdam, NETHERLANDS
 Duffels, Dr. J. P., Afdeling Ent., Inst. Taxonomische, Zoologie, Univ. van
 Amsterdam, Platange Middenlaan 64, 1018 DH Amsterdam, NETHERLANDS
 Dunn, Gary, 147 Natural Science Building, Michigan State University, E. Lansing
 MI, 48824, USA

Eastin, J., 2924 W. Paradise Dr., Phoenix AZ, 85029, USA
 Edmonds, Dave, California State Polytech. Univ., 3801 W Temple Ave., Pomona CA, 91768, USA
 Endrody-Younga, Dr. S., Dept. Coleoptera, Transvaal Museum, P.O. Box 413, Pretoria, SOUTH AFRICA
 Evans, Art, Department of Entomology, University of Pretoria, Pretoria, 0002, SOUTH AFRICA
 Faulkner, David, Department of Entomology, P.O. Box 1390, San Diego, CA, 92112, USA
 Fincher, Dr. G. T., USDA-ARS-VTERL, P.O. Drawer GE, College Station, TEXAS, 77841, USA
 Francesco, Cattaneo, Via Carducci 12, 21013 Gallarate, ITALY
 Frankie, G., Department of Entomology, Texas A&M University, College Station TEXAS, 77843, USA
 Freude, Dr. Heinz, D-8000 Munchen 19, Landshuter Allee 156, WEST GERMANY
 Fujiyama, Shizuo, Dept. of Biology, Shinshu University, Matsumoto 390, JAPAN
 Galante Patino, Eduardo, Dept. de Zoologia, Universidad de Salamanca, SPAIN
 Gavin, Bill, Department of Entomology, Oregon State University, Corvallis OR, 97331, USA
 Geck, R., 18741 Capense St., Fountain Valley CA, 92708, USA
 Giesbert, E., 9780 Drake Lane, Beverly Hills CA, 90210, USA
 Gilbert, Art, 7817 N. Leonard, Clovis CA, 93612, USA
 Gilbert, P., Librarian, British Museum (Natural History), Cromwell Road, London SW7 5BD, ENGLAND
 Gill, Bruce, Biology Department, Carleton University, Ottawa, Ontario, K1S 5B6, CANADA
 Gillogly, LtC. Alan, USAEHA (PMPMD), Aberdeen Proving Ground, MD, 21010, USA
 Girard, Claude, Laboratoire d'Entomologie, Museum de Paris, 45, rue Buffon, 75005, Paris, FRANCE
 Giuliani, Derham, 170 Flower Alley, Big Pine, CA, 93513, USA
 Glaser, John D., 660 Loch Hill Rd., Baltimore MD, 21239, USA
 Gordon, Dr. Robert, 12402 Round Tree Lane, Bowie, MD, 20715, USA
 Gupta, A. K., Research Associate, Division of Entomology, Indian Agricultural Research Inst., New Delhi, INDIA
 Halffter, Gonzalo, Cda. de Monte Kamerum #34, Lomas de Chapultepec, Deleg. Miguel Hidalgo, 11000 Mexico, D.F., MEXICO
 Hammond, P. M., Department of Entomology, British Museum(Natural History), London, SW7 5BD, ENGLAND
 Hanrahan, Dr. S. A., Zoology, University of Witwatersrand, 1 Jan Smuts Ave., Johannesburg, 2001, SOUTH AFRICA
 Hanski, Dr. I., Department of Zoology, University of Helsinki, Pohj.Rautatiekatu 13, SF-00100 Helsinki 10, FINLAND
 Hardy, Dr. Alan R., Insect Taxonomy Laboratory, Rm 340, California Dept. of Food & Agric., 1220 "N" Street, Sacramento, CA, 95814, USA
 Hartmann, Matthias, 5101 Apfelstadt, Schafgasse 7, GERMAN DEMOCRATIC REP.
 Haskins, Scott, 702 Ozark Ct., Stockton CA, 95205, USA
 Hedstrom, Ingemar, Apdo 339 (DEI), San Pedro 2050, San Jose, COSTA RICA
 Helgesen, R. G., Department of Entomology, Cornell University, Ithaca, NY, 14853, USA
 Hielkema, M. A., Veenenburg 6, 2804 WX Gouda, NETHERLANDS
 Holm, E., Department of Entomology, University of Pretoria, Pretoria 0001, SOUTH AFRICA
 Holter, Dr. P., Institute of General Zoology, Universitetsparken 15, Copenhagen, DK-2100, DENMARK
 Hovore, Frank, 19152 W. Placerita Cyn Rd, Newhall CA, 91321, USA
 Howden, Henry, Department of Biology, Carleton University, Ottawa, Ontario, CANADA
 Hummer, Larry, 1622 Ravine Rd, Vista CA, 92083, USA

