Henoticonus bouchardi Grouvelle transferred to Trogocryptoides Champion (Coleoptera: Salpingidae)

Paul Skelley
Florida State Collection of Arthropods
Florida Department of Agriculture and Consumer Services – DPI
P.O. Box 147100
Gainesville, FL 32614-7100 USA

Date of Issue: February 28, 2013
Paul Skelley
*Henoticonus bouchardi* Grouvelle transferred to *Trogocryptoides* Champion (Coleoptera: Salpingidae)
Insecta Mundi 0281: 1-4

ZooBank Registered: urn:lsid:zoobank.org:pub:38FCD045-7D19-4965-8D0C-B6927137EC6B

**Published in 2013 by**
Center for Systematic Entomology, Inc.
P. O. Box 141874
Gainesville, FL 32614-1874 USA
http://www.centerforsystematicentomology.org/

**Insecta Mundi** is a journal primarily devoted to insect systematics, but articles can be published on any non-marine arthropod. Topics considered for publication include systematics, taxonomy, nomenclature, checklists, faunal works, and natural history. **Insecta Mundi** will not consider works in the applied sciences (i.e. medical entomology, pest control research, etc.), and no longer publishes book reviews or editorials. **Insecta Mundi** publishes original research or discoveries in an inexpensive and timely manner, distributing them free via open access on the internet on the date of publication.

**Insecta Mundi** is referenced or abstracted by several sources including the Zoological Record, CAB Abstracts, etc. **Insecta Mundi** is published irregularly throughout the year, with completed manuscripts assigned an individual number. Manuscripts must be peer reviewed prior to submission, after which they are reviewed by the editorial board to ensure quality. One author of each submitted manuscript must be a current member of the Center for Systematic Entomology. Manuscript preparation guidelines are available at the CSE website.

**Managing editor:** Paul E. Skelley, e-mail: insectamundi@gmail.com
**Production editor:** Michael C. Thomas, Brian Armitage, Ian Stocks
**Editorial board:** J. H. Frank, M. J. Paulsen
**Subject editors:** G.B. Edwards, J. Eger, A. Rasmussen, F. Shockley, G. Steck, Ian Stocks, A. Van Pelt, J. Zaspel
**Spanish editors:** Juliesta Brambila, Angélico Asenjo

**Printed copies (ISSN 0749-6737) annually deposited in libraries:**
CSIRO, Canberra, ACT, Australia
Museu de Zoolégia, São Paulo, Brazil
Agriculture and Agrifood Canada, Ottawa, ON, Canada
The Natural History Museum, London, Great Britain
Muzeum i Instytut Zoologiczny PAN, Warsaw, Poland
National Taiwan University, Taipei, Taiwan
California Academy of Sciences, San Francisco, CA, USA
Florida Department of Agriculture and Consumer Services, Gainesville, FL, USA
Field Museum of Natural History, Chicago, IL, USA
National Museum of Natural History, Smithsonian Institution, Washington, DC, USA
Zoological Institute of Russian Academy of Sciences, Saint-Petersburg, Russia

**Electronic copies (On-Line ISSN 1942-1354, CDROM ISSN 1942-1362) in PDF format:**
Printed CD or DVD mailed to all members at end of year. Archived digitally by Portico.
Florida Virtual Campus: http://purl.fcla.edu/fcla/insectamundi
University of Nebraska-Lincoln, Digital Commons: http://digitalcommons.unl.edu/insectamundi/
Goethe-Universität, Frankfurt am Main: http://edocs.ub.uni-frankfurt.de/volltexte/2010/14363/

**Author instructions** available on the Insecta Mundi page at:
http://www.centerforsystematicentomology.org/insectamundi/

Copyright held by the author(s). This is an open access article distributed under the terms of the Creative Commons, Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited. http://creativecommons.org/licenses/by-nc/3.0/
Henoticonus bouchardi Grouvelle transferred to Trogocryptoides Champion (Coleoptera: Salpingidae)

Paul Skelley
Florida State Collection of Arthropods
Florida Department of Agriculture and Consumer Services – DPI
P.O. Box 147100
Gainesville, FL 32614-7100 USA
Paul.Skelley@FreshFromFlorida.com

Abstract. During a revision of the genus Pharaxonotha Reitter, 1875 (Coleoptera: Erotylidae) the study of the type of Henoticonus bouchardi Grouvelle, 1919 (Coleoptera: Erotylidae), considered to belong in Pharaxonotha, was found to be misplaced. Henoticonus bouchardi is transferred to the genus Trogocryptoides Champion, 1924 (Coleoptera: Salpingidae: Prostominiinae), becoming Trogocryptoides bouchardi (Grouvelle), new combination. A lectotype is designated for H. bouchardi to stabilize its identity and nomenclature.

Introduction

Taxonomic revisions of genera require studying the types for all species placed in that genus and other species that might be considered members. While studying types of Pharaxonotha Reitter (Coleoptera: Erotylidae), I discovered that Henoticonus bouchardi Grouvelle, alleged by Sen Gupta and Crowson (1969, 1971) to belong in Pharaxonotha, was not a member of the genus Pharaxonotha, or even an Erotylidae. Additional work led to the correct taxonomic placement of this species.

