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REVIEW OF THE GENUS *LEIPARTHRUM* IN NORTH AMERICA, WITH A DESCRIPTION OF ONE NEW SPECIES (COLEOPTERA: SCOLYTIDAE)

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Abstract *Can. Ent.* 100: 636–639 (1968)

Leiparthrum albosetum n. sp. from Baja California is described. The three North American species in the genus are discussed and a key to distinguish them is presented.

Leiparthrum Wollaston is primarily a Palearctic genus which, until recently, contained only one North American species. Wood (1959) described the second North American species, *arizonicum*, and the third species is described here. A key to the North American species is presented.

Leiparthrum was described by Wollaston (1854) to include *L. mandibulare* Woll., *L. bituberculatum* Woll., *L. curtum* Woll., and *L. artemisiae* Woll., all from the Canary Islands. Subsequently, over 20 species have been named for the world. Schedl (1959) revised the genus for the Palearctic region, reducing the number of species to 15. Blackman (1920) described *Erineosimus* for the species *E. squamosus* from Mississippi and Wood (1957) synonymized *Erineosimus* under *Leiparthrum*.

In the original description, Wollaston (1854) spelled this genus "*Leiparthrum*". However, in 1864, he changed the spelling to "*Liparthrum*" and gave no reasons for the change. *Liparthrum* has since been used by all subsequent authors; however, Wollaston's 1864 action constitutes an unjustified emendation, so the original spelling must be maintained.

The species of this genus are distinguished from related genera by the four-segmented (occasionally five-segmented) antennal funicle (Fig. 3), by the unsegmented antennal club (Fig. 3), by the uniseriate rows of erect, broad interstrial scales, by the recumbent strial hairs of the elytra, and by the four or five median tubercles on the anterior portion of the pronotum.

Specimens are deposited in the following collections, as indicated by the abbreviations: Canadian National Collection (CNC), U.S. National Museum (USNM), and S. L. Wood (SLW).

Leiparthrum Wollaston

Leiparthrum Wollaston, 1854, p. 294; Wollaston, 1857, p. 97; Wollaston, 1860, p. 364; Wollaston, 1862, p. 174.

Liparthrum Wollaston, 1864, p. 265 (unjustified emendation); Wollaston, 1865, p. 245; Hagedorn, 1910, p. 28; Wood, 1957, p. 399; Schedl, 1959, p. 35.

Erineosinus Blackman, 1920, p. 53; Chamberlin, 1939, p. 272; Wood, 1957, p. 399 (= *Liparthrum*).

Frons convex in male, concave in female; surface minutely reticulate, setose. Eyes elongate-oval, inner margin entire. Antennal funicle usually four-segmented, club elongate-oval, sutures not evident. Pronotum wider than long; anterior slope with sparse, erect asperities; surface minutely reticulate, clothed with broad, flattened scales and recumbent setae. Elytra with anterior margin elevated, crenulate to the base of the fourth interspace; striae punctured in regular rows, punctures rather large; interspaces as wide as striae, slightly convex, smooth; vestiture consisting of erect, broad interstrial scales and recumbent strial setae. Declivity convex, steep, unarmed; strial punctures somewhat reduced in size; otherwise unmodified.

Type-species: *Leiparthrum bituberculatum* Wollaston, original designation.

Leiparthrum is in the tribe Hypoborini, subfamily Hylesininae.

Key to the North American Species of *Leiparthrum*

1. Length 1.1 mm or less; pronotal asperities minute, much shorter than the scales; pubescence of frons consisting almost entirely of rather long spatulate scales; from southeastern United States ..... *squamosum* (Blackman)

   Length 1.1 mm or more; pronotal asperities prominent, as long as or longer than the scales; pubescence of frons consisting of scales and setae intermixed; from southwestern United States and northern Mexico 2

2. Elytral and pronotal scales broad, 1.0–1.5 times longer than wide; pronotum broadest at or near middle (Fig. 1); size slightly smaller, 1.1–1.3 mm; Arizona and northern Mexico ..... *arizonicum* Wood

   Elytral and pronotal scales narrow, 2.0 or more times longer than wide; pronotum broadest near base (Fig. 2); size slightly larger, 1.4 mm; Baja California . *albosetum* n. sp.

Leiparthrum squamosum (Blackman)

Erineosinus squamosus Blackman, 1920, p. 53 (Type ♀, Mississippi, USNM); Blackman, 1922, p. 74; Chamberlin, 1939, p. 272.

Liparthrum squamosum: Wood, 1957, p. 399.

This is the only species in the genus occurring in the southeastern United States. It may easily be distinguished by its distribution and by the characters given in the key.

