



# SCARABS



HE HS RSHMJR, SGDX VHKK BNLD.

Occasional Issue Number 72

Print ISSN 1937-8343 Online ISSN 1937-8351

February, 2013

## WITHIN THIS ISSUE

A Remarkable *Golofa* ..... 1

## BACK ISSUES

Available At These Sites:

Coleopterists Society  
[www.coleopsoc.org/default.asp?Action=Show\\_Resources&ID=Scarabs](http://www.coleopsoc.org/default.asp?Action=Show_Resources&ID=Scarabs)

University of Nebraska  
[www-museum.unl.edu/research/entomology/Scarabs-Newsletter.htm](http://www-museum.unl.edu/research/entomology/Scarabs-Newsletter.htm)

## EDITORS

Rich Cunningham  
[Scarab349@aol.com](mailto:Scarab349@aol.com)

Olivier Décobert  
[oldec@wanadoo.fr](mailto:oldec@wanadoo.fr)

Barney Streit  
[barneystreit@hotmail.com](mailto:barneystreit@hotmail.com)

## A Remarkable *Golofa* Hope, 1837 from Peru (Coleoptera: Dynastinae: Dynastini)

by Brett C. Ratcliffe

Systematics Research Collections  
University of Nebraska State Museum  
Lincoln, NE, USA  
[bratcliffe1@unl.edu](mailto:bratcliffe1@unl.edu)

and Jochen-P. Saltin

Idsteiner Str. 32  
D-65527 Niedernhausen/Taunus  
GERMANY  
[jochen.saltin@gmx.de](mailto:jochen.saltin@gmx.de)

There are about 28 species in the Neotropical genus *Golofa*, depending on which authority one uses (Endrödi 1977, 1985; Lachaume 1985; Dechambre 1983; Morón 1995). Species are found from central Mexico to northern Argentina and Chile. Thirteen species are found in Central America, and 14 species are found in South America.

Adult males of most species may be recognized by their brownish yellow to dark reddish brown color (three species are black or nearly so); presence in the males of most species of a short to long, upright, slender head horn and presence of a short to long, erect or obliquely oriented pronotal horn or prominent tubercle. *Golofa* females are dark yellowish brown to more commonly black, and they lack armature.

Even after the modern synopses of those authors cited above, identification of many species of *Golofa* remains a difficult and often exasperating task. Why is this? First and foremost is the significant morphological variation in male secondary sexual characters combined with an unusual (for dynastines) lack of differentiation of the male genitalia. Most authors have based their concepts of *Golofa* species on the characters of male armature, and, since these vary so much within a species due to allometric growth, it has always been difficult to incorporate all of the variation in a workable key, description, or in photographs. In many cases, females can be identified only by being collected with the males. So,

