



An unusual new species of Gyrinidae (Coleoptera), *Orectochilus orbisonorum* n. sp., from India

KELLY B. MILLER^{1,4}, PAOLO MAZZOLDI² & QUENTIN D. WHEELER³

¹Department of Biology and Museum of Southwestern Biology, University of New Mexico, 167 Castetter Hall, MSC03 2020, Albuquerque, NM 87131-0001, USA. E-mail: kbmiller@unm.edu

²Via G. Galileo 87, I-25128 Brescia, Italy. E-mail: paolo.mazzoldi@fastwebnet.it

³School of Life Sciences, Arizona State University, PO Box 876505, Tempe, AZ 85287-6505, USA. E-mail: Quentin.Wheeler@asu.edu

⁴Corresponding author

Abstract

A new species of Gyrinidae, *Orectochilus orbisonorum* n. sp., is described to honor the late Roy Orbison, recording artist and songwriter, and his wife Barbara. The species is unique among Indian Gyrinidae and *Orectochilus* Lacordaire, in general, since the ventral surfaces are white as the result of clear areas of cuticle allowing internal tissues to be visible.

Key words: whirligig beetles, classification, taxonomy

Introduction

Orectochilus Lacordaire, 1835 is one of the most speciose genera of Gyrinidae with members occurring throughout the Old World tropics with a single species in Africa (*O. africanus* Ochs, 1923) and one in Europe (*O. villosus* Müller, 1776). Many species live in India where they can be collected in large numbers at lights or from small streams. Often numerous species can be found in the same habitat. A surprisingly homogeneous group in many respects, nearly all species in this genus are black, bronzy, brown or reddish, with the ventral surfaces black, reddish or testaceous. A new species from southwestern India was recently discovered, however, that is unique in being dorsally black but largely white ventrally, a highly atypical feature for this genus. *Orectochilus* species have not been comprehensively revised, but Indian species were treated by Vazirani (1984) who keyed the species and described and illustrated them. The genus is difficult because of great diversity, close similarity of many taxa and intraspecific variation (including sexual dimorphism in taxonomically important characters). However, Vazirani's (1984) work has made the species in India, at least, identifiable.

Materials and methods

Measurements. Measurements were obtained using an ocular scale on a Wild M3C dissecting microscope. All available intact specimens were measured. Measurements taken include total length (TL, distance from the anterior margin of the clypeus to the posterior margin of visible abdominal sternum VI), greatest width (GW, the greatest distance across the elytra), greatest height (GH, the greatest distance between the dorsal and ventral surfaces as viewed laterally), length of the protibia (TiL, the greatest length of the male tibia), protarsal length (TaL, the greatest length of the male tarsus) and protarsal width (TaW, the greatest width across the