Iablokoff-Khuzorian, Dr. S. M., Akad. der Wissenschaften der, Armeuischan SSR,
Zool. Inst., Paruir-Sevac-Str.7, 3750 44, Erevan 44, USSR

Ichikawa, Toshiyuki, 2-1-17 Ojihincho, Kita-ku, Tokyo, JAPAN

Ienistea, M. A., Str. Caraiman 108, R-78229, Bucurest 2, RUMANIA

Jackson, Dr. Trevor, Canterbury Agricultura Science Ctr., P.O.Box 24, Lincoln,
NEW ZEALAND

Jameson, Mary Liz, Entomology, University of Nebraska State Museum, W436
Nebraska Hall, Lincoln, Nebraska, 68588-0514, USA

Jiron, Prof. Luis Fernando, Faculty of Microbiology, University of Costa Rica,
COSTA RICA

Johnson, Dr. L. R., History Department, Memphis State University, Memphis,
Tennessee, 38152, USA

Johnson, Paul, Department of Plant, Soil and Entomological Sciences, Univeristy
of Idaho, Moscow, Idaho, 83843, USA

Johnson, Dr. Donn T., University of Arkansas, Department of Entomology, Ag.
Bldg. 320, Fayetteville, Arkansas, 72701, USA

Kabir, Dr. S. M. H., Department of Zoology, University of Dacca, Dacca-2,
BANGLADESH

Kalinina, O. I., Biological and Soil Institute, USSR Academy of Sciences,
Vladivostock, USSR

Kamp, Carl, 15984-B E. Rice Place, Aurora COLO, 80015, USA

Kavakov, O. N., Zoological Institute, Academy of Sciences, 199034 Leningrad,
USSR

Kim, Jin Ill, Department of Biology, University of Sungshin, 249-1 3KA Dongsun-
Dong, Sungbuk-Ku, Seoul, 132, KOREA

Kingston, Dr. T. J., Department of Agriculture, Mt. Pleasant Laboratories, P.O.
Box 46, Launceston South, Tasmania, 7249, AUSTRALIA

Kitayama, Cliff, 1050 San Pablo Ave., Albany CA, 94706, USA

Klein, Bert, Department of Zoology, University of Florida, Gainesville, FLA,
32611, USA

Klemperer, Dr. H. G., Department of Biochemistry, University of Birmingham,
P.O. Box 363, Birmingham, B15 2TT, ENGLAND

Klien, Michael, USDA Japanese Beetle Lab, Ohio Agric. Res. & Develop. Cntr.,
Wooster, OHIO, 44691, USA

Kloft, W. J., Institute of Applied Zoology, University of Bonn, Bonn, WEST
GERMANY

Kobayashi, Hirokazu, 3-16, Kamishakujii-minami cho, Nerima-ku, Tokyo 177, JAPAN

Koskela, Dr. H., Department of Biology, University of Jyvaskyla, Yliopistonkatu
9, SF-40100 Jyvaskyla 10, FINLAND

Kowalyk, Henry E., Biology Research, RC 15, 800 Kipling Ave., Toronto, Ontario,
M8Z 5S4, CANADA

Kral, Dr. David, Italska 2, 120 00 Praha 2, CZECHOSLOVAKIA

Krikken, Dr. J., Rijksmuseum Van Natuurlijke Hist., Raamsteeg 2, Leiden,
NETHERLANDS

Kuhbander, Max, Zool. Staatssammulung, Munchhausenstrasse 21, D-8000, Munchen
60, WEST GERMANY

Kuijten, Dr. P., Wagherpl. 58, Leiden, NETHERLANDS

LaRue, Delbert, 3894 McKenzie St., Riverside, CA, 92503, USA

Lago, Paul, Department of Biology, University of Mississippi, University, MS,
38677, USA

Lampert, Jr., Lester, 17 Hillview Circle, Asheville NC, 28805, USA

Landin, B. O., Zoological Institute, University of Lund, Lund, SWEDEN

Langston, Dr. Robert, 31 Windsor Ave., Kensington CA, 93708, USA

Lattin, Jack, Department of Entomology, Oregon State University, Corvallis OR,
97331, USA

Lawrence, Dr. John, CSIRO Entomology, G.P.O. Box 1700, Canberra A.C.T. 2601,
AUSTRALIA

Levi, Lisa, Museo Regionale di Scienze Nat., Via Maria Vittoria, 18, 10123
Torino, ITALY

