

РОССИЙСКАЯ АКАДЕМИЯ НАУК
Южный научный центр

RUSSIAN ACADEMY OF SCIENCES
Southern Scientific Centre



Кавказский Энтомологический Бюллетень

CAUCASIAN ENTOMOLOGICAL BULLETIN

Том 18. Вып. 1

Vol. 18. No. 1



Ростов-на-Дону
2022



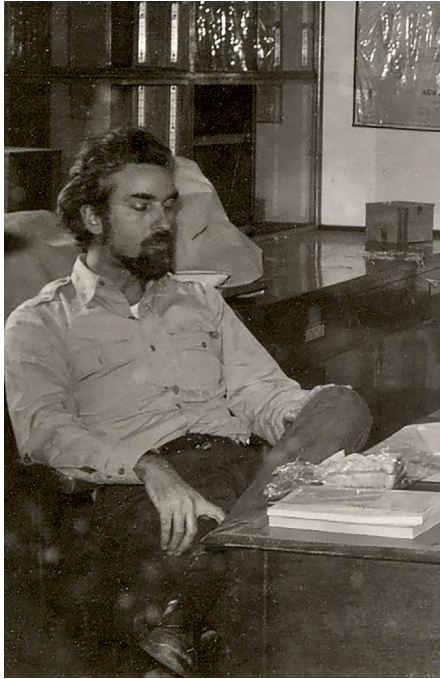
In memory of Eric G. Matthews
Памяти Эрика Мэтьюса
(9.02.1932–18.01.2022)

Eric Glasswell Matthews was born on February 9, 1932 in Neuilly, Seine, France in the family of Herbert Lionel and Edith (Crosse) Matthews. His father Matthews was a famous reporter for “The New York Times”, whose articles played an important role in USA foreign policy.

Eric received his bachelor’s degree at Columbia University (USA) in 1953 and PhD at Cornell University (USA) in 1960. During 1961–1969 he was a Professor in the University of Puerto Rico, where he lectured in zoology. In 1970 Eric immigrated to Australia where he got the position of the Assistant Curator of insects and later the Curator of insects at the South Australian Museum in Adelaide. Here he worked until retirement, and then became the museum’s Honorary Associate and continued to work until the end of his life.

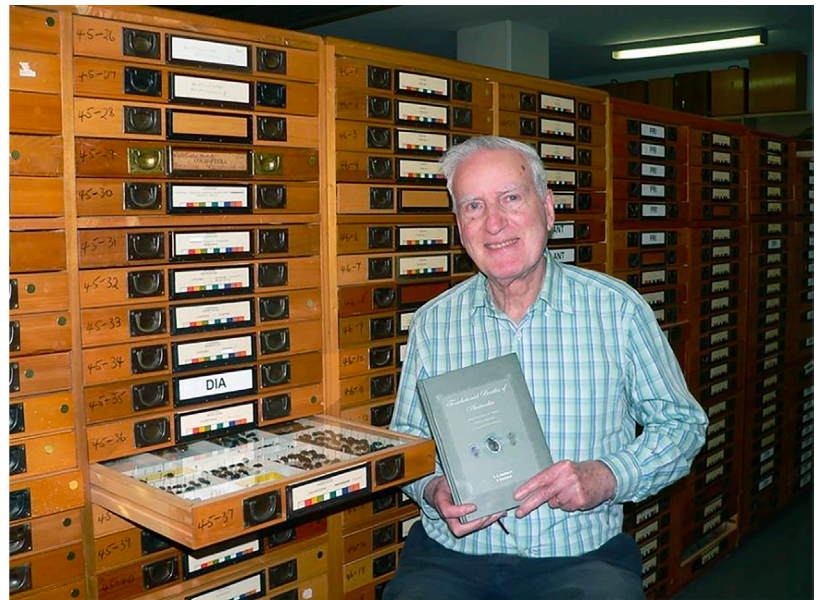
Eric was a great entomologist and belonged to the generation that laid the foundation for modern insect classification. At the beginning of his career, Eric was interested in scarab beetles. He published 18 papers on Scarabaeidae of the New World and Australia. Some of those publications, in fact, were monographs of more than 300 pages with a revision of this family within the boundaries of the entire New World or major works on the natural history of the family Scarabaeidae. One of the monographs [Matthews, Halffter, 1966] became a desktop encyclopedia for fellow entomologists. It was republished three years later and still has not lost its importance. In Australia, Eric continued to intensively study the scarab beetles. The peak of his research there was the monograph “A revision of the scarabaeine dung beetles of Australia” with a total volume of 593 pages, published in three parts [Matthews, 1972, 1974, 1976]. Interestingly, that Eric published his taxonomic papers on dung beetles after he started working on a CSIRO (Commonwealth Scientific and Industrial Research Organisation, Australia) grant to introduce dung beetles to Australia.

