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Descriptions of females of *Nothopleurus* Lacordaire and *Strongylaspis* Thomson (Coleoptera: Cerambycidae: Prioninae: Macrotomini) with new distributional records

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Descriptions of females of *Nothopleurus* Lacordaire and *Strongylaspis* Thomson (Coleoptera: Cerambycidae: Prioninae: Macrotomini) with new distributional records

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Abstract. The female of *Nothopleurus subsulcatus* (Dalman, 1823) (Coleoptera: Cerambycidae: Prioninae: Macrotomini) is described for the first time, and the female of *Strongylaspis bullata* Bates, 1872 is redescribed. Color photographs of the habitus of both, and key characters for the former are included. New distributional records within Mexico for *N. subsulcatus* and *Strongylaspis championi* Bates, 1884 are given.

Keywords. Central America; description; longhorned woodboring beetles; Mexico; systematics.

Resumo. A fêmea de *Nothopleurus subsulcatus* (Dalman, 1823) (Coleoptera: Cerambycidae: Prioninae: Macrotomini) é descrita pela primeira vez e a de *Strongylaspis bullata* Bates, 1872 é redescrita. São adicionadas figuras coloridas para as duas espécies e chave parcial para a *N. subsulcatus*. São fornecidos novos registros no México para *N. subsulcatus* e *Strongylaspis championi* Bates, 1884.

Palavras chave. América Central; cerambicídeos; descrição; México; sistemática.

Introduction

Recent comprehensive studies of *Nothopleurus* Lacordaire, 1869 (Santos-Silva et al. 2010) did not include the female of *N. subsulcatus* (Dalman, 1823) nor was the female of *Strongylaspis bullata* Bates, 1872 included in a recent synopsis of the *Strongylaspis* Thomson, 1861 (Monné and Santos-Silva 2003). The purpose of this paper is to describe the female of *N. subsulcatus*, heretofore unknown, and to re-describe that of *S. bullata*. In addition, we report new Mexican distributional records for the former species as well as for *Strongylaspis championi* Bates, 1884.

Materials Examined

All specimens examined are deposited in the collection of James E. Wappes, American Coleoptera Museum (**ACMT**), San Antonio, TX, USA.

DISCUSSION

Nothopleurus subsulcatus (Dalman, 1823)

(Fig. 1 -5)

Prionus subsulcatus Dalman, 1823: 63.
Nothopleurus subsulcatus (Dalman, 1823) (assigned by Waterhouse 1874: xxviii - as *N. gnatho* White, 1853); Monné 2006: 56; Santos-Silva et al. 2010: 11.

Mallodon gnatho White, 1853: 45 (syn. by Lameere 1902: 73).
Nothopleurus ebeninus Lacordaire, 1868: 125 (syn. by Lameere 1902:100).

Description. Female (Fig. 1). Length of head (Fig. 2), excluding mandibles, about 0.9 times that of prothorax; slightly elongated behind eyes. Central area between antennal tubercles and middle of upper ocular lobes with gibbosity on each side of longitudinal dorsal furrow. Dorsal face coarsely punctate, punctures coarser and more confluent between eyes, especially close to ocular carina (Fig. 2, arrow b); central area close to prothorax with irregular impunctate region on each side of longitudinal furrow (Fig. 2, arrow a). Area behind eyes coarsely punctate on basal half of upper ocular lobes, punctate-vermiculate on the remaining. Antennal tubercles rounded; area close to the scape microsculptured, texture differing markedly from that of adjacent areas. Labrum oblique, partially visible dorsally, length about 0.3 times width; distal margin projected centrally; basal portion almost flat, remaining concave; medially pilosity long, abundant. Eye large; distance between upper ocular lobes equal to 1.6 times length of scape; distance between lower ocular lobes equal to 1.8 times length of scape. Apex of gena wide, bidentate.

Hypostomal area (Fig. 3, arrows) tumid, very coarsely punctate-rugose from gula to anterior third (arrow b); anterior third (arrow a), vermiculate, distinctly depressed; anterior edge narrow, elevated; pilosity long, sparse (almost absent centrally), but abundant and longer on narrow band bordering hypostomal carina. Hypostomal carinae elevated (Fig. 3, arrow c). Maxillary palpomere I shorter than II; II longer than III; III about as long as IV. Apex of labial palpus attaining basal third of maxillary palpomere IV. Galea not reaching apex of maxillary palpomere II. Mandible (Fig. 2) 0.6 times length that of head; dorsal carina (Fig. 4) elevated, not distinctly separated from the outer face, forming tooth close to the base, but not strongly elevated as in male; inner margin with two large teeth together protracted; short sparse pilosity restricted to the base of outer face with inner surface pilosity longer and more abundant. Antenna reaching basal third of elytron. Scape, extending at most to middle of eye; dorsal surface finely, sparsely punctate; outer margin coarser and more densely punctate than dorsal and ventral surfaces.

Anterior angles of prothorax (Fig. 1-3) simple, not spiniform, projecting forward; lateral angles spiniform; posterior angles obtuse, distinct; lateral margins strongly crenulate. Pronotum shining, almost impunctate on disc, coarsely rugose-punctate laterally. Elytron finely punctate; elytral carinae distinct; sutural apex with small spine. Metepisternum (Fig. 5) distinctly narrowed and concave at inner margin (width at narrower region about 0.1 times length). Metepisternum and lateral side of metasternum with abundant, short pilosity. Urosternites I - IV shining, sparsely punctate centrally, chagrinate laterally; pilosity along lateral margin, short and sparse, longer and more abundant on urosternite IV. Urosternite V microsculptured, sparsely punctate; pilosity short and sparse throughout, longer and more abundant laterally and apically.

Dimensions (mm). Total length (including mandibles), 33.8; prothoracic length, 6.3; anterior prothoracic width (between apices of anterior angles), 8.2; posterior prothoracic width (between apices of posterior angles), 9.0; humeral width, 11.0; elytral length, 26.3.

Geographical distribution. Honduras, Mexico, Guatemala and Bahamas. Lacordaire (1868), the first to record the species from Mexico (Yucatán) (as *Nothopleurus ebeninus*) did not indicate a precise locality: "Son unique espèce (1) est um grand et bel insecte du Yucatan dont je dois la connaissance à mon savant ami M. C. A. Dohrn".

Material examined. MEXICO, *Yucatán*: Piste, one female, VIII.1968, [no collector name indicated] (ACMT).

Comments. Santos-Silva et al. (2010) did not examine females of *N. subsulcatus*. However, the female was included in their key to the species of *Nothopleurus* (see couplets 5 and 6 below), based on the characters of males, and its similarity with *N. madericus* (Skiles, 1978):

"5(1). Dorsal carina of mandible strongly elevated at basal half (fig.42) **6**
— Dorsal carina of mandible not strongly elevated at basal half (figs. 37, 39) **7**