Lewis, Doris, P.O. Box 2034, Covina CA, 91722, USA
 Lopez, Yrma, Galetti 87-2, San Miguel Chapult., Deleg. Miguel Hidalgo, 11850,
 Mexico, D.F., MEXICO
 Lugaski, Thomas, P.O. Box 18219, Steamboat Br., Reno NV, 89511, USA
 Lumaret, Jean-Pierre, Laboratoire de Zoogeographie, Universite Paul Valery,
 B.P. 5043 F 34032, Montpellier Cedex, FRANCE
 Lundgren, Randall, 815 S. Fell Ave., Normal Illinois, 61761, USA
 Majumber, Md. Zahidur Rahman, Bangladesh Atomic Energy Comm., P.O. Box 3787
 Ganok Bari, Savar Dacca, BANGLADESH
 Maltsev, I. V., Department of Plant Protection, Odessa Agricultural Institute,
 Odessa, USSR
 Marqua, D., Whittier Narrows Nature Center, 1000 N. Durfee Ave, S. El Monte CA,
 91733, USA
 Martinez, Antonio, Juan Carreras 508-C.C. 21, Rosario de Lerma (4405), Salta,
 ARGENTINA
 Martins, Antonio S. P., Depto. Biologia, Univ. Acores, 9502 Ponta Delgada
 (Acores) Codex, PORTUGAL
 Massa, Bruno, Instituto di Zoologia, dell'Universita di Palermo, Palermo, ITALY
 Matthews, Dr. E. G., South Australia Museum, North Terrace, Adelaide, 5000,
 SOUTH AUSTRALIA
 McCleve, Scott, 2210 13th St., Douglas AZ, 85607, USA
 McPeak, Ron, 7989 La Brusca Way, Carlsbad CA, 92008, USA
 McQueen, Dr. A., CSIRO- Entomology, Rockhampton, Queensland, AUSTRALIA
 McQuillan, Peter, New Town Research Labs, St. Johns Ave, New Town, TAS, 7008,
 AUSTRALIA
 Medvedev, Dr. S. I., Department of Entomology, University of Khar'kov, USSR
 Micheli, Julio, 14 Baldorioty St., Mariani, Ponce, PUERTO RICO
 Mignani, Prof. Roberto, Dipartimento di Fisica, I Universita di Roma "La
 Sapienza", p. le A. Moro, 2, Rome, 00185, ITALY
 Miksic, Rene, Fortinstitut, Sarajevo, YUGOSLAVIA
 Mittal, I. C., Department of Zoology, Kurukshetra University 132-119,
 Kurukshetra, INDIA
 Mohyuddin, Dr. A. I., C.I.B.C. Station, Shahrah Pehlvi, P.O. Box 8, Rawalpindi,
 PAKISTAN
 Monteith, Geof B., Entomology, Queensland Museum, P.O. Box 300, South Brisbane,
 Queensland, 4101, AUSTRALIA
 Moretto, Ph., Mas Sainte Aglae, Chemin du Pelvoux, 83200 Toulon, FRANCE
 Morgan, Dr. A., Dept. of Biology, University of Waterloo, Waterloo, Ontario,
 N2L 3G1, CANADA
 Moron, Miguel Angel, Calzada del Hueso y Canal Nacional, Coyoacan, Apartado
 Postal 23-181, Mexico 23 D.F., MEXICO
 Morrill, Wendell, Department of Biology, Montana State University, Bozeman, MT,
 59717, USA
 Mosenender, Chris, 8073 S. Newport Ct., Englewood COLO, 80112, USA
 Nabhitabhata, J., Applied Scientific Research Corp., Bangkhen, Bangkok 9,
 THAILAND
 Nakamura, Hikaru, Yamanashis Ento. Research Ctr., P.O. Box 12, Fujiyoshida,
 Yamanashiken, JAPAN
 Nakamura, Dr. Y., National Grassland Institute, Nihinasu, Nasu-Gun, Tochigi
 329-27, JAPAN
 Narendran, Dr. T. C., Department of Zoology, University of Calicut, Calicut,
 Kerala 673-635, INDIA
 Nelson, G. H., COMP 309, Pomona Mall E., Pomona CA, 91766, USA
 Newton, Dr. N. H., Vector Control Branch, Environmental Health Section, P.O.
 Box 2091, Raleigh, NC, 27602, USA
 Nicolle, H., St. Blaise, 10 Vendeuvre-sur-Barse, FRANCE
 Nikolajev, Dr. J. V., Alma-Ata 480032, Akademgorodok, Institute of Zoology,
 USSR

Nikritin, L. M., Central Laboratory for Plant Quar., Ministry of Agriculture of the USSR, Moscow 107139, USSR

Olechowicz, Dr. E., Institute of Ecology, Polish Academy of Sciences, Driekanow Lesny near Warsaw, POLAND

Olsak, L., Department of Entomology, University of Georgia, Athens, GA, 30602, USA

Osberg, Deborah, Department of Zoology, Univ. of Witwatersrand, 1 Jan Smuts Ave., Johannesburg, 2001, SOUTH AFRICA

