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INSECTA MUNDI

A Journal of World Insect Systematics

0163

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Date of Issue: April 15, 2011

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Insecta Mundi 0163: 1-4

Published in 2011 by

Center for Systematic Entomology, Inc.

P. O. Box 141874

Gainesville, FL 32614-1874 U. S. A.

<http://www.centerforsystematicentomology.org/>

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Printed copies deposited in libraries (ISSN 0749-6737)

Electronic copies in PDF format (On-Line ISSN 1942-1354, CDROM ISSN 1942-1362)

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Oxycheila binotata Gray (Coleoptera: Carabidae: Cicindelinae), information on a little known taxon from Colombia

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Abstract. Two specimens of *Oxycheila binotata* Gray (Coleoptera: Carabidae: Cicindelinae) in the Field Museum of Natural History offer additional information on the morphology and distribution of this rare species. One of the specimens, a female, is considered to be the first known specimen of this species.

Introduction

The Neotropical tiger beetle genus *Oxycheila* Dejean presently includes 47 species ranging in distribution from southern Mexico southward to east central Argentina (Wiesner 1999; Wiesner 2003). Adults of this genus are nocturnal and are most often encountered clinging to emergent rocks of fast flowing streams (Pearson and Vogler 2001).

Presently, 11 species of *Oxycheila* are known from Colombia, with two additional species considered possible (Vitolo-L. 2004). Of the 11 confirmed Colombian species, one, *O. binotata* Gray (type locality = “Columbia”) is known from only two specimens—the lectotype male (designated by Wiesner 1999) and a female specimen collected in Guatemala (Wiesner 1999). Wiesner (1999) presented a re-description of this species based on these two specimens, noting that the identification of the female was tentative due to the lack of additional material and definite association of sexes.

During the course of identifying tiger beetles for the Field Museum of Natural History (FMNH, Chicago, Illinois), two previously unidentified specimens of *Oxycheila*—one male and one female, both of which were collected in Colombia (Fig. 9), key to and closely match the description of *O. binotata* as presented by Wiesner (1999). The male is labeled: “Colombia: Cauca; Quebrada, Huanqui, Rio Sonja area, 100m, X:20-31-1971, leg. B. Malkin”. The female is labeled: “Nariño, Pasto, X:1:19:1971, leg. B. Malkin and P. Burchard at light”.

Discussion

A comparison of the FMNH male specimen to the photo and illustrations of the lectotype male in Wiesner (1999) indicates that the FMNH male (Fig. 1) differs only in the following: elytral maculation slightly smaller, unpigmented areas of legs and antennae slightly darker, black covering larger percentage of femur, labrum black brown, labral teeth more distinct (Fig. 2), and length = 15.5 mm. This specimen has numerous missing antennomeres and tarsi in addition to the apex of the aedeagus being broken (Fig. 3, 4).

The single female specimen examined by Wiesner (1999) differed from the lectotype male in the uniformly tapered elytral apex and the fact that it did not have the pronounced humeral angle; therefore it was tentatively identified as *O. binotata*. In sharp contrast to the female specimen examined by Wiesner (1999), the FMNH female exhibits a truncated elytral apex and a pronounced anterolateral projection on the humeral angle, both of which are found in the lectotype male. The FMNH female (Fig. 5) has elytral maculation of similar size as the lectotype (Wiesner 1999, fig. 81) and lighter unpigmented areas when compared to the FMNH male. The FMNH female specimen exhibits a deep depression in the center of the mesoepisternum (Fig. 7), Wiesner (1999) noted a similar depression on the female specimen he examined; however the labrum appears more elongated (Fig. 8).