Materials and Methods

The type of H. bouchardi Grouvelle was found in the Grouvelle collection, Box number 264, at the Museum National d’Historie Naturelle, Paris, France. Photographs were taken using an AutoMontage system by Syncroscopy located at the Florida State Collections of Arthropods. Plates were created using Paint Shop Pro 7.

SALPINGIDAE: Prostominiinae

Trogocryptoides bouchardi (Grouvelle, 1919), new combination
Figures 1-8


Distribution. Sumatra, Indonesia; Malang, Java.

Discussion. The genus Henoticonus Reitter (type species: Henoticonus triphylloides Reitter) has an interesting history of family assignments; starting in the Cryptophagidae, going through a period in the Languriidae (Sen Gupta and Crowson 1967, 1971), and now belonging in the Erotylidae: Pharaxonothinae
(Leschen 2003). While the type species is properly placed in the Erotylidae, the similar appearing *H. bouchardi* proved problematic.

Grouvelle (1919) described *H. bouchardi* in the Cryptophagidae indicating it was similar to *Pharaxonotha*. He then briefly discusses three other specimens: one also from Sumatra (Palembang), the other two from Java (Malang), which he felt were the same species. Because *H. bouchardi* is similar to beetles of different families, and Grouvelle studied three additional specimens whose depository and true identity remain unknown, I must solidly establish the identity of *H. bouchardi* by here designating the specimen stated above as the lectotype. This specimen was deposited in Grouvelle’s collection and has all necessary labels identifying it as the specimen on which he based the description.

Soon after its description, *H. bouchardi* was cataloged by Schenkling (1923) in the Cryptophagidae. Following Grouvelle’s description and comments, Sen Gupta and Crowson (1967: 91 footnote, 1971: 16 footnote; *Henoticonus* assigned to the Languriidae, Loberinae, Pharaxonothini) stated that *H. bouchardi* might be better placed in the genus *Pharaxonotha*. However, their 1971 footnote stated they have not studied a specimen. This would explain why they did not transfer it to *Pharaxonotha*, nor recognize that it was not a member of the Cucujoidae.

Examination of the type quickly proved it was not a *Pharaxonotha* species or even an erotylid. Characters excluding it from *Pharaxonotha* included: small body size, length 2.4 mm; tarsi slender with
Figures 4-8. Lectotype of Henoticonus bouchardi Grouvelle. 4) Ventral view of head and pronotum. 5) Dorsal view of head and pronotum. 6) Dorsolateral view of head and pronotum. 7) Dorsal view of extruded female genitalia. 8) Original labels.
5-5-4 tarsal formula; no vertexal line nor stridulatory files on vertex; terminal maxillary palpomere dilated, not acuminate; mentum rectangular; pronotum lacking pores and longitudinal lines at basal margin; pronotal disc with subbasal depressions on each side; antennomeres II-III elongate; mesosternum lacking anterior carina and depressions for reception of prosternum; eyes small, finely facetted; scutellary striae short.

Although *H. bouchardi* is easily excluded from the Erotylidae, determining the correct family placement required the assistance of colleagues. Photographs were sent to R. Leschen (New Zealand Arthropod Collection) who identified it as a salpingid based on the antennal insertion hidden in dorsal view (present in most groups), which is a reliable character to separate similar-looking members of the Salpingidae from *Pharaxonotha*. The family Salpingidae is a heterogeneous group of Tenebrionoidea (Leschen et al. 2010, Lawrence et al. 2012) and is presently under revision (Escalona 2012) but can be separated from Erotylidae by their tenebrionid aedeagus and tarsal formula. The images were sent to H. Escalona (Museo del Instituto de Zoología Agrícola, Venezuela) who stated it belonged in the genus *Trogocryptoides* Champion. Characters which help place *H. bouchardi* in *Trogocryptoides* include: 5-5-4 tarsal formula; margin at frontoclypeal suture entire, not notched; pronotum with lateral marginal bead slightly crenulate; antennal grooves only reaching base of subgenal process; prosternal process narrow, not expanded apically; procoxal cavities slightly open externally; intermetacoxal process of first abdominal ventrite acute.

**Acknowledgments**

I thank A. Taghavian and Th. Deuve, Muséum National d’Histoire Naturelle, Paris, France, for loan of the specimen studied here. Richard Leschen, New Zealand Arthropod Collection, Auckland, New Zealand, assisted in locating types and identifying this species. Hermes Escalona, Museo del Instituto de Zoología Agrícola, FAGRO-Universidad Central de Venezuela, Maracay, Venezuela, provided tentative generic and family identification, and the draft of his manuscript. I thank R. Leschen and H. Escalona for critically reviewing this paper. This is Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Entomology Contribution Number 1216.

**Literature Cited**


Received October 29, 2012; Accepted February 3, 2013.