Ostmark, H. E., Division of Tropical Research, Tela Railroad Co., La Lima, HONDURAS

Owen, Colin R., Chimperie Agencies, P.O. Box 1384, Somerset West 7130, SOUTH AFRICA

Parsons, Gary L., Department of Entomology, Oregon State University, Corvallis OR, 97331, USA

Paulian, Dr. A., Les Bougainvilles A, Impasse Mathiea 93200, Toulon, FRANCE

Paulian, Dr. Renaud, La Rouviere, Port Ste. Foy, F-33220 Sainte Foy la Grande, FRANCE

Pereira, P. F. S., Avenida Nazareth, 481, Caixa Postal, 7172, Sao Paulo, BRAZIL

Peters, Gary, 1445 NW Menlo Dr., Corvallis OR, 97330, USA

Piattella, Dr. Emanuele, Via Pietro Campora, 25, Rome, 00152, ITALY

Ping, Dr. Lin, Kwangtung Entomological Inst., Kwangchow, Peoples Republic of CHINA

Pittino, Dr. Riccardo, Via Zezon 10, 20124, Milan, ITALY

Pontuale, Giorgio, Pomponio Leto, 3, Rome, 00193, ITALY

Pope, Dr. R. D., British Museum (Natural History), Entomology, Cromwell Rd., London SW7, ENGLAND

Potts, Bob, P.O. Box 336, Coarsegold CA, 93614, USA

Pupier, R., Universite de Sainte-Etienne, 23, rue du Docteur Paul Michelon, 42100, Saint-Etienne, FRANCE

Rakovic, Dr., Biophysical Institute, Charles University, Salmouska 3, Prague 2, CZECHOSLOVAKIA

Rataj, Dr. Karel, Botanical Institute, 78712 Sumperk, CZECHOSLOVAKIA

Ratcliffe, Dr. Brett, Univ. of Nebraska State Museum, W436 Nebraska Hall, Lincoln, Nebraska, 68588, USA

Reichenbach, Dr. A., Carl-Ludwig-Institut f. Physiol., der Karl Marx Univ., 7010 Leipzig, Liebigstrasse 27, EAST GERMANY

Reid, Bill, 43 Sunken Meadow Rd., Ft. Salonga NY, 11768, USA

Reifschneider, Alex, 2040 "F" Street, #7, Lincoln, Nebraska, 68510, USA

Remington, C. L., Yale University, Peabody Museum of Natural History, New Haven, CT, 06511, USA

Rey, Antonio, Via C. Capeppa 37, 16122 Genova, ITALY

Reyes-Castillo, Pedro, Instituto de Ecologia, Apartado Postal 18-845, Mexico 18 D.F., MEXICO

Riley, Edward, Department of Entomology, Louisiana State University, Baton Rouge, LA, 70803, USA

Ritcher, Dr. Paul, 45 N. Los Olmos, Green Valley AZ, 85614, USA

Robertson, J., 10839 Kelmere, Culver City CA, 90230, USA

Roggemna, J., Tulpentin 81, Voorburg, NETHERLANDS

Rougon, D. & C, Laboratoire d'Ecole animale, Universite d'Orleans, 45046 Orleans cedex, FRANCE

Rulien, Neil, 495 "D" Paseo Madera, Green Valley AZ, 85614, USA

Sabatinelli, Dr. Guido, B. P. 2208, Ouagadougou, UPPER VOLTA

Sanderson, Dr. Milton W., 195 Rainbow Rock Road, Sedona AZ, 86336, USA

Scheuren, Joachim, Altchek 22, D-5482 Grafschaft-Esch, WEST GERMANY

Scholtz, Dr. C. H., Department of Entomology, University of Pretoria, Pretoria, SOUTH AFRICA

Schroder, Arnd, Behringstrasse 2, Berlin, 1195, GERMAN DEMOCRATIC REP.

Schulze, Joachim, Museum fur Naturkunde, Invalidenstrasse 43, 1040 Berlin,
GERMAN DEMOCRATIC REP.

Schwert, Dr. D. P., Geology Department, North Dakota State University, Fargo,
ND, 58102, USA

Seely, Dr. M. K., Namib Desert Research Station, P.O. Box 953, Walvis Bay,
SOUTHWEST AFRICA

Smith, Kirk A., 1227 F St., Davis CA, 95616, USA

Smith, Dr. J. Ridsill, CSIRO, Entomology, Private Bag P.O., Wembley, W.A.,
6014, AUSTRALIA

Staines, Jr., Charles L., 3302 Decker Place, Edgewater MD, 21037, USA

Stamatov, Dr. John, Box 117-27 Annadale Street, Armonk, NY, 10504, USA

Stebnicka, Dr. Z., Polish Academy of Sciences, ul. Stawkowska 17, 31-016
Krakow, POLAND