One of the most important textbooks is his “Insect ecology” [Matthews, 1976; Matthews, Kitching, 1984], which was reprinted twice. It was used in the universities for student education for a long time. The undoubted merit of Eric is eight volumes of “A Guide to the Genera of Beetles of South Australia” [Matthews, 1980, 1982, 1984, 1985, 1987, 1992, 1997, 2002]. It was the first series containing well-illustrated keys and diagnosis of the beetle genera for Australia. This work received the most laudatory reviews from colleagues and still serves Australian amateur and professional entomologists. As an old-school scientist, Eric preferred to publish fewer but large synthesis papers or monographs rather than produce small multiple papers, the so called “salami-slicing”. Therefore, during eight years of his study of Tenebrionidae, he published a series of large revisions on the tribes Cyphaleini, Heleini, Adeliini etc. These works significantly improved the quality standards for taxonomic publications, because they contained phylogenetic hypotheses based on an extensive morphological base, as well as discussions about the origin of large tenebrionid taxa, especially in the Southern Hemisphere. Data on Australian Tenebrionidae were summarized in the magnificent book “Tenebrionid Beetles of Australia” [Matthews, Bouchard, 2008]. In my opinion, this is one of the most outstanding and superbly illustrated guides on the morphology and systematics of darkling beetles. Eric and his co-author Patrice Bouchard very accurately and succinctly characterized the taxa of Tenebrionidae from generic rank to family and presented diagnoses of subfamilies and tribes for the first time. Later, Eric with other colleagues completed a similar brief guide for Tenebrionidae of the world fauna [Matthews et al., 2010]. Now, this work reflects current views on the family system and the interpretation of morphological characters.



Left to right: Southern Australian Museum, at the work table, 1974; Eric Matthews checks traps, Ferris McDonald Conservation Park, Australia, 1977.

Слева направо: Музей Южной Австралии, за рабочим столом, 1974 год; Эрик Мэтьюс проверяет ловушки, заповедник Феррис Макдональд, Австралия, 1977 год.



Left to right: Southern Australian Museum, museum job, November, 2002; Eric Matthews with a newly published book "Tenebrionidae of Australia", Southern Australian Museum, 2008.

Слева направо: Музей Южной Австралии, музейная работа, ноябрь 2002 год; Эрик Мэтьюс с только что опубликованной книгой «Tenebrionidae of Australia», Музей Южной Австралии, 2008 год.

I acquainted with Eric by correspondence in 2013, when we had an exchange of our books on the darkling beetles of the Caucasus, and of Australia respectively. Although we did not meet face to face, we had an intense correspondence discussing the morphology and evolution of the Tenebrionidae. Eric repeatedly reviewed my manuscripts and checked its linguistically. In 2018, I invited him to become a member of the editorial board of the journal “Caucasian Entomological Bulletin”. He declined to become full editor due to age, but agreed to be special editor for the Tenebrionidae articles. In the process of his work in the journal, I was surprised to find that Eric corrects typos in the Russian-language parts of the manuscripts, and then he said that he studied Russian in his student times. In the late 80s of the last century, Eric even translated Russian-language papers of Prof. Gleb Medvedev into English, since the translated versions of Russian articles in the journal “Entomological Review” were linguistically of poor quality. Thus, he contributed to the dissemination of the results of Russian scientists among English-speaking colleagues.

I remember our communication and discussions with warmth and gratitude. Such exchange is so lacking now! Unfortunately, a man of the era has left us, whose scale, clear mind and experience were in great demand until the end of his life.