It should be noted that the key to the species of *Oxycheila* provided by Wiesner (1999) does not utilize the characters of the shape of elytra humeri, or the shape of the elytra apex. Due to this, the Guatemalan female examined by Wiesner (1999) keys out to *O. binotata*. However, the pronounced humeral angle of

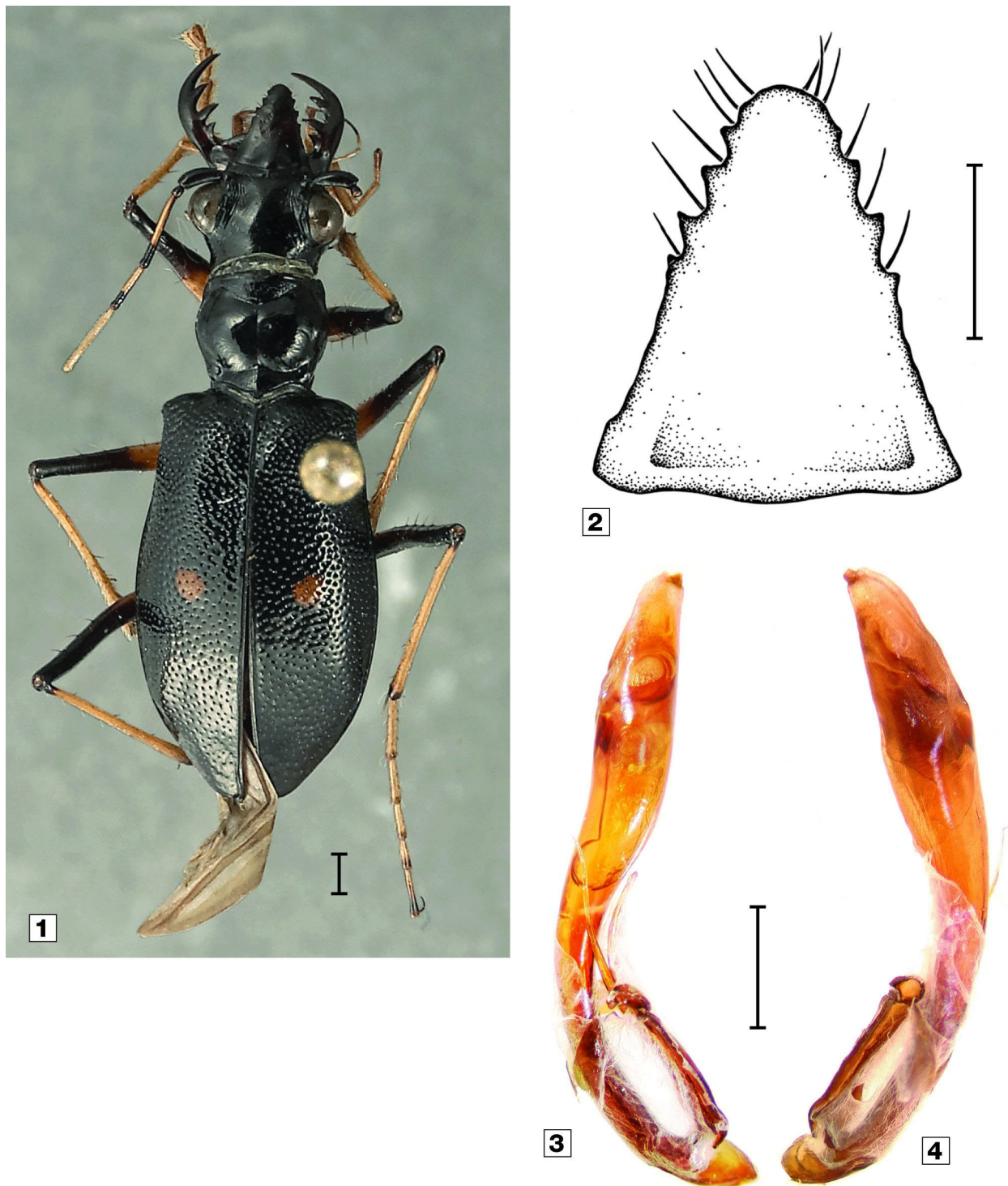


Figure 1-4. *Oxycheila binotata* male in FMNH. **1)** Habitus (scale bar = 1mm). **2)** Labrum (scale bar = 1mm). **3)** Aedeagus, left lateral view (scale bar = 1mm). **4)** Aedeagus, right lateral view (scale bar = 1mm).