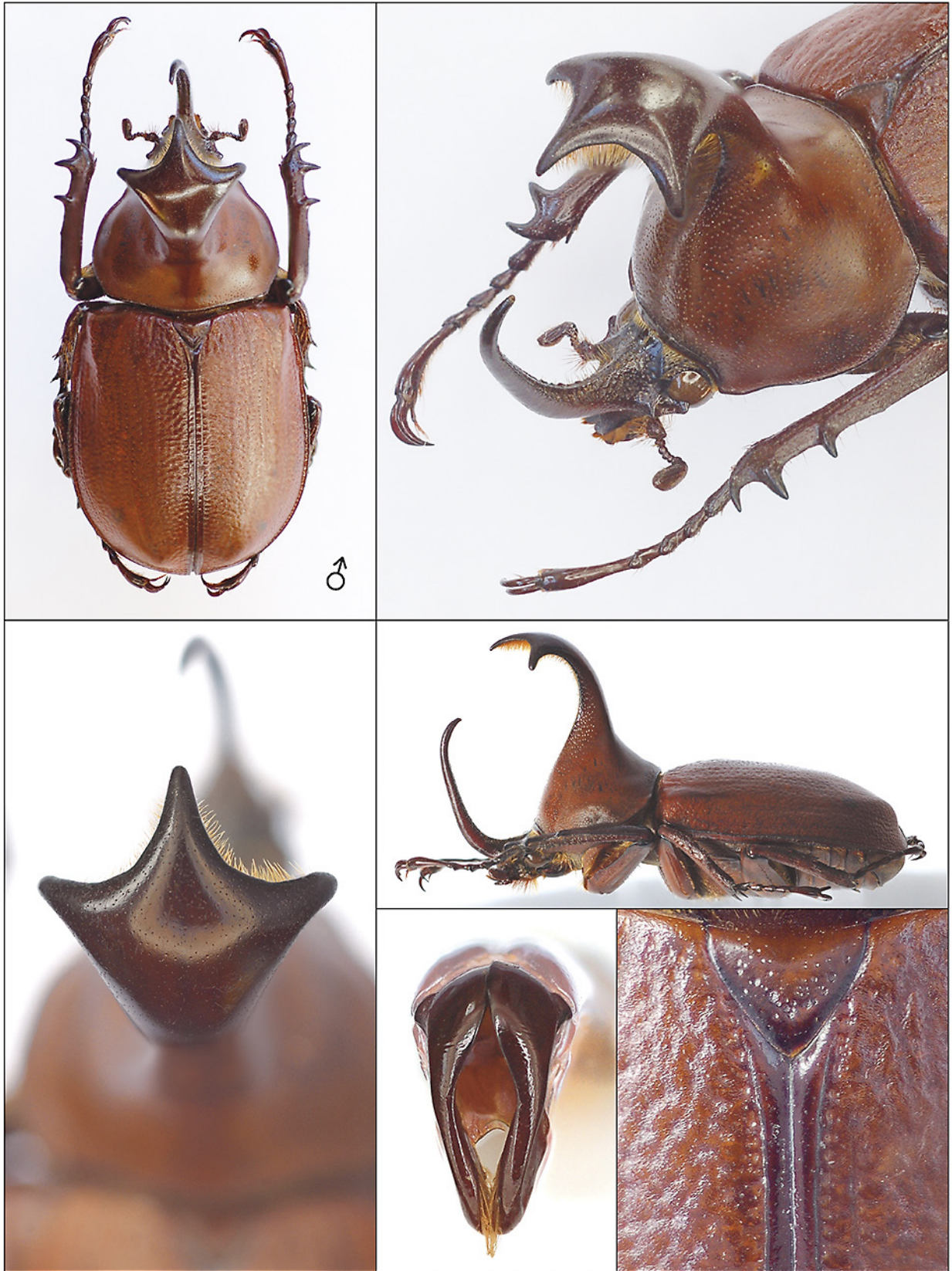
male characters vary considerably, the usually diagnostic parameres are not reliable, other characters seem to vary in their expression, and most of the females all seem to look alike. The result is difficulty in identification of some species.

Here we report a presumably unique specimen from the Department of Cuzco, Peru that is unlike any other *Golofa* species known to us. It resembles *G. claviger* (L.) which is known from Peru, Ecuador, and Colombia, but its pronotal armature is truly remarkable, and its parameres differ somewhat. It is either a new species or the result of an irregular combination of genes resulting in a morphological oddity. Additional specimens with the same body structures would confirm a new species, but in the meantime we suspect that it is a unique monstrosity or malformed specimen. Note particularly the pronotal horn where the apex is deeply bifurcate with visible setae on the anterior edge and a thickened head horn. The sympatrically occurring *Golofa claviger*, by contrast, has a pronotal horn with an apex that is strongly and triangularly dilated with setae on the concave surface beneath the dilation and a more slender head horn. The parameres of the monstrosity are also more arcuate rather than subtriangular as in *G. claviger* and are also slightly more robust. These parameres do not seem to match any species of *Golofa*.

