THE SYSTEMATIC POSITION OF *PECTOTOMA HOPPINGI* HATCH (COLEOPTERA: SCRAPTIIDAE: SCRAPTIINI)

DANIEL K. YOUNG

Department of Entomology, Michigan State University
East Lansing, MI 48824

ABSTRACT

The abrupt postocular constriction of the head, and pubescent tibial spurs of *Pectotoma hoppingi* Hatch make its placement within the Melandryidae (*sensu stricto*) or Tetratomidae (*sensu* Crowson, 1955; Miyatake, 1960) untenable. A discussion of these and additional characters leads the author to propose that *Pectotoma* be placed in the scraptiid tribe Scraptiini.

While sorting through a loan of undetermined Pyrochroidae from the University of Alberta, a series of 3 peculiar specimens (2 males, 1 female) from Waterton, Alberta were brought to my attention by George Ball. They rather closely resembled members of the scraptiid genus *Canifa* with the exception that the males possessed beautifully pectinate antennae not unlike those of male pyrochroids—especially *Schizotus* and *Dendroides*.

Further investigations, including a conversation with John Lawrence, led me to the name *Pectotoma hoppingi* Hatch. Three British Columbian specimens of *Pectotoma*, including 1 paratype, were subsequently forwarded to me by David Kavanaugh of the California Academy of Sciences. These were examined and found to be conspecific with the Waterton material.

Hatch (1965) described the monotypic *Pectotoma* from 5 British Columbian specimens, placing it in the tribe Tetratomini (Melandryidae: Tetratominae). However, close examination of relaxed specimens reveals the following features which preclude the placement of *Pectotoma* within the Melandryidae (*sensu stricto*) or Tetratomidae (*sensu* Crowson 1955; Miyatake 1960):

—head abruptly constricted behind eyes, forming distinct "neck" (easily escapes observation in dried material due to intimate association of head and pronotum).

—base of pronotum narrower than anterior elytral margins.

—penultimate tarsal segments slightly lobed (but not bilobed) on all legs.

—tibial spurs pubescent.

By contrast, the head is not sharply constricted postocularly in the melandryids or tetratomids, the base of the pronotum is rarely narrower than the anterior elytral margins, the tarsi rarely possess lobed segments, and the tibial spurs are serrate (Melandryidae) or simple (Tetratomidae).

Pectotoma may be easily distinguished from the Mordellidae by its simple tarsal claws, the fact that the seventh abdominal tergite is not prolonged posteriorly into a style-like structure, and by the slightly lobed penultimate tarsal segments of all legs. This leaves the family Scraptiidae, with which *Pectotoma* closely agrees in all major characteristics.

In fact, it adheres closely to Franciscolo's (1964) characterization of the tribe Scraptiini of the Scraptiinae.

Franciscolo (1972) enumerated and discussed 10 characters of the Scraptiidae, referring to their presumed "primitivi" and "evoluti" states. *Pectotoma* has been analyzed with respect to these character states which are summarized as follows:

1) pronotum and elytra lacking fine transverse striae (DERIVED).
2) labial and maxillary palpi with apical segments elongate-securiform (PRIMITIVE).
3) all tarsi with penultimate segments slightly lobed, but not bilobed (this feature falls in between the primitive (=linear) and derived (= bilobed or otherwise modified) extremes proposed by Franciscolo).
4) lack of crenulature upon all tibial and tarsal segments (PRIMITIVE).
5) tibiae and meta-tarsal segments with apices transversely truncate (PRIMITIVE).
6) antennae not clubbed (PRIMITIVE).
7) sternites of male devoid of movable appendages (PRIMITIVE).
8) elytral apices separately rounded, not coming together completely along suture (PRIMITIVE).
9) eyes glabrous and deeply emarginate in both sexes (DERIVED).
10) pro-tibiae linear, not apically dilated (PRIMITIVE).

In the same paper, Franciscolo illustrated the relationships between scraptiid genera in the form of a chart. The following genera were assigned to the Scraptiini: *Scraptia* Latreille, *Canifa* LeConte, *Scraptogetus* Broun, *Neoscraptia* Fender, *Trotomma* Kiesw., *Trotommidea* Reitter, *Egydiella* Reitter, *Biophida* Pascoe, *Biophidina* Champion, and *Tolmetes* Champion. On the basis of the characteristics discussed above, I propose that *Pectotoma* Hatch be added to this list of Scraptiini.

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