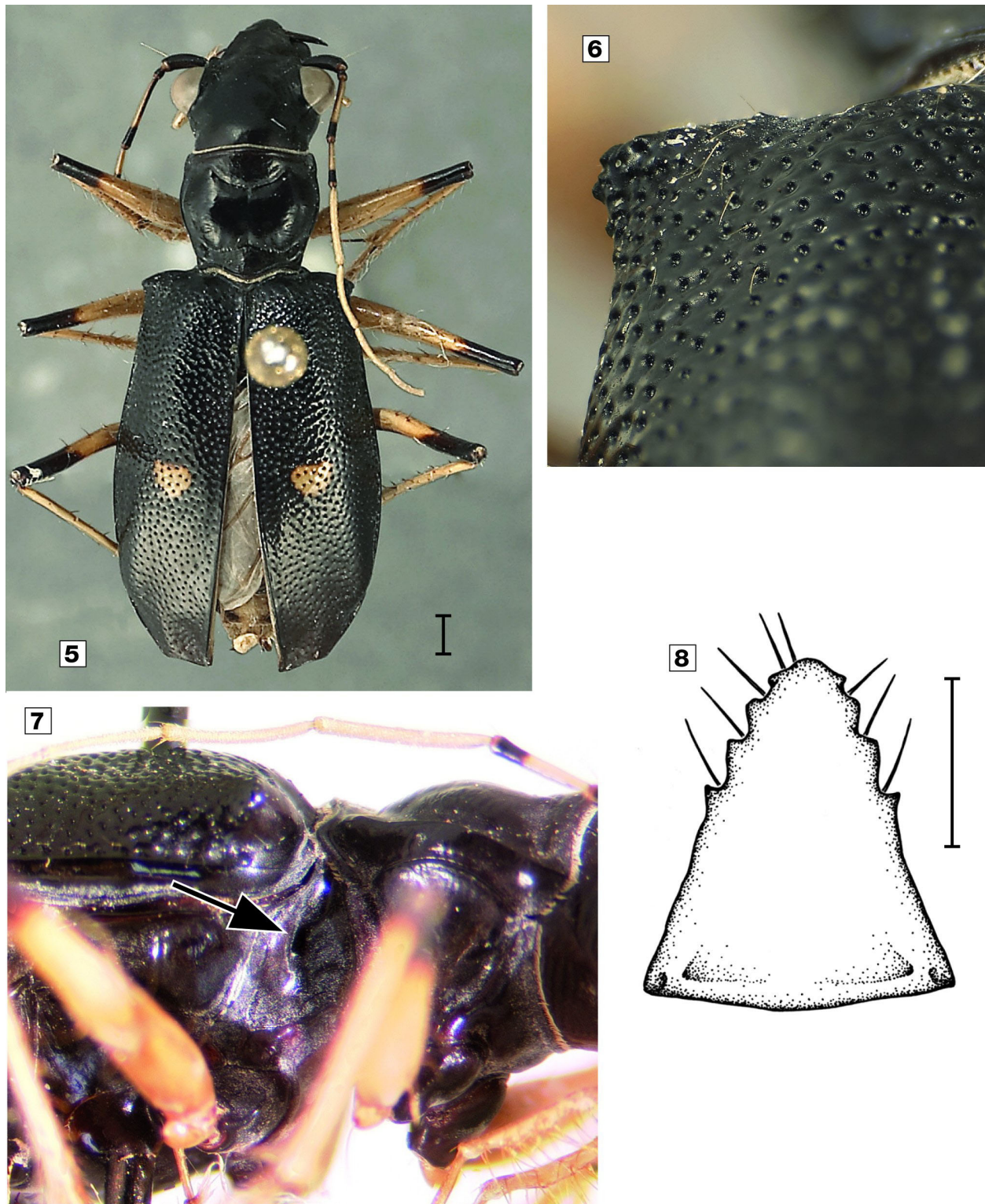


Figure 5-8. *Oxycheila binotata* female in FMNH. **5)** Habitus (scale bar = 1mm). **6)** Left humerus, illustrating anterolateral projection. **7)** Mesoepisternum, illustrating deep depression (arrow). **8)** Labrum (scale bar = 1mm).