Stewart, Dr. T., School of Veterinary Med., Louisiana State University, Baton
Rouge, LA, 70803, USA

Stiernet, Nicole, 20 rue du Marche, B-4020 Liege, NETHERLANDS

Storey, Mr. R., Dept. of Primary Industry, P.O. Box 1054, Mareeba, Queensland,
4880, AUSTRALIA

Streit, Barney, 2218 N. First Ave., Upland CA, 91786, USA

Sukapantharam, V., Thailand Institute of Scientific & Technological
Research, 196 Phahonyothin Road, Bang Khen, Bangkok 10900, THAILAND

Sullivan, P., Eaton Canyon Nature Center, 1750 N. Altadena Dr., Pasadena CA,
91107, USA

Sundberg, Dan, 480 Circle Dr., Schertz, TEXAS, 78154, USA

Tashiro, H., NYS Agric. Exp. Stn., Cornell University, Geneva NY, 14456, USA

Taylor, Terry, P.O. Box 1446, Fort Davis TEXAS, 79734, USA

Thomas, Dr. Donald, USDA-ARS Livestock Insects Lab., P.O. Box 232, Kerrville
TEXAS, 78028, USA

Turnbow, Jr., Robert H., Supervisory Entomologist, Deh, Bldg. 1404, Fort
Rucker, AL, 36362, USA

Turner, Dr. W. J., Department of Entomology, Washington State University,
Pullman WA, 99164, USA

Tyndale-Biscoe, Dr. M., CSIRO, Entomology, P.O. Box 1700, Canberra City,
A.C.T., 2601, AUSTRALIA

Upodhyay, Dr. V. B., Department of Zoology, University of Gorakhpur, Gorakhpur
(U.P.), 270-001, INDIA

Vanin, Sergio, Dept. Zoologia, Univers. Sao Paulo, Caixa Postal 20.520, CEP
05421, 01000, Sao Paulo, BRAZIL

Verity, Dave, Botanical Gardens-Herbarium, University of California, Los
Angeles, CA, 90024, USA

Vick, Ken, USDA-ARS, P.O. Box 14565, Gainesville, FLA, 32604, USA

Viedma, M. G. de, Department of Entomology, University of Madrid, Madrid (3),
SPAIN

Walford-Huggins, Allan, P.O. Box 17, Molloy, N. Queensland 4880, AUSTRALIA

Wallin, Henrik, University of Uppsala, Box 561, S-75122, Uppsala, SWEDEN

Walters, George C., 150 San Remo Rd., Carmel Highlands, California, 93923, USA

Wappes, J. E., 90 Placid Hill Cir., Woodlands, TEXAS, 77381, USA

Warner, W. B., Department of Zoology, Arizona State University, Tempe AZ,
85281, USA

Wei, Dr. Change You, Institute of Zoology, Academia Sinica, Beijing, Peoples
Republic of, CHINA

Weir, Mr. T. A., CSIRO Entomology, G. P. O. Box 1700, Canberra A. C. T., 2601,
AUSTRALIA

Werner, Dr. Floyd, Department of Entomology, University of Arizona, Tucson AZ.
85721, USA

Werner, Karl, Bahnhofst. 7, 8922 Peiting, WEST GERMANY

Westcott, Rick, State Department of Agriculture, 635 Capitol St. N.E., Salem
OR, 97310, USA

Whitford, W. G., Department of Biology, New Mexico State University, Box 3AF,
Las Cruces NM, 88003, USA

Williams, G. A., C/-Post Office Lansdowne, Via Taree, NSW, 2430, AUSTRALIA

Wilson, Donald, P.O. Box 322, Newfields, NH, 03856, USA

Woodley, Norman, Systematic Entomology Lab. USDA, U. S. National Museum NHB
168, Washington, DC, 20560, USA

Woodruff, R. W., Florida Department of Agriculture, Plant Industry, P.O. Box
1269, Gainesville, FLA, 32602, USA

Yadav, J. S., Department of Zoology, Kurukshetra University, Kurukshetra,
1321119, INDIA

Young, Dr. Daniel K., 237 Russell Labs, 1630 Linden Dr., Madison, WI, 53706,
USA

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

Young, Dr. Ronald, W-436 Nebraska Hall, Unniversity of Nebraska, Lincoln, NEB,
68588, USA

Zadek, Jiri, 830 Van Vleet Oval, Rm. 163, The University of Oklahoma, Norman
OKLA, 73019, USA

Zunino, Dr. M., Museo Ed. Instituto di Zoologia, Sistematica, Univ. di Torino,
101 23 Torino, ITALY

zur Strassen, R., Porschungsinstitut-Natur Mus., 6 Frankfurt a. M. 1,
Senckenberganlage 25, WEST GERMANY

