

## The genus *Ontherus* Erichson 1847 (Coleoptera: Scarabaeidae: Scarabaeinae): description of a new species, and notes on the genus in Colombia

FABIO ARTURO GONZÁLEZ<sup>1</sup> & CLAUDIA ALEJANDRA MEDINA U

Colecciones Biológicas, Instituto Alexander von Humboldt. Villa de Leyva, Boyacá, Colombia. E-mail: fgonzalez@humboldt.org.co, fagakorn@gmail.com; camedina@humboldt.org.co, claudiaalejandramedina@gmail.com

<sup>1</sup>Corresponding author. E-mail: fgonzalez@humboldt.org.co, fagakorn@gmail.com

### Abstract

The state of knowledge of the genus *Ontherus* Erichson 1847 in Colombia is reviewed and updated since the revision of the genus by Génier (1996), and the species list for Colombia of Medina *et al.* (2001). Two new distributional records for Colombia are confirmed; *Ontherus politus* Génier 1996 and *Ontherus gilli* Génier 1996. An updated species list of *Ontherus* for Colombia is presented with comments on the species with doubtful distribution in Colombia. *O. felicitae* n. sp., a new species from the *mexicanus* species group, is described from Western Andes of Colombia.

**Key words:** Dung beetles, *Ontherus*, Colombia, new records, *O. felicitae* n. sp.

### Resumen

Se revisa y actualiza el estado del conocimiento del género *Ontherus* Erichson 1847 en Colombia, desde la revisión del género por Genier (1996), y del listado de especies de Colombia de Medina *et al.* (2001). Se confirmaron dos nuevos registros del género para Colombia; *Ontherus politus* Génier 1996 y *Ontherus gilli* Génier 1996. Se presenta el listado actualizado de especies de *Ontherus* para Colombia con comentarios de las especies con distribución dudosa en Colombia. Se describe una nueva especie del grupo *mexicanus* de los Andes occidentales de Colombia, *O. felicitae* nueva especie.

### Introduction

The genus *Ontherus* Erichson 1847, a neotropical dung beetle of the subfamily Scarabaeinae, is widely collected in the Colombian Andes, mainly from the inner montane forest, between 0 and 3000 m, although some species are typical of open pastures. The genus was reviewed by Génier (1996), which included 58 valid species for the genus. 19 species were registered for Colombia, seven with uncertainty (with no specific locality, or doubtful locality). One species, *O. gladiator* Génier 1998 was described two years later for a total of 59 species (Génier 1998). Medina *et al.* (2001) registered 18 species of *Ontherus* for Colombia, seven of which differed from what was reported by Génier (1996).

Currently a project of taxonomic verification of the Colombian species of dung beetles, together with the establishment of a reference collection at the Alexander von Humboldt Institute, is being implemented. The project also includes the unification of the registers of dung beetles of Colombia, using a unique code for those species lacking a specific name; this is especially needed in those groups lacking a recent taxonomic revision (Medina & González 2014). A careful revision of the species of *Ontherus* present in different dung beetles collection, allowed the taxonomic verification of the species registered for Colombia, which also contribute to the revision and the update of the species list for Colombia. Also, a new species from the *mexicanus* species group, collected in the Mesenia Nature Reserve, Jardín Antioquia, is described.

The updated species list of dung beetles of Colombia is still a work in progress. Taxonomic uncertainty is still enormous; approximately the 40 % of the species in ecological surveys are still lacking specific identification (Cultid *et al.* 2012, Medina & González 2014). Although the genus *Ontherus* has been reviewed, changes in the species list were needed. A significant number of changes in the species list of dung beetles of Colombia are expected, when more genera, especially those without taxonomic review, will be studied.

## Acknowledgments

Special thanks are given to La Mesenia Nature Reserve, for the support to the project and the conservation efforts made in the area. We thank Edwin Torres, Miguel Torres and Luis E. Franco, from the IAvH Entomological Collection, for their invaluable support in the curation and digitization of specimens. To Carlos Cultid (WCSC Colombia), and Alejandro Lopera (ECC) for allowing access to the specimens. To Felicity Edwards, James Gilroy and Dave Edwards, who did the field work where the new species were collected. Thanks to J. W. Miles for helping in the language revision. Thanks to two evaluators for their recommendations to the manuscript. Funding for the project was provided to T. Haugaasen and D. Edwards by The Research Council of Norway, grant number 208836. Collecting permit by the Autoridad Nacional de licencias ambientales ANLA Number 1579.

## References

- Brown, B.V. (2013) Automating the "Material examined" section of taxonomic papers to speed up species descriptions. *Zootaxa*, 3683 (3), 297–299.  
<http://dx.doi.org/10.11646/zootaxa.3683.3.8>
- Cultid, C., Medina, C.A., Martínez, B., Escobar, A., Constantino, L.M. & Betancur, N.J. (2012) *Escarabajos Coprófagos (Scarabaeinae) del Eje Cafetero: guía para el estudio ecológico*. WCS Books Colombia, 196 pp.
- Génier, F. (1996) A revision of the Neotropical genus *Ontherus* Erichson (Coleoptera: Scarabaeidae, Scarabaeinae). *Memoirs of the Entomological Society of Canada*, 170, 1–169.  
<http://dx.doi.org/10.4039/entm128170fv>
- Génier, F. (1998) A revision of the Neotropical genus *Ontherus* Erichson (Coleoptera: Scarabaeidae, Scarabaeinae), Supplement 1. *The Coleopterists Bulletin*, 52 (3), 270–274.
- Medina, C.A. & González, A. (2014) Escarabajos coprófagos de la subfamilia Scarabaeinae. In: Pizano, C. & García, H. (Eds.), *El bosque seco tropical en Colombia*. Instituto de Investigación de Recursos Biológicos Alexander von Humboldt (IAvH) Bogotá, pp. 195–213.
- Medina, C.A., Lopera, A., Vítolo, A. & Gill, B. (2001) Escarabajos Coprófagos (Coleoptera: Scarabaeidae: Scarabaeinae) de Colombia. *Biota Colombiana*, 2 (2), 131–144.
- Medina, C.A., Scholtz, C.H. & Gill, B. (2003) Morphological variation and systematics of *Canthon* and related genera of new world Canthonini dung beetles. *Deutsche Entomologische Zeitschrift*, 50 (1), 23–68.
- Medina, C.A., Molano, F. & Scholtz, C.H. (2013) Morphology and terminology of dung beetles (Coleoptera: Scarabaeidae: Scarabaeinae) genitalia. *Zootaxa*, 3626 (4), 455–476.  
<http://dx.doi.org/10.11646/zootaxa.3626.4.3>
- Pulido, A. & Medina, C.A. (2009) Escarabajos coprófagos (Coleoptera: Scarabaeinae) de la Orinoquia Colombiana. *Biota Colombiana*, 10 (1 y 2), 55–62.
- Tarasov, S. & Solodovnikov, A. (2011) Phylogenetic analyses reveal reliable morphological markers to classify mega-diversity in Onthophagini dung beetles (Coleoptera: Scarabaeidae: Scarabaeinae). *Cladistics*, 27, 1–39.  
<http://dx.doi.org/10.1111/j.1096-0031.2011.00351.x>