The best evidence of the recognition of merit and respect of colleagues for Eric are one genus and 17 species of beetles named after him.

Acknowledgements

I am grateful to Eric’s son Chris Matthews who sent me photographs of his father for this memorial note.

*M.V. Nabozhenko,
Precaspian Institute of Biological Resources
of the Daghestan Federal Research Centre of the Russian Academy of Sciences,
Dagestan State University*

The list of main publications of Eric G. Matthews

1959

Matthews E.G. 1959. Nueva especie de *Copris* (Coleoptera, Scarabaeidae) y clave para la determinación de las especies mexicanas del genero. *Ciencia (Mexico)*. 19: 133–136.

Matthews E.G., Halffter G. 1959. Nuevas especies mexicanas de *Copris* (Coleoptera, Scarabaeidae). *Ciencia (Mexico)*. 18: 191–204.

1962

Matthews E.G. 1962. A revision of the genus *Copris* Müller of the Western Hemisphere (Coleoptera, Scarabaeidae). *Entomologica Americana*. 41: 1–139.

1963

Matthews E.G. 1963. Observations on the ball-rolling behavior of *Canthon pilularius* (L.) (Coleoptera, Scarabaeidae). *Psyche*. 70: 75–93.

Matthews E.G. 1963. Description of the larva and pupa of *Cathochilum histeroides* (Harold) with notes on its biology (Coleoptera: Scarabaeidae). *The Coleopterists' Bulletin*. 17(4): 110–116.

1965

Matthews E.G. 1965. The taxonomy, geographical distribution, and feeding habits of the canthonines of Puerto Rico (Coleoptera: Scarabaeidae). *Transactions of the American Entomological Society*. 91(4): 431–465.

1966

Matthews E.G. 1966. A taxonomic and zoogeographic survey of the Scarabaeinae of the Antilles (Coleoptera, Scarabaeidae). *Memoirs of the American Entomological Society*. 21: 1–312.

Matthews E.G., Halffter G. 1966. The natural history of dung beetles of the subfamily Scarabaeinae (Coleoptera, Scarabaeidae). *Folia Entomologica Mexicana*. 12–14: 1–312. DOI: 10.1002/mmz.19690450211 (Reprinted in 1999 by Medical Books di G. Cafaro, Palermo, with foreword by Mario Zunino).

Matthews E.G. Zayas F., de. 1966. Revisión de los cantoninos de Cuba (Coleoptera, Scarabaeidae) con la descripción de seis nuevas especies. *Poeyana (La Habana), ser. A*. 14: 1–24.

1968

Matthews E.G., Halffter G. 1968. New data on American *Copris* with discussion of a fossil species (Coleoptera, Scarabaeidae). *Ciencia (Mexico)*. 26: 147–162.

1969

Matthews E.G. 1969. New data on Antillean scarabaeine beetles, and two new species fom Hispaniola. *Psyche*. 76: 114–125.

1971

Halffter G., Matthews E.G. 1971. The natural history of dung beetles. A supplement on associated biota. *Revista latino-americana de Microbiologia*. 13(2): 147–164.

1972

Matthews E.G. 1972. A revision of the scarabaeine dung beetles of Australia. I. Tribe Onthophagini. *Australian Journal of Zoology, Supplementary Series*. 9: 1–330.

1973

Matthews E.G., Emberson R.M. 1973. Introduced Scarabaeinae (= Coprinae) (Coleoptera) in New Zealand. *The New Zealand Entomologist*. 5(3): 346–350.

1974

Matthews E.G. 1974. A revision of the scarabaeine dung beetles of Australia. II. Tribe Scarabaeini. *Australian Journal of Zoology, Supplementary Series*. 24: 1–211.

1975

Matthews E.G. 1975. The Mediterranean beetle *Blaps polychresta* Forskal in South Australia (Tenebrionidae). *The South Australian Naturalist*. 49(3): 35–39.

1976

Matthews E.G. 1976. A revision of the scarabaeine dung beetles of Australia. III. Tribe Coprini. *Australian Journal of Zoology, Supplementary Series*. 38: 1–52.