the FMNH female (Fig. 6), along with collecting data of Colombia indicates that this specimen more likely represents the female of *O. binotata* than the Guatemalan female which may, in fact, represent a yet undescribed species.

Acknowledgments

Fabio Cassola (Rome, Italy), Boris Kondratieff (Colorado State University, Fort Collins, CO), David Pearson (Arizona State University, Tempe, AZ) and Jürgen Wiesner (Wolfsburg, Germany) reviewed the manuscript and offered numerous suggestions. James Boone (Field Museum of Natural History, Chicago, IL) provided specimens and facilities during the course of this project. Gracen Brilmyer (FMNH) photographed figures one, five, and six. Michael Ivie (Montana State University, Bozeman, MT) provided facilities and access to the photomontage system.

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Received January 16, 2011; Accepted March 8, 2011.

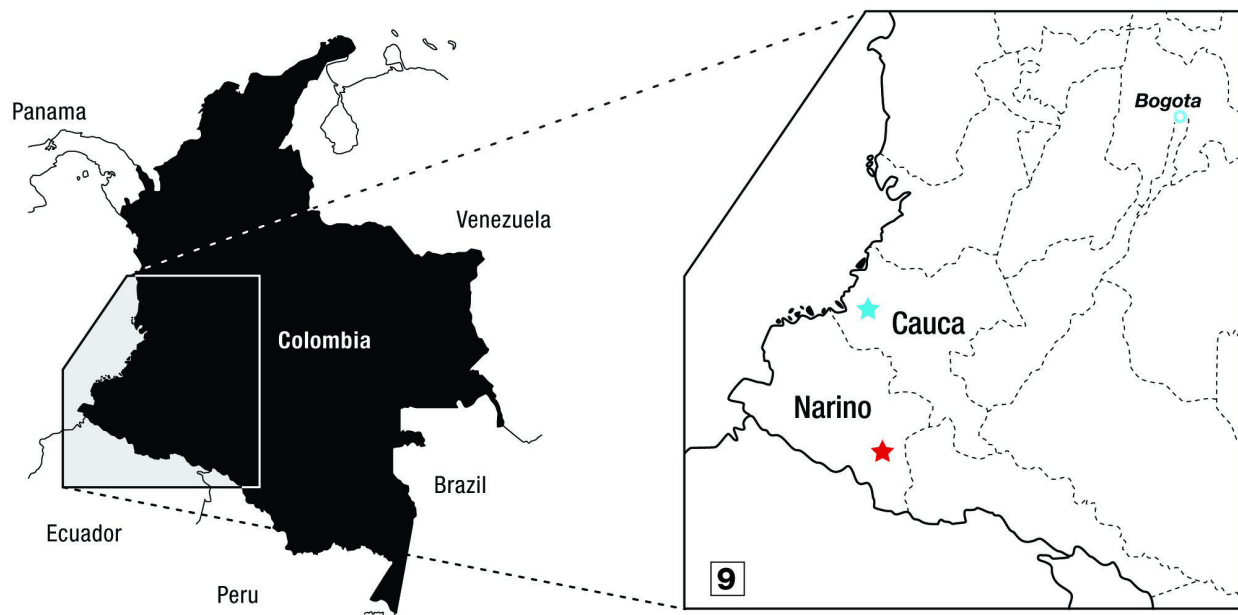


Figure 9. Map of Colombia illustrating approximate collecting locals for FMNH *Oxycheila binotata* male (blue star) and female (red star).