

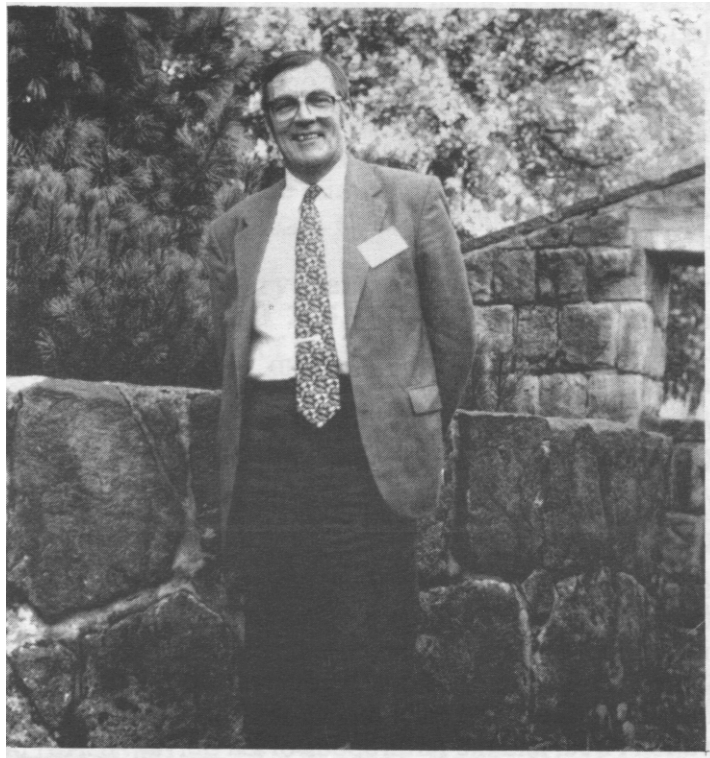
CURCULIO

A NEWSLETTER DEVOTED TO DISSEMINATION OF
KNOWLEDGE ABOUT CURCULIONOIDEA

NO. 41 - MARCH 1997

CANADIAN MUSEUM OF NATURE
P.O. BOX 3443, STATION D
OTTAWA, ON. K1P 6P4
CANADA

EDITED BY
ROBERT S. ANDERSON



Mike Morris (retired)
September 1992, Poland

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EDITORIAL COMMENTS

Yes, this number of CURCULIO is late. It should have been prepared and sent out in September of 1996, but our museum has been going through a move to new facilities and things have been in turmoil. We are now settled in and most services are up and running again. The collections, which were packed away for the move, are also now accessible again. Seems that things went quite well and in fact our Entomology section fared quite well as the move into our new facilities resulted in a great deal more space than we already had. We're now getting the laboratories prepared and should be back to full speed in the near future. Our mailing address has not changed!

On another note, congratulations are in order for Rolf Oberprieler who has accepted the weevil systematics position at CSIRO in Canberra, Australia. This will be a great new challenge for Rolf and one in which we can all be sure he will fare admirably. The Australian weevil fauna is exceptionally diverse and interesting and with the recent books by Elwood Zimmerman, a great base has been set for further and more detailed work on the fauna. I understand Rolf will be there sometime this summer. Now all he has to do is master 'G'Day' and 'mate' and he'll have it made! Best wishes to Rolf and his family.

One last note: CURCULIO relies on input from people who study weevils. If you have something you think other people who work on weevils might be interested in hearing, then let's hear it! CURCULIO needs your input.

*Bob Anderson
Canadian Museum of Nature
Ottawa, Canada*

RESEARCH ACTIVITIES AND INTERESTS

Anderson, Robert S. Canadian Museum of Nature, PO Box 3443, Station D, Ottawa, ON. K1P 6P4, Canada. Generally interested in weevil biodiversity with a focus on the weevils of the New World. Has completed short papers on new species of mistletoe-associated weevils from Panama and Costa Rica, new species of Sicoderus from the Virgin Islands (West Indies), and description of a remarkable new genus which includes three new species of Cyclanthaceae-associated weevils from Panama and Costa Rica (with Luis D. Gomez). Larger ongoing projects include revision of the species of Theognete (illustrations almost completed, taxonomic sections presently being written, phylogeny reconstruction remaining to be done), review of the Rhynchophorinae of Costa Rica (in collaboration with the Instituto Nacional de la Biodiversidad [INBio], The Guanacaste Conservation Area, and the Arthropods of La Selva [ALAS] project), and general studies on regional biodiversity, endemism and community structure in Central American leaf litter inhabiting weevils. For the last four years has been active in an "administrative" role at the museum but has resigned this position in favour of a return to full-time research. Plans for future studies include continued work on the biodiversity and systematics of New World leaf litter weevils.

