

February 1998

An Unusual New Unicorn Species of *Copris* From Nicaragua (Scarabaeidae: Scarabaeinae, Coprini)

Brett C. Ratcliffe

University of Nebraska-Lincoln, bratcliffe1@unl.edu

Follow this and additional works at: <http://digitalcommons.unl.edu/entomologypapers>



Part of the [Entomology Commons](#)

Ratcliffe, Brett C., "An Unusual New Unicorn Species of *Copris* From Nicaragua (Scarabaeidae: Scarabaeinae, Coprini)" (1998). *Papers in Entomology*. 86.

<http://digitalcommons.unl.edu/entomologypapers/86>

This Article is brought to you for free and open access by the Museum, University of Nebraska State at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Papers in Entomology by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

AN UNUSUAL NEW UNICORN SPECIES OF *COPRIS* FROM NICARAGUA
(SCARABAEIDAE: SCARABAEINAE, COPRINI)

BRETT C. RATCLIFFE
Systematics Research Collections
W436 Nebraska Hall
University of Nebraska
Lincoln, NE 68588-0514, U.S.A.

Abstract

Copris maesi, new species, is described from Nicaragua. This species is unlike any other New World *Copris* Müller because of the single, long, pronotal horn. Its characters place it outside of any known *Copris* species group.

New World members of the genus *Copris* Müller were revised by Matthews (1962). His study resulted in 23 valid species, and only one of those (*C. lugubris* Boheman) was known to occur in Nicaragua. Matthews and Halfpeter (1968) described *C. martinezi* from northwestern Mexico. Warner (1990) described two additional species, *C. macclevei* Warner from the southwestern United States and *C. igualensis* Warner from southwestern Mexico.

I describe here a highly unusual new species of *Copris* whose disarticulated remains were found beneath a log in Nicaragua by Jean-Michel Maes and A. de la Fuente. I had hoped that additional specimens would have been found in the intervening years since the specimen was found, but this has not happened. I have decided to describe the species now, without waiting for a complete body to be collected, because its remarkably distinctive features are diagnostic.

Matthews (1962) indicated that *Copris* is completely isolated taxonomically from any other New World genus of Coprini, and that it can be easily distinguished by the characters given in his diagnosis on p. 35. This specimen falls within Matthews' characterization of the genus.

Copris maesi Ratcliffe, new species
Figs. 1-2

Type Material. Holotype, labelled "NICA: MATAGALPA: FUENTE PURA, 20-iii-94, J.M. Maes & A. de la Fuente," deposited at the University of Nebraska State Museum (UNSM).

Holotype. Male. Specimen missing head, all legs except left profemur, and genitalia. Length 17.7 mm from front of pronotum to apex of elytra; width 11.2 mm across middle of elytra. Color black, moderately shining. *Pronotum:* Surface minutely and densely crazed (apparently normal microsculpturing), with numerous micropunctures. Anterior angles and lateral fovea with large, dense, ocellate-umbilicate punctures, punctures extending as an oblique band onto side of pronotum (Fig. 1). Base either side of middle with single row of similar punctures. Margin at each anterior angle with prominent, subrectangular protrusion. Lateral carina absent and lateral, laminate process vestigial. Each side with suboval fossa, anterior edge of fossa with large, elongated tubercle. Center of disc with long, forward projecting horn (Figs. 1-2); horn



Fig. 1. *Copris maesi*, dorsal habitus.

4.5 mm long, gradually tapering to narrow blunt apex (apex weakly worn), venter longitudinally and shallowly sulcate and roughened. Lateral margins narrowly reflexed. *Elytra*: Each stria with row of small punctures, punctures 2–3 diameters apart and joined by narrow, impressed line. Intervals weakly convex with surface similarly crazed and with micropunctures as on pronotum. Eighth stria obsolete in apical half. *Pygidium*: Surface across base and in an-

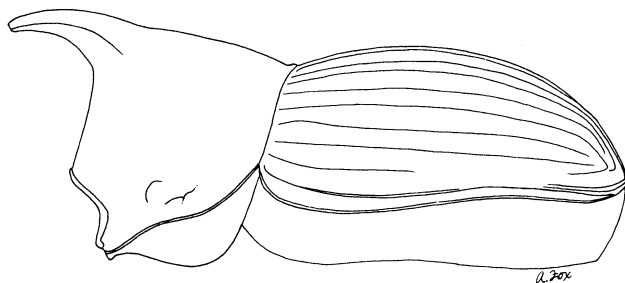


Fig. 2. *Copris maesi*, lateral view, showing pronotal configuration.

gles with sparse, moderately large, ocellate-umbilicate punctures; disc with a few smaller punctures. A transversely arcuate, impressed sulcus traverses surface between middle of pygidium and its apex. *Venter*: Anterior edge of prosternal margin with extremely minute, subtriangular median tooth. Median lobe of metasternum with micropunctures and crazing similar to that of pronotum; median, longitudinal sulcus narrow, deep, impunctate. *Legs*: Ventral surface of anterior femur with large, setigerous punctures on posterior half longitudinally, large punctures lacking on anterior half. Remaining legs absent.