RECENT LITERATURE

- Allsopp, P. G. 1986.
Book Review: The Dynastinae of the World: S. Endrodi.
Journal of the Australian Entomological Society. 25:110.
- Allsopp, P. G. & Carne, P. B. 1986.
Teinogenys mooniensis sp. n. and new locality records for other
species of *Teinogenys* Sharp (Coleoptera: Scarabaeidae: Dynastinae).
Journal of the Australian Entomological Society. 25:89-93. 3 figs.
- Allsopp, P. G. & Carne, P. B. 1986.
Paraschizognathus marcus sp. n. (Coleoptera: Scarabaeidae: Rutelinae)
from south east Queensland.
Journal of the Australian Entomological Society. 25:95-97. 4 figs.
- Allsopp, P. G. & Carne, P. B. 1986.
Anoplognathus viotor sp. n. (Coleoptera: Scarabaeidae: Rutelinae) from
west Queensland.
Journal of the Australian Entomological Society. 25:99-101. 4 figs.
- Britton, E. B. 1986.
A revision of the Australian Chafers (Coleoptera: Scarabaeidae:
Melolonthinae). Vol. 4. Tribe Liparetrini: Genus *Colpochila*.
Australian Journal of Zoology, Supplementary Series.
No. 118:1-135. 374 figs.
- Burne, Jeffrey C. 1986.
Note on a flight of *Lissomelas flohri* Bates (Coleoptera: Scarabaeidae)
The Coleopterist's Bulletin. 40(4):312.
- Cambeport, Yves & Jean-Pierre Lumaret 1986.
Nidification et larve du genre *Litocopris* Waterhouse (Coleoptera:
Scarabaeidae).
Nouv. Revue Entomol.. 3(2):251-256. 18 figs.
- Carne, P. B. 1980.
Pseudoryctes storeyi sp. n. and new records of other species of
other species of *Pseudoryctes* Sharp (Coleoptera: Scarabaeidae:
Dynastinae).
Journal of the Australian Entomological Society. 19:255-258. 2 figs.

- Carne, P. B. 1981.
 Three new species of *Anoplognathus* Leach, and new distribution records for poorly known species (Coleoptera: Scarabaeidae: Rutelinae).
Journal of the Australian Entomological Society. 20:289-294. 9 figs.
- Chandra, Kailash 1986.
 Taxonomic studies on Pleurostict Scarabaeidae (Coleoptera) of North-West India.
 Synopsis of Thesis, Kurukshetra University, India. [unpaged]: .
- Dechambre, R.-P. 1985.
 Quatre nouvelles espèces de *Stenocrates* (Coleoptera, Dynastidae).
Revue française d'Entomologie (N.S.). 7(3):142-144. 5 figs.
- Dechambre, R.-P. & Lumaret, J.-P. 1985.
 Un *Ligyryus* nouveau (Coleoptera, Dynastidae) description de l'imago, de la larve et indications éthologiques.
Revue française d'Entomologie (N.S.). 7(3):107-110. 15 figs.
- Dechambre, Roger-Paul 1986.
 Faune de Madagascar. 65. Insectes Coléoptères Dynastidae.
 Muséum national d'Histoire naturelle, Paris. :1-215. 280 figs.
- Dechambre, Roger-Paul & Jean-Pierre Lumaret 1986.
 Un *Actinobolus* nouveau (Coleoptera: Dynastidae) de Carajas (Para, Bresil). Description de l'imago, de la larve et données éthologiques.
Boletim do museu Paranense Emilio Goeldi. 2(2):101-111. 20 figs.
- Donaldson, Jean M. I. 1985.
 The effect of temperature on the immature stages of *Pachnoda sinuata flaviventris* (Coleoptera: Scarabaeidae).
Phytophylactica. 17:139-141. 2 tables.
- Donaldson, Jean M. I., McGovern, T. P. & Ladd Jr., T. L. 1986.
 Trapping techniques and Attractants for Cetoniinae and Rutelinae (Coleoptera: Scarabaeidae).
Journal of Economic Entomology. 79(2):374-377.
- Duff, Robert 1986.
 The Scarabaeidae of America North of Mexico- A reference guide and Literature compendium. Part III. A preliminary bibliography of the Scarabaeidae of America North of Mexico.
 Entomological Research Publishers, Downey, California. :1-97.
- Evans, Arthur V. 1986.
 Notes on *Valgus californicus* Horn (Coleoptera: Scarabaeidae).
The Pan-Pacific Entomologist. 62(1):83.
- Glaser, John D. 1986.
 Notes on some Maryland Scarabaeidae and Cerambycidae (Coleoptera).
The Coleopterist's Bulletin. 40(4):353-354.
- Houston, W. W. K. 1986.
 Exocrine glands in the forelegs of dung beetles in the genus *Onitis* F. (Coleoptera: Scarabaeidae).
Journal of the Australian Entomological Society. 25:161-169. 15 figs.
- Howden, Henry F. & C. H. Scholtz 1986.
 Changes in a Texas dung beetle community between 1975 and 1985 (Coleoptera: Scarabaeidae, Scarabaeinae).
The Coleopterist's Bulletin. 40(4):313-316. 2 figs.
- Kim, Jin Ill 1979.
 A new species of *Aegialia* (s. str.) (Col., Scarab., Aegialidae) from sand dunes of Korea.
The Korean Journal of Entomology. 9(2):9-10.
- Kim, Jin Ill 1980.
 Deux nouvelles espèces du genre *Psammodius* Coréen (Col. Aphodiidae).
The Korean Journal of Entomology. 10(2):9-11.