Cave, Ronald D. Depto. Proteccion Vegetal, Escuela Agricola Panamericana, Apdo. 93, Zamorano, Honduras. Generally interested in biodiversity inventory and biological control. In collaboration with Howard Frank of the University of Florida and the Florida Council of Bromeliad Societies, is presently studying

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the biology and laboratory rearing of the tachinid Admontia sp., a parasitoid of Metamasius quadrilineatus, a rhynchophorine weevils which attacks cloud forest bromeliads.

Giusto, Carlo. Viale Cordano, 4 int. 8, 16035, Rapallo, Italy. Has been studying Apionidae for 10 years. Has in press a revision of the genus Oryxolaemus Alonso-Zarazaga and is presently working on the systematics of the genus Synapion Schilsky.

Hallett, Rebecca H. Department of Biological Sciences, Simon Fraser University, Burnaby, BC V5A 1S6, Canada. Has just completed thesis work on the taxonomic status of two sympatric Rhynchophorus palm weevils in southeast Asia. Based on morphology as well as mating experiments and molecular studies, she concluded that Rhynchophorus ferrugineus Olivier and R. vulneratus Panzer are conspecific.

Hamilton, Robert. Biology Department, Loyola University, 6525 N. Sheridan Road, Chicago, IL. 60626. Generally interested in taxonomy of Rhynchitidae and Attelabidae. Presently revising the New World species of Pterocolinae.

Hespenheide, Henry H. Department of Biology, University of California, Los Angeles, CA. 90095-1606. Interests continue to be Zygoptinae and Tachygonus of North and Central America and the occurrence of mimicry among weevils and other Coleoptera. Current major projects include the Arthropods of La Selva (ALAS) project at the La Selva Biological Station in Costa Rica and revisionary studies of the genera Pseudolechriops and Paramnemyne. The weevil fauna associated with the plant genus Cecropia is also of special interest. Work on the U.S. species of Laemosaccus in the L. nephele (= plagiatus) group is progressing slowly and I would still like to borrow material for inclusion in this study. A paper of the mimicry complex based on clytrine Chrysomelidae, but including Laemosaccus, should be published soon.

Langor, David. Canadian Forestry Service, Northern Forestry Centre, 5320-122 St., Edmonton, AB. T6H 3S5, Canada. Interested generally in systematics, ecology and management of Pissodes species. Currently revising the Nearctic and Chinese species of Pissodes, preparing life tables for Pissodes strobi and undertaking silvicultural management of Pissodes strobi using overstory shading. Requests the loan of Pissodes specimens from Central America and the West Indies.

Mesaros, Gabor. Institute for Biological Research, Department for Evolutionary Biology, 29. novembra 142, 11060 Belgrade, Yugoslavia. Generally interested in the systematics, taxonomy and zoogeography of Curculionidae from Yugoslavia. Currently studying the systematics, historical zoogeography and mechanisms of evolutionary divergence of the high altitude Otiorhynchus species of the Balkan Peninsula. Planning an illustrated electronic catalogue of weevils from Yugoslavia (integrated as a hypertext and stamped on CD-ROM or accessible on WWW).

Morris, M.G. Orchard House, 7 Clarence Road, Dorchester, Dorset, DT1 2HF, U.K. Retired but continuing to work extensively on weevils of the British Isles. Currently working on handbooks to the weevils of Britain. The volume on the 'broadnosed weevils' (Entiminae) went to press in August of 1996.

Normark, Benjamin. Department of Entomology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. Presently on a one-year National Science Foundation postdoctoral fellowship at the Natural History Museum in London working on aphids.

