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Trogocryptoides Champion (Coleoptera: Salpingidae)

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

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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

Henoticonus Bouchardi Grouvelle, 1919: 152-154 ~ Schenkling 1923: 15; Sen Gupta and Crowson 1967: 91; Sen Gupta and Crowson 1971: 16.

Material examined. A single female of *Henoticonus bouchardi* Grouvelle, **here designated as lectotype**, is labeled: “[red paper] Type / [white paper] Palembang, Sumatra. / [white paper with dotted line across middle, hand written] *Henoticonus Bouchardi* Grouv. / [red paper] LECTOTYPE *Henoticonus bouchardi* Grouvelle, des. P.E. Skelley 2012 / [white paper with black border, mostly hand written] Salpingidae: *Trogocryptoides bouchardi* (Grouv.), det. P.E. Skelley 2012 /”. Deposited in the Grouvelle Collection, Museum National d'Historie Naturelle, Paris, France.

Distribution. Sumatra, Indonesia; Malang, Java.

Discussion. The genus *Henoticonus* Reitter (type species: *Henoticonus triphyloides* 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



Figures 1-3. Lectotype of *Henoticonus bouchardi* Grouvelle. 1) Dorsal view, line = 1.0 mm. 2) Ventral view. 3) Lateral view.

(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 Cucujoidea.

Examination of the type quickly proved it was not a *Pharaxonotha* species or even an erotyloid. Characters excluding it from *Pharaxonotha* included: small body size, length 2.4 mm; tarsi slender with



Figures 4-8. Lectotype of *Henoticonus bouchardei* 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 faceted; scutellary striole 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.

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