- Kim, Jin Ill 1980.
Deux nouvelles espèces sabuleuses apparent au genre *Psammodyus* (Col. Aphodiidae) de la Corée.
The Korean Journal of Entomology. 10(1):7-8.
- Kim, Jin Ill 1984.
Taxonomic study on the Korean Laprosticti (Scarabaeoidea, Insecta).
The Korean Journal of Entomology. 14(1):51-61. 2 figs.
- Kim, Jin Ill 1984.
Taxonomic study on the Korean Laprosticti (Scarabaeoidea) II.
Scarabaeidae (2. genus *Caccobius*).
The Korean Journal of Entomology. 14(2):19-22. 1 fig.
- Kim, Jin Ill 1985.
Taxonomic study on the Korean Laprosticti (Scarabaeoidea) III.
Scarabaeidae (2. genus *Onthophagus*).
The Korean Journal of Entomology. 15(1):1-13. 4 figs.
- Kim, Jin Ill 1985.
Taxonomic study on the Korean Laprosticti (Scarabaeoidea) IV.
Aphodiidae (Aphodiini I).
The Korean Journal of Systematic Zoology. 1(1-2):79-86.
- Kim, Jin Ill 1986.
Taxonomic study on the Korean Laprosticti (Scarabaeoidea) V.
Two new and two rare unrecorded species of the genus *Aphodius*.
The Korean Journal of Entomology. 16(1):7-11. 3 figs.
- Kirk, A. A. & T. J. Ridsdill-Smith 1986.
Dung beetle distribution patterns in the Iberian Peninsula.
Entomophaga. 31(2):183-190. 2 fig, 2 t
- Klemperer, H. G. 1982.
Normal and atypical nesting behaviour of *Copris lunaris* (L.): comparison with related species (Coleoptera, Scarabaeidae)
Ecological Entomology. 7:69-83. 3 figs.
- Klemperer, H. G. 1982.
Nest construction and larval behaviour of *Onitis belial* and *Onitis ion* (Coleoptera, Scarabaeidae)
Ecological Entomology. 7:291-297. 1 fig.
- Klemperer, H. G. 1982.
Parental behaviour in *Copris lunaris* (Coleoptera, Scarabaeidae): care and defence of brood balls and nest.
Ecological Entomology. 7:155-167. 3 figs.
- Klemperer, H. G. 1983.
The evolution of parental behaviour in Scarabaeinae (Coleoptera, Scarabaeidae): an experimental approach.
Ecological Entomology. 8:49-59.
- Klemperer, H. G. 1983.
Brood ball construction by the non-brooding Coprini *Sulcophanaeus carnifex* and *Dichotomius torulosus* (Coleoptera, Scarabaeidae).
Ecological Entomology. 8:61-68. 2 figs.
- Klemperer, H. G. 1986.
Life history and parental behaviour of a dung beetle from neotropical rainforest, *Copris laeviceps* (Coleoptera, Scarabaeidae).
Journal of Zoology, London (A). 209:319-326. 1 fig.
- Krikken, J. 1986.
Provisional checklist of the Valginae (Coleoptera: Cetoniidae).
Haroldius. 1:1-17.
- Krikken, J. 1986.
Two new species of *Onthophagus* Latraille from the Philippine island of Samar (Coleoptera: Scarabaeidae).
Zoologische Mededelingen. 60(19):277-283. 12 figs.