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Read, R.W. John. 43 Holly Terrace, Hensingham, Whitehaven, Cumbria, CA28 8RF, U.K. Interested in all species of Curculionoidea occurring in the British Isles. Especially interested in the biology, ecology and distribution of all weevils of Cumbria County. To date 293 species have been recorded. Presently documenting the distribution of all weevils in Cumbria and will publish a complete list of all species in the near future. Also, carrying out observations on the biology and ecology of Ramphus and Orthochaetes.

Sprick, Peter. Weckenstr. 15, D-30451, Hannover, Germany. Generally interested in plant-weevil interactions, weevil ecology, conservation and management. Presently studying weevils and other phytophagous beetles in forests in Germany with special attention to host plant-beetle associations. Planning to develop general explanations for the variation in host plant ranges of various weevil genera focusing on examination of secondary plant metabolites.

Wood, Stephen L. 290 Life Science Museum, Brigham Young University, Provo, UT 84602. Interested in taxonomy and behaviour of worldwide Scolytidae and Platypodidae. Currently undertaking a taxonomic monograph of the Scolytidae of South America (planned for the years 1995-1999). Planning a taxonomic monograph of the Platypodidae of North and South America (in collaboration with L.R. Kirkendall).

REQUESTS FOR COLLABORATION

David Langor (Canadian Forestry Service, Northern Forestry Center, 5320-122 St., Edmonton, AB. T6H 3S5, Canada) requests the loan of Pissodes specimens from Central America and the West Indies for systematic study. Both adults and larvae are required. Adults may be pinned or in ethanol.

Robert Hamilton (Biology Department, Loyola University, 6525 N. Sheridan Road, Chicago, IL. 60626). Requests the loan of additional specimens of Pterocolus ovatus (F.). In particular needs records from Kentucky, Mississippi and Louisiana. Will also examine any Pterocolinae sent on loan.

THIRD INTERNATIONAL SYMPOSIUM ON CURCULIONOIDEA -- BRAZIL 2000

During the XX International Congress of Entomology in Florence, two informal weevil gatherings were held to discuss weevils in general and to discuss the importance of holding another International Symposium on Curculionoidea during the upcoming XXI International Congress at Foz do Iguasu in Brazil in the year 2000.

Charles W. O'Brien was "volunteered" to moderate this Third International Symposium and also suggested that an afternoon workshop be developed for discussions on Curculionoidea as well. This had proven to be a very successful approach at the Vancouver Congress and in order to avoid another lapse in the development of such symposia, O'Brien agreed to undertake this task. Subsequently he was officially nominated for this and voted unanimously to take over such a project. During the final informal conference on Curculionoidea, O'Brien acted as moderator and subsequently agreed to prepare an overview of the discussions to be presented in CURCULIO. Since O'Brien was also moderating the meeting his notes were not as complete as would be

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hoped for but at least weevil workers will be presented with a summary of the main topics discussed.

In general the attendees decided that there should not be a specific theme for the Brazil Symposium. The lack of a theme would make it possible for a greater number of weevil people to be able to take part in the symposium. For this reason all titles dealing with a broad aspect of research on Curculionoidea will be considered for acceptance during the International Symposium. It may be necessary to limit the number of talks based upon the time available at the Congress, therefore early submissions will receive priority in the selection process for presentation at the meetings. If you decide that you wish to present a paper at the Congress, in this Symposium, be sure that you have definite intentions of attending the Congress. Withdrawals or cancellations of accepted presentations creates problems in planning the session.

It is my intention to moderate the Symposium at the Congress and I am requesting participation from one or two Brazilian weevil specialists to assist me in this. While I will act as Co-moderator of the Workshop, I am hopeful that one or both of them will take the lead on the development and moderation of the Workshop. Two specialists have been contacted and progress on the development of both the International Symposium and the Workshop will be discussed in future issues of CURCULIO.