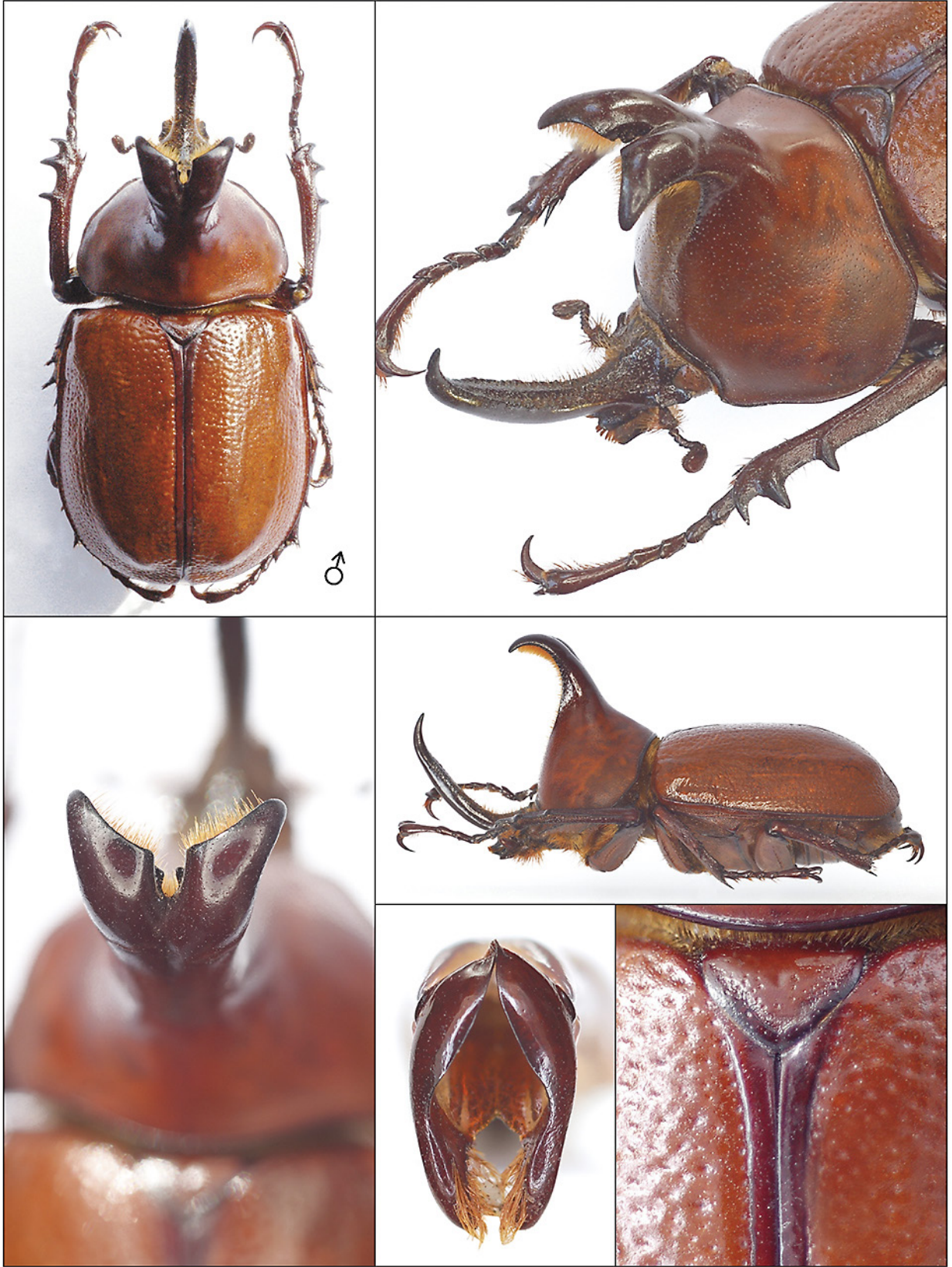
So, while it might be tempting to describe this specimen as a new



A map of Peru showing the Departments of Junin and Cuzco, where the range of *Golofa claviger* overlaps with that of the unique specimen describe here.



*Golofa claviger* Linnaeus, 1771. Peru, Department of Junin, La Merced, I-2012. Length 46mm.



*Golofa* sp. Peru, Department of Cuzco, 1,100 meters elevation, II-2012. Length 50 mm.

species, we believe it serves our science better if we could confirm that there are additional specimens with the same body structure before rushing to judgment.

We thank Michael Bueche (Tingo Maria, Peru; michael\_buche@yahoo.es) for providing the specimen for study, and it has been returned to him. This project was supported by a National Science Foundation Biotic Surveys and Inventory grant (DEB 0716899) to Brett Ratcliffe and Ronald Cave.

#### Literature Cited

Dechambre, R.-P. 1983. Le genre *Golofa* (Col. Dynastidae). *Bulletin Sciences Nat* No. 37: 111.

Endrödi, S. 1977. Monographie der Dynastinae (Coleoptera) 6. Tribus Dynastini. II. *Acta Zoologica Academiae Scientiarum Hungaricae* 23: 3786.

Endrödi, S. 1985. *The Dynastinae of the World*. Dr. W. Junk Publisher, Dordrecht, The Netherlands. 800 pp., 46 plates.

Lachaume, G. 1985. Dynastini 1: *Dynastes - Megasoma - Golofa*. *Les Coléoptères du Monde* 5. Sciences Nat, Venette, France. 85 pp, 29 plates.

Morón, M. A. 1995. Review of the Mexican species of *Golofa* Hope (Coleoptera: Melolonthidae, Dynastinae). *The Coleopterists Bulletin* 49: 343386.