- Kuijten, P. J. 1986.
Revision of the African and Madagascan species of *Phaeochrous* Castelnau, 1840 (Coleoptera: Scarabaeidae, Hybosorinae).
Musée royal de l'Afrique Centrale Tervuren, Belgique. Annual Vol..
249:1-50. 78 figs.
- Lekkerkerk, R. W. & J. Krikken 1986.
Taxonomic review of the Afrotropical genus *Dicronorhina* Hope, with notes on its relatives (Coleoptera: Cetoniidae).
Zoologische Verhandelingen. 233:1-46. 24 figs.
- Lumaret, Jean-Pierre 1986.
Toxicité de certains helminthocides vis-à-vis des insectes coprophages et conséquences sur la disparation des excréments de la surface du sol.
Acta Oecologica. Oecologica Applic.. 7(4):313-324. 3 figs 4 t
- Mudge, Alan D. & Gregg Henderson 1986.
A mating aggregation of the myrmecophilous scarab *Cremastocheilus crinitus* pugetanus Casey (Coleoptera: Scarabaeidae).
The Coleopterist's Bulletin. 40(3):245-246.
- Paulian, Renaud 1986.
Un nouveaux genre Malgache de Canthonini Coleoptera, Scarabaeidae\$.
Revue fr. d'Entomol. (N.S.). 8(3):113-115. 3 figs.
- Rahoal-Fabra, Pompeu 1985.
Les especes francaises du genre *Onthophagus* (Col. Scarabaeidae) leur biologie et repartition dans le languedoc et ses regions limitrophes.
Published by the author. St. Etienne d'Escatte 30250 Sommières France.
:1-86. 48 figs.
- Rakovic, Miloslav 1986.
Complementary notes to my revision of old world *Psammodius* Fallen species (Coleoptera, Scarabaeidae, Aphodiinae).
Annotationes Zoologicae et Botanicae. No. 174:1-19. 6 figs.
- Rakovic, Miloslav 1986.
A review of the genus *Neopsammobius* gen. n. (Coleoptera, Scarabaeidae, Aphodiinae).
Acta entomologica bohemoslovaca.. 83:197-201. 4 figs.
- Ratcliffe, Brett C. & Dechambre, R.-P. 1983.
New combinations, synonymy and distribution records for neotropical Pentodontini and Oryctini (Coleoptera: Scarabaeidae: Dynastinae).
The Coleopterist's Bulletin. 37(3):267-272. 1 fig.
- Ridsdill-Smith, T. J. & Kirk, A. A. 1985.
Selecting dung beetles (Scarabaeinae) from Spain for bushfly control in south-western Australia.
Entomophaga. 30(3):217-223. 4 tbls.
- Ridsdill-Smith, T. J., L. Hayles & M. J. Palmer 1986.
Competition between the bush fly and a dung beetle in dung of differing characteristics.
Entomol. exp. appl.. 41:83-90. 2 fig, 3 t
- Scholtz, C. H. 1986.
A new species of *Trox* Fabricius (Coleoptera: Trogidae) from Zambia.
The Coleopterist's Bulletin. 40(1):29-31. 3 figs
- Stebnicka, Z. 1984.
New species of *Eupariini* (Coleoptera, Scarabaeidae, Aphodiinae) from Papua- Nerw Guinea.
Revue suisse Zoology. 91(3):595-602. 14 figs.
- Stebnicka, Z. 1985.
Notes on the distribution and economic importance of the Scarabaeid-Beetles.
Young Entomologist's Society Quarterly. 2(3):26-31. 1 fig.

Stebnicka, Z. 1986.

Notes on the taxonomic status of the genus *Caelius* Lewis (Coleoptera, Scarabaeidae, Aphodiinae).

Acta Zool. Cracov.. 29(14):339-354. 25 figs.

Young, Ron 1986.

Three new species of North American Polyphylla Harris (Coleoptera: Scarabaeidae: Melolonthinae).

Transactions of the Nebraska Academy of Sciences. XIV:47-50. 7 figs.

PASSALIDAE NEWS

Edited by Isa Montenegro

We have heard from Jack Schuster, who is working and teaching in Guatemala.

Jack is currently working with Pedro Reyes-Castillo on a revision of the genus *Ogyges*. In connection with his work on the biogeography of Passalidae of Mesoamerica he "would like to receive specimens for identification and collecting data on passalids from this region, especially above 1500 m altitude." He may be contacted at: Dr. Jack Schuster

Depto. de Biología
Universidad del Valle de Guatemala
Apartado Postal no. 82
Guatemala, Guatemala, C. A.

RECENT PASSALIDAE LITERATURE

Schuster, Jack 1983.

Acoustical signals of Passalid beetles: complex repertoires.

The Florida Entomologist. 66(4):486-496. 2 figs 1 t

Schuster, Jack 1983.

The Passalidae of the Galapagos Islands.

The Coleopterist's Bulletin. 37(4):299-301. 1 fig.

Schuster, Jack 1983.

The Passalidae of the United States.

The Coleopterist's Bulletin. 37(4):302-305. 1 fig.

Schuster, Jack 1984.

Pasalidos como organismos indicadores de areas bioticas para el establecimiento de reservas biologicas.

Proc. 1st Congreso Nacional de Biología, Guatemala. :161-169. 1 fig 2 t