A number of potential subjects were discussed for the Workshop and here are some of the subjects that were presented as possibilities. Chris Lyal suggested a discussion of higher classification - where are we now and where are we going? Mike Morris and Chris Lyal suggested a discussion of systematics versus user needs, and noted that it would be valuable to "flag" problems of ecologists and applied workers and discuss these problems in relation to the systematists interests as well. Larry Kirkendall suggested that we discuss the interface between ecology and systematics, and perhaps emphasize host plant associations and such. George Ball suggested that we title our Workshop and perhaps even the Symposium, "Hyperdiversity" and discuss this in relation to the importance of biodiversity in tropical habitats. Brian Farrell suggested a discussion of the evolution of life history trends with discussions on what groups are pests and the importance of fragmentation of taxonomic entities presenting a great need for descriptive taxonomy. A discussion of why some groups of weevils switch from monocots to dicots, yet other taxa maintain this host association would be part of this discussion. It was also suggested by a number of people, including Miguel Alonso-Zarazaga, that more discussions regarding the retrieval of host information and methods of using the Internet and other electronic data collection and distribution methods be discussed in greater detail.

Following these discussions it was decided that at this point we do not wish to lock ourselves into any particular theme for the Symposium and/or the Workshop until we have had input from a much broader group of specialists around the world so your suggestions will be most welcome. Please forward these comments directly to Charles W. O'Brien, Entomology--Biological Control, Florida A&M University, Tallahassee, FL 32307-4100, (904) 599-3149, FAX (904) 561-2221, e-mail cobrien@fam.u.edu--who will be acting as moderator for the Symposium and, with Brazilian colleagues, as co-moderator of the Workshop. Your input is critical to this particular project and any success that we may hope to attain is dependent upon the contributions we receive from as wide a group of weevil specialists as possible.

*Charles W. O'Brien
Tallahassee, Florida, U.S.A.*

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ADMONTIA SP. TACHINIDS PARASITIZE METAMASIVS QUADRILINEATUS CHAMPION ON BROMELIADS IN HONDURAS

Effort in 1995 was made to obtain more information on a tachinid reared two years previously from larvae of the weevil Metamasius quadrilineatus Champion, which infests cloud forest bromeliads. Earlier attempts to rear the weevil larvae on artificial diet produced flies that either did not emerge from their puparia or did not have expanded wings and died immediately. Through the efforts of Howard Frank (University of Florida), funding was obtained from the Florida Council of Bromeliad Societies, Inc., who are interested in parasitoids for control of another Metamasius species infesting bromeliads in Florida.

Three species of plants were collected which yielded weevils: Catopsis hahnii Baker, Vriesea nephrolepis L.B. Smith et Pittenor and Tillandsia oreogenes Standley et L. Williams (the more abundant of the three). In the first months of the year, collections were concentrated in a cloud forest on Cerro Monserrat. Although plants were heavily infested with weevils, few flies were obtained. However, the few flies obtained were in good condition with expanded wings. Subsequent examination by Norman Woodley (SEL, ARS) determined them to be in the genus Admontia. At mid-year, plant collections were concentrated in a cloud forest on Cerro La Montaña del Aguacate. Infested plants contained from 1 to 3 weevil larvae and pupae per plant. Moreover, a rich harvest of live flies was obtained. I hypothesize that the female flies larviposit near the tunnel of the weevil larva, which the fly enters to find its host. Parasitized weevil larvae form a pupal chamber made of plant tissue threads but die before pupating. It would not be too surprising if this Admontia species turns out to be undescribed.

*Ronald D. Cave,
Escuela Agrícola Panamericana,
Zamorano, Honduras*

WEEVIL RESEARCHERS MEET IN LOUISVILLE, KENTUCKY

At the 1996 annual meeting of the Entomological Society of America in Louisville, Kentucky, the following nine weevil enthusiasts met informally to discuss their research and other items of common interest.

Louis LaPierre is studying with Henry Hespeneheide at the University of California at Los Angeles. His project concerns the weevils associated with the plant family Cecropiaceae and he is studying such things as the genetic differences between the plants as well as the biology of the weevils, mostly Zygoptinae and Tachygonus. May all the Azteca ants be timid, Louis!