Distribution and hosts: Known only from Mississippi. Over 30 specimens were examined from: MISSISSIPPI: Agriculture College, 20, 21 Feb. 1920, and 19 May 1920, M. W. Blackman, *Toxylon pomiferum* (now *Maclura pomifera*) (USNM); Holly Springs, 18 Sept. 1921, C. J. Drake (CNC).

Remarks: Blackman (1922) stated that the parent galleries are of the cave type, consisting of an irregular shaped chamber from which the longitudinal

larval mines originate. The galleries are always in the phloem–cambial region, never extending into the wood.

Leiparthrum arizonicum Wood

(Fig. 1)

Liparthrum arizonicum Wood, 1959, p. 57 (Type ♂, Arizona, SLW).

This species is easily distinguished from *L. albosetum* by the very broad scales on the pronotum and elytra, by its slightly smaller size (1.1–1.3 mm) and by the more arcuate lateral margins of the pronotum (Fig. 1).

Distribution and hosts: Known from Arizona and northern Mexico. Over 150 specimens were examined from: ARIZONA: Miller Canyon, Huachuca Mountains, 22 Aug. 1958, S. L. Wood, *Arbutus arizonicus* (USNM and SLW). DURANGO: Buenos Aires, 10 miles west of La Ciudad, 4 July 1964, J. B. Thomas, *Arbutus* sp. (CNC).

Wood (1960) also records this species from La Laja and at 20 and 23 miles south of Creel (both localities about 55 miles south of Ciudad Guerrero), Chihuahua, Mexico, from *Arbutus arizonicus* and *A. glandulosa*.

Remarks: The galleries are apparently similar to those of *L. squamosum*. Wood (1959) stated that the parent gallery was of the simple cave type, constructed below the cambium region. Eggs are deposited around the rim of the cavity in no apparent order and the larval mines are short and irregular, not oriented in any particular direction.

Leiparthrum albosetum n. sp.

(Figs. 2, 3)

This species is evidently closely related to *L. arizonicum* but may be distinguished by the characters given in the key. In addition, the frons of the male is flatter above the epistoma, the setae on the frons are longer and more slender, and the pronotum is differently shaped (Fig. 2).

Male. Length 1.4 mm; 2.0 times longer than wide; body dark reddish-brown, antennae light brown, vestiture white.

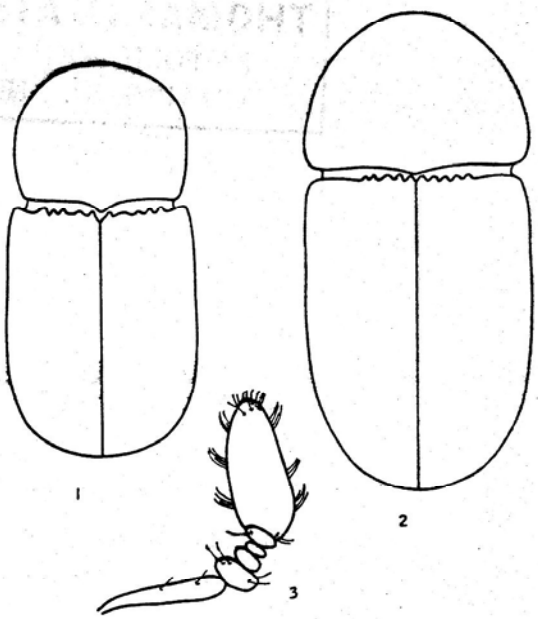
Frons convex, distinctly flattened above epistoma; surface minutely reticulate, shining; vestiture rather abundant, consisting of setae intermixed with spatulate scales, setae denser on epistomal margin. Antennal scape longer than funicle; club 2.1 times longer than wide.

Pronotum 1.5 times wider than long, widest at base, sides curving toward rather broadly rounded anterior margin; surface minutely reticulate, shining; anterior margin armed with two small asperities; anterior slope with five asperities scattered along median portion, these as long as or longer than scales; vestiture of about equal numbers of rather narrow scales and recumbent setae, scales more than twice as long as wide.

Elytra 1.4 times longer than wide; basal margins raised and each bearing five contiguous crenulations; striae not impressed, except first near declivity; strial punctures close, deep, of moderate size; interspaces as wide as striae, convex, without evident punctures; vestiture consisting of rather narrow interstrial scales and short, strial setae, scales more than twice as long as wide. Declivity convex, steep; first striae slightly impressed; strial punctures obscure; vestiture as on disc.

Female. Unknown.

Type material. Holotype, male, 22 miles northwest of Penjamo, Baja California, 29 August 1959, light trap, K. W. Radford and F. G. Werner, collectors. Deposited in the California Academy of Sciences, San Francisco.



FIGS. 1–3. 1, dorsal outline of *L. arizonicum*. 2, dorsal outline of *L. albosetum*. 3, antennae, *L. albosetum*. Insects drawn to same scale.

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