Matthews E.G. 1976. La biogeografía ecológica de los escarabajos del estiércol. *Acta politécnica Mexicana*. 16: 89–98.

Matthews E.G. 1976. Insect ecology (Australian ecology series). St Lucia, Queensland: University of Queensland Press. 226 p.

1980

Matthews E.G. 1980. A guide to the genera of beetles of South Australia. Part 1: Archostemata and Adephaga. Adelaide: South Australian Museum. 68 p.

1982

Matthews E.G. 1982. A guide to the genera of beetles of South Australia. Part 2: Polyphaga: Staphylinoidea & Hydrophylloidea. Adelaide: South Australian Museum. 64 p.

1984

Matthews E.G. 1984. A guide to the genera of beetles of South Australia. Part 3: Polyphaga: Eucinetoidae, Dascilloidea & Scarabaeoidea. Adelaide: South Australian Museum. 60 p.

Matthews E.G., Kitching R.L. 1984. Insect ecology. St Lucia, Queensland: University of Queensland Press. 211 p.

1985

Matthews E.G. 1985. A guide to the genera of beetles of South Australia. Part 4: Polyphaga: Byrrhoidea, Buprestoidea, Dryopoidea, Elateroidea, Cantharoidea, Derodontoidea & Bostrichoidea. Adelaide: South Australian Museum. 68 p.

Matthews E.G. 1985. Foraging activity of some tenebrionid beetles in a South Australian mallee area. *In: Soil and litter invertebrates of some Australian Mediterranean-type ecosystems. Western Australian Institute of Technology Bulletin*. 2: 63–64.

Matthews E.G. 1985. Distribution patterns of some beetles (Tenebrionidae and Scarabaeidae). *In: Occasional Publications of the Royal Society of South Australia*. Vol. 4. Natural History of Eyre Peninsula. Adelaide: Royal Society of South Australia: 183–189.

1986

Matthews E.G. 1986. A revision of the troglomorphic genus *Brises* Pascoe, with a discussion of the Cyphaleini (Coleoptera: Tenebrionidae). *Records of the South Australian Museum*. 19: 77–90.

Matthews E.G., Stebnicka Z. 1986. A review of *Demarziella* Balthasar with a transfer from Aphodiinae to Scarabaeinae (Coleoptera, Scarabaeidae). *Australian Journal of Zoology*. 34(3): 449–461. DOI: 10.1071/ZO9860449

1987

Matthews E.G. 1987. A guide to the genera of beetles of South Australia. Part 5: Polyphaga: Tenebrionoidea. Adelaide: South Australian Museum. 67 p.

1988

Matthews E.G. 1988. Peron, Latreille and pie dish beetles. *Search*. 19: 215–217.

1989

Matthews E.G., Doyen J.T. 1989. A reassessment of the Australian species of *Menephilus* Mulsant (Coleoptera: Tenebrionidae) with descriptions of two new genera and a larva and pupa. *Records of the South Australian Museum*. 23(1): 39–50.

1990

Doyen J.T., Matthews E.G., Lawrence J.F. 1990. Classification and annotated checklist of the Australian genera of Tenebrionidae (Coleoptera). *Invertebrate Taxonomy*. 1989. 3(3): 229–260. DOI: 10.1071/IT9890229

1992

Matthews E.G. 1992. Classification, relationships and distribution of the genera of Cyphaleini (Coleoptera: Tenebrionidae). *Invertebrate Taxonomy*. 6(2): 437–522. DOI: 10.1071/IT9920437

Matthews E.G. 1992. A guide to the genera of beetles of South Australia. Part 6: Polyphaga: Lymexyloidea, Cleroidea and Cucujoidea. Adelaide: South Australian Museum. 75 p.

Matthews E.G., Lawrence J.F. 1992. A new genus and species of Heleini from Tasmania (Coleoptera: Tenebrionidae). *Journal of the Australian Entomological Society*. 31(4): 311–316. DOI: 10.1111/j.1440-6055.1992.tb00513.x

1993

Matthews E.G. 1993. Classification, relationships and distribution of the genera of Heleini (Coleoptera: Tenebrionidae). *Invertebrate Taxonomy* 7(5): 1025–1095. DOI: 10.1071/IT9931025

1997

Matthews E.G. 1997. A guide to the genera of beetles of South Australia. Part 7: Polyphaga: Chrysomeloidea: Cerambycidae. Adelaide: South Australian Museum. 64 p.