Remarks. *Copris maesi* is unique among the New World members of the genus *Copris* because of its single, long, pronotal horn. All other species have either a distinct, bifurcate horn or process, or they lack a median prominence altogether. *Copris maesi* also lacks a lateral carina on either side of the pronotum, a character present in most other species. When present, this carina extends from an anterior point on the lateral margin upward and backward to pass just under the lateral fossa, after which it disappears. The character states shown by this specimen prevent it from being placed in any of Matthews' (1962) species complexes.

The specimen was collected at Fuente Pura on the road between Matagalpa and Jinotega at an elevation between 1,400–1,500 meters. The habitat is cloud forest with many epiphytes but no pines. The broken remains of the beetle were found beneath a rotting tree trunk that was about 20 cm in diameter (Maes, personal communication, May 1997). Maes indicated he looked under other numerous fallen tree trunks in the same area while looking for passalids but did not find any other specimens.

Etymology. This species is named in honor of Jean-Michel Maes who is doing so much to promote the study of beetles in Nicaragua and who is one of the co-discoverers of this species.

Acknowledgments

I thank Jean-Michael Maes (Museo Entomologico, Leon, Nicaragua) for sending the specimen upon which this paper is based. I also thank Angie Fox (Scientific Illustrator, University of Nebraska State Museum) who provided the illustrations and Gail Littrell (University of Nebraska State Museum) who typed the manuscript. Two anonymous reviewers provided valuable suggestions for improving this paper, and they are thanked.

Literature Cited

- Matthews, E. G. 1962.** A revision of the genus *Copris* Müller of the Western Hemisphere (Coleoptera, Scarabaeidae). *Entomologica Americana* 41:1–139.
- Matthews, E. G. and G. Halffter. 1968.** New data on American *Copris* with discussion of a fossil species (Coleoptera: Scarabaeidae). *Ciencia (Mexico)* 26:147–162.
- Warner, W. B. 1990.** Two new North American *Copris* Müller, with notes on other species (Coleoptera: Scarabaeidae). *Pan-Pacific Entomologist* 66:232–240.

(Received 19 May 1997; accepted 4 August 1997)

The Coleopterists Bulletin, 52(1):96. 1998.

THANKS TO REVIEWERS

The following individuals reviewed manuscripts for the Bulletin in 1997: P. G. Allsopp, M. A. Alonso-Zarazaga, D. M. Anderson, R. Andreazze, J. C. Bedick, C. L. Belamy, J. Bernhardt, J. K. Bouseman, M. A. Branham, G. R. Buckingham, H. R. Burke, J. F. Cavey, T. Center, F. Chalumeau, D. S. Chandler, S. M. Clark, C. Costa, C. A. Deloya Lopez, K. Desender, P. F. Dowd, W. D. Edmonds, D. J. Emlen, R. A. Fayerlund, R. W. Flowers, G. W. Folkerts, E. J. Ford, J. H. Frank, D. G. Furth, W. D. Garrahan, Jr., E. F. Giesbert, B. Gill, A. R. Gillogly, T. K. Philips Goodrich, D. W. Hall, R. W. Hamilton, R. S. Hanley, A. Hardy, K. Harusawa, M. A. R. L. Hoffman, F. T. Hovore, H. F. Howden, A. T. Howden, J. A. Jackman, M. L. Jameson, C. Dan Johnson, C. D. Johnson, K. Katovich, D. G. Kissinger, D. H. Kistner, A. Konstantinov, W. L. Krinsky, J. R. LaBonte, S. W. Lingafelter, Y. Lopez-Guerrero, J. D. McCarty, S. McCleve, J. V. McHugh, C. S. Michalski, D. W. Moeller, A. V. Morgan, G. Nelson, C. W. O'Brien, M. K. Oliver, W. A. Palmer, G. L. Parsons, S. B. Peck, P. D. Perkins, E. C. Phillips, J. D. Pinto, B. C. Ratcliffe, C. M. Reid, K. J. Ribardo, M. E. Rice, J. Rifkind, E. G. Riley, T. O. Robbins, R. E. Roughley, G. A. Samuelson, G. Scherer, J. C. Schuster, T. N. Seeno, D. S. Sikes, A. Smetana, G. Snelling, J. R. Spence, B. D. Streit, Jr., D. B. Thomas, R. D. Ward, W. B. Warner, S. G. Wellso, R. L. Westcott, D. E. Wheeler, G. J. Wibmer, D. K. Young, R. S. Zack.

Sincere thanks are also extended to the members of the editorial board for reviewing manuscripts and assisting in the resolution of various matters.