Derek Sykes, formerly working on weevils with Mike Ivie at Montana State University, has jumped ship and is now studying the genus Nicrophorus (Silphidae) on a world basis under Carl Schaeffer at the University of Connecticut. He expects to keep up his interest in weevils.

Peter Kovarik, formerly at Ohio State University where he worked on Histeridae, is now working with Charlie O'Brien on a variety of projects concerning weevils and in addition, he and several other coleopterists are exploring the fauna of old growth forests in the Florida panhandle.

Henry Hespeneheide has completed several papers on mimicry and on the genus Laemosaccus of the United States. He has recently studied the Casey types of

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Cylindrocopturus in the USNM. He says that fogging at La Selva, Costa Rica, has increased the number of species of Zygopinae known from La Selva to 450!

Barry Valentine is working with Mike Ivie on the Anthribidae of the Virgin Islands. To date they have 9 genera and 13 species of anthribids, all undescribed. Barry also has 4 new genera of Anthribidae from the United States. He is progressing well on his keys to the genera of Africa and the New World excluding Chile. Barry is a master of puns and was in good form; he exceeded his allowance of 3 for the afternoon, but host Charlie O'Brien graciously tolerated it. What can you say when asked if ants and weevils feeding on Mullerian bodies turn antibodies into antimatter?

Don Bright announced that the first 5-year supplement to the literature of the Scolytidae and Platypodidae is ready for publication. Don is now working on the scolytids of the Galapagos with Stewart Peck and on the scolytids of the West Indies with Mike Ivie. He has in press a description of a new species of Panscopus based on the unpublished work of the late Tim Spanton. The next volume of the weevils of Canada is in preparation and will include approximately the ceutorhynchids through the cossonines. Don is also writing sections on three species of scolytids for a volume on the pests of Southeast Asia.

Anne Howden continues revising the genus Pandeleiteius: a paper revising 20 species with irregular elytral striae and with a stylus on the coxite of the ovipositor was published in the fall of 1996.

Charlie O'Brien recently has completed a number of projects on aquatic weevils, particularly on the genus Bagous. While he will continue his work on aquatics, he now plans to begin work on a long term interest of his, namely the palm flower weevils, especially derelomines. He says he plans to divide his time and effort about 50/50 between remaining projects on aquatics (such as revision of the genera of New World Stenopelmini, regional revisions of Bagous [with Roberto Caldara]) and various projects on palm weevils. In preparation for his first project on the derelomines, he is now borrowing Notolomus from Florida and will then tackle the derelomines of the West Indies. He also has a project on Celetes and plans a "quick publication" on his long-standing Rhopalotria project, and then to do the immature stages and phylogeny at a later date.

At the International Congress of Entomology in Florence, Charlie volunteered to undertake the preliminary organizing of a third weevil symposium for the next congress, the 21st, in Brazil in the year 2000. He is presently contacting Brazilian colleagues concerning organization of the proposed symposium.

Brian Farrell, Museum Of Comparative Zoology, Harvard University has been doing DNA sequencing on Chrysomeloidea and is now "cruising" Curculionoidea. He would like to study some of the "extreme" taxa and welcomes samples collected into 95% ethanol. Only a leg is needed!

Lastly, if you plan to be in Nashville for the next ESA meeting, contact one of us early in the meeting so you can join in our discussions.

*Anne Howden
Canadian Museum of Nature
Ottawa, Canada*

CHANGES OF ADDRESS

Benjamin Normark
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U.K.

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REVISION OF NORTH AMERICAN CLEONINI AVAILABLE

Over the last few years a number of colleagues have requested a copy of my revision of the North American Cleonini (Anderson, R.S. 1988. Systematics, phylogeny and biogeography of New World weevils of the tribe Cleonini (Coleoptera : Curculionidae). *Quaestiones Entomologicae* 23 : 431-709). Unfortunately, I only received 50 copies and these were all sent out quickly. I want to let everyone know that I have now received a limited number of additional copies and these are available on a first come basis. If you do not have a copy and have a need for it, please send me an email or a letter.