1998

Matthews E.G. 1998. Classification, phylogeny and biogeography of the genera of Adeliini (Coleoptera: Tenebrionidae). *Invertebrate Taxonomy*. 12(5): 685–824. DOI: 10.1071/IT97008

2000

Matthews E.G. 2000. Origins of Australian arid-zone tenebrionid beetles. *Invertebrate Taxonomy*. 14(6): 941–951. DOI: 10.1071/IT00021

Newton F., Matthews E.G., Muona J. 2000. John F. Lawrence – coleopterist par excellence. *Invertebrate Taxonomy*. 14(6): 721–731. DOI: doi.org/10.1071/IT00041

2002

- Matthews E.G., Weir T. 2002. Two new species of the genus *Lepanus* Balthasar from South Australia (Coleoptera: Scarabaeidae). *Records of the South Australian Museum*. 35(1): 79–84.
- Matthews, E.G. 2002. A guide to the genera of beetles of South Australia. Part 8: Polyphaga: Chrysomeloidea: Chrysomelidae. Adelaide: South Australian Museum. 64 p.

2003

- Matthews E.G. 2003. Selection of types of Australian Heleini from the collection of F. di Brema (Coleoptera: Tenebrionidae). *Bollettino del Museo Regionale di Scienze Naturali, Torino*. 20: 119–134.
- Matthews E.G. 2003. *Aoupinia*, a remarkable new genus of Adeliini from New Caledonia (Coleoptera: Tenebrionidae). *Memoirs of the Queensland Museum*. 49(1): 441–445.
- Matthews E.G. 2003. The *Palorus* group – a new subfamily of Tenebrionidae. *Spixiana*. 26(1): 49–55.
- Matthews E.G. 2003. *Ulomotypus* Broun a member of the new subfamily Palorinae, with remarks on *Aphthora* Bates and *Demtrius* Broun (Coleoptera, Tenebrionidae). *New Zealand Entomologist*. 26(1): 7–14. DOI: 10.1080/00779962.2003.9722104
- Matthews E.G., Scupola A. 2003. Entomological investigations in Australia by the Natural History Museum of Turin: Coleoptera, Tenebrionidae. *Museo Regionale di Scienze Naturali, Monografie*. 35: 281–302.

2004

- Matthews E.G. 2004. New synonymy and new names in Australian Tenebrionidae (Coleoptera). *Transactions of the Royal Society of South Australia*. 128: 261.

2005

- Matthews E.G., Lawrence J.F. 2005. New taxa, new synonymy and new generic records for Australian Tenebrionidae (Coleoptera). *Annales Zoologici*. 55(4): 531–547.

2008

- Matthews E.G., Bouchard P. 2008. Tenebrionid Beetles of Australia: Descriptions of tribes, keys to genera, catalogue of species. Canberra: Australian Biological Resources Study. viii + 398 p.

2010

- Matthews E.G., Lawrence J.F., Bouchard P., Steiner W.E., Ślipiński Jr., Ślipiński S.A. 2010. 11.14. Tenebrionidae Latreille, 1802. In: Handbook of zoology. Arthropoda: Insecta. Part 38. Coleoptera, beetles. Vol. 2. Morphology and systematics (Elateroidea, Bostrichiformia, Cucujiformia partim). Berlin: Walter de Gruyter: 574–659.
- Matthews E.G., Monteith G.B. 2010. *Monteithium storeyi*, a new species of Adeliini (Coleoptera: Tenebrionidae) from the Wet Tropics of Queensland, Australia. *The Australian Entomologist*. 36(4): 201–206.