Bob Anderson
Canadian Museum of Nature
Ottawa, Canada

RECENT PUBLICATIONS ON CURCULIONOIDEA

Abazzi, P., E. Colonnelli, L. Masutti and G. Osella. 1995. Checklist delle specie della fauna Italiana. 61. Coleoptera. Polyphaga XVI (Curculionoidea). Ministero dell' Ambiente e Comitato Scientifico per la Fauna d'Italia. 68 pp.

Aiello, A. and H.P. Stockwell. 1996. The golden-cage weevil, *Isorhinus undatus* (Champion) (Coleoptera: Curculionidae). *The Coleopterists Bulletin* 50: 192-194.

Anderson, R.S. and J.J. Morrone. 1996. A new genus of microphthalmic Rhytirrhinini from Andean leaf litter (Coleoptera: Curculionidae). *Entomologica Scandinavica* 27: 259-278.

Anderson, R.S. and C.W. O'Brien. 1996. Curculionidae (Coleoptera). pp. 329-351, In: Llorente Bousquets, J.E., García Aldrete, A.N. and González Soriano, E. (Editores). *Biodiversidad, Taxonomía y Biogeografía de Artrópodos de México: Hacia una Síntesis de su Conocimiento*. México. xvi + 660 pp.

Andreotti, A. and G. Osella. 1994. Gli Attelabidae italiani: sistematica e biologia. *Atti XVII Congresso nazionale italiano di Entomologia, Udine 13-18 giugno 1994*: 141-143.

Barratt, B.I.P. and G. Kuschel. 1996. Broad-nosed weevils (Curculionidae: Brachycerinae: Entimini) of the Lammermoor and Rock and Pillar Ranges in Otago, with descriptions of four new species of *Irenimus*. *New Zealand Journal of Zoology* 23: 359-374.

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Bernal, R. and F. Ervik. 1996. Floral biology and pollination of the dioecious palm *Phytelephas seemannii* in Colombia: An adaptation to staphylinid beetles. *Biotropica* 28: 682-696.

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- Clark, W.E. and H.R. Burke. 1996. The species of Anthonomus Germar (Coleoptera: Curculionidae) associated with plants in the family Solanaceae. Southwestern Entomologist. Supplement # 19, 114 pp.
- Cuppen, J.G.M. and T. Heijerman. 1995. A description of the larva of Bagous brevis Gyllenhal, 1836 (Coleoptera: Curculionidae) with notes on its biology. Elytron 9: 45-63.
- Day, M.D., I.W. Forno, R. Segura and M. Martinez. 1995. Life cycle and host specificity of Eutinobothrus sp. (Col.: Curculionidae) an agent for biological control of Sida acuta (Malvaceae) in the Northern Territory, Australia. Entomophaga 40: 345-355.
- Furniss, M.M. 1996. Taxonomic status of Dendroctonus punctatus and D. micans (Coleoptera: Scolytidae). Annals of the Entomological Society of America 89: 328-333.
- Giusto, C. 1986. Segnalazioni Faunistiche Italiane. Boll. Soc. ent. ital., Genova 118: 117-120.
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- Howden, A.T. 1996. Neotropical Pandeleteius (Coleoptera: Curculionidae) with irregular elytral striae. The Canadian Entomologist 128: 877-955.
- Jolivet, P. and J.-M. Maes. 1996. Un cas cycloalexie chez un Curculionide: Phelypera distigma (Boheman) (Hyperinae) au Nicaragua. L'Entomologiste 52: 97-100.
- Karasev, V.P. 1996. Geographical distribution and formation of Coleopteran genus Tychius (Coleoptera, Curculionidae). Zoological Journal (Moscow) 75:369-374.

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- Kojima, H. and K. Morimoto. 1996. The tribe Ochyromerini (Coleoptera, Curculionidae) of Japan II. Genus Ochyromera Pascoe. *Japanese Journal of Entomology* 64: 570-586.
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- Kuschel, G. and T.H. Worthy. 1996. Past distribution of large weevils (Coleoptera: Curculionidae) in the South Island, New Zealand, based on Holocene fossil remains. *New Zealand Entomologist* 19: 15-22.
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Morris, M.G. 1996. Polydrusus chrysomela (Olivier) not a British species (Curculionidae). *The Coleopterist* 5: 26-27.

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