2012

- Matthews E.G. 2012. Australian Alleculinae: new genera, new combinations, and a lectotype designation (Coleoptera: Tenebrionidae). *Psyche*. 2012: 814865. DOI: 10.1155/2012/814865

2015

- Matthews E.G., Lawrence J.F. 2015. Trachelostenini sensu novo: redescription of *Trachelostenus* Solier, *Myrmecodema* Gebien and *Leaus* Matthews & Lawrence, based on adults and larvae, and descriptions of three new species of Leaus (Coleoptera: Tenebrionidae). *Zootaxa*. 4020(2): 289–312. DOI: 10.11646/zootaxa.4020.2.4
- Matthews E.G., Merkl O. 2015. *Hangaya enigmatica*, a new genus and species of Tenebrionidae from Central Australia (Coleoptera). *Annales Zoologici*. 65(3): 479–482. DOI: 10.3161/00034541ANZ2015.65.3.004
- Iwan D., Matthews E.G. 2015. *Scleropatroides* Löbl and Merkl (Coleoptera: Tenebrionidae: Opatrini) discovered in Australia, with description of a new species and discussion of related genera. *The Coleopterists' Bulletin*. 69(mo4): 115–121. DOI: 10.1649/0010-065X-69.mo4.115

2018

- Ballerio A., Krell F.-T., Bezdek A., Frolov A., Huchet, J.-B., Keith D., López-Colón J.-I., Matthews E., Rey A., Vaz De Mello F.Z. 2018. Case 3768 – *Hybosorus illigeri* Reiche, 1853 (Insecta, Coleoptera): proposed conservation by giving it precedence over *Hybosorus pinguis* Westwood, 1845, *Hybosorus roei* Westwood, 1845 and *Hybosorus carolinus* LeConte, 1847. *The Bulletin of Zoological Nomenclature*. 75: 152–164. DOI: 10.21805/bzn.v75.a032

2019

- Baehr M., Ballerio A., Escalona H.E., Fikáček M., Gunter N.L., Hall W.E., Hendrich L., Hutchinson P.M., Jin M., Lackner T., Lemann C., Matthews E.G., Mazur S., Moeseneder C.H., Reid C.A.M., Seeman O.D., Watts C.H.S., Weir T.A., Will K.W., Zhou Y.-L., Zwick P. 2019. Australian Beetles. Volume 2. Archostemata, Myxophaga, Adephaga, Polyphaga (part). Clayton: CSIRO Publishing. 792 p.

Taxa named after Eric G. Matthews

Genus: *Matthewsotys* Bouchard et Bousquet, 2021 (Coleoptera: Tenebrionidae)

Species:

Amblytelus matthewsi Baehr, 2004 (Coleoptera: Carabidae)

Archaeoglenes matthewsi Iwan et Rincon, 2022 (Coleoptera: Tenebrionidae)

Atrocates matthewsi Iwan, 2016 (Coleoptera: Tenebrionidae)

Aulacopris matthewsi Storey, 1986 (Coleoptera: Scarabaeidae)

Blockbolbus matthewsi Howden, 1985 (Coleoptera: Scarabaeidae)

Chlamydopsis matthewsi Caterino, 2003 (Coleoptera: Histeridae)

Csiro matthewsi G. Medvedev et Lawrence, 1984 (Coleoptera: Tenebrionidae)

Dendarus matthewsi Nabozhenko et Poggi, 2022 (Coleoptera: Tenebrionidae)

- Derbyana matthewsi* Lawrence et Slipinski, 2005 (Coleoptera: Dermestidae)
Derosphaerus ericmatthewsi Schawaller, 2011 (Coleoptera: Tenebrionidae) (= *Derosphaerus matthewsi* Schawaller, 2005
nec *Derosphaerus matthewsi* Kaszab, 1987)
Derosphaerus matthewsi Kaszab, 1987 (Coleoptera: Tenebrionidae)
Hydrochus matthewsi Makhan, 1995 (Coleoptera: Hydrohididae) (junior synonym of *Hydrochus multicolor* Lea, 1926)
Laccobius matthewsi Gentili, 1981 (Coleoptera: Hydrophilidae)
Mesomorphus matthewsi Ferrer, 2008 (Coleoptera: Tenebrionidae)
Pogonus matthewsi Baehr et Hudson, 2001 (Coleoptera: Carabidae)
Pronus matthewsi (Español, 1982) (Coleoptera: Ptinidae)
Stenolagria matthewsi Merkl, 1987 (Coleoptera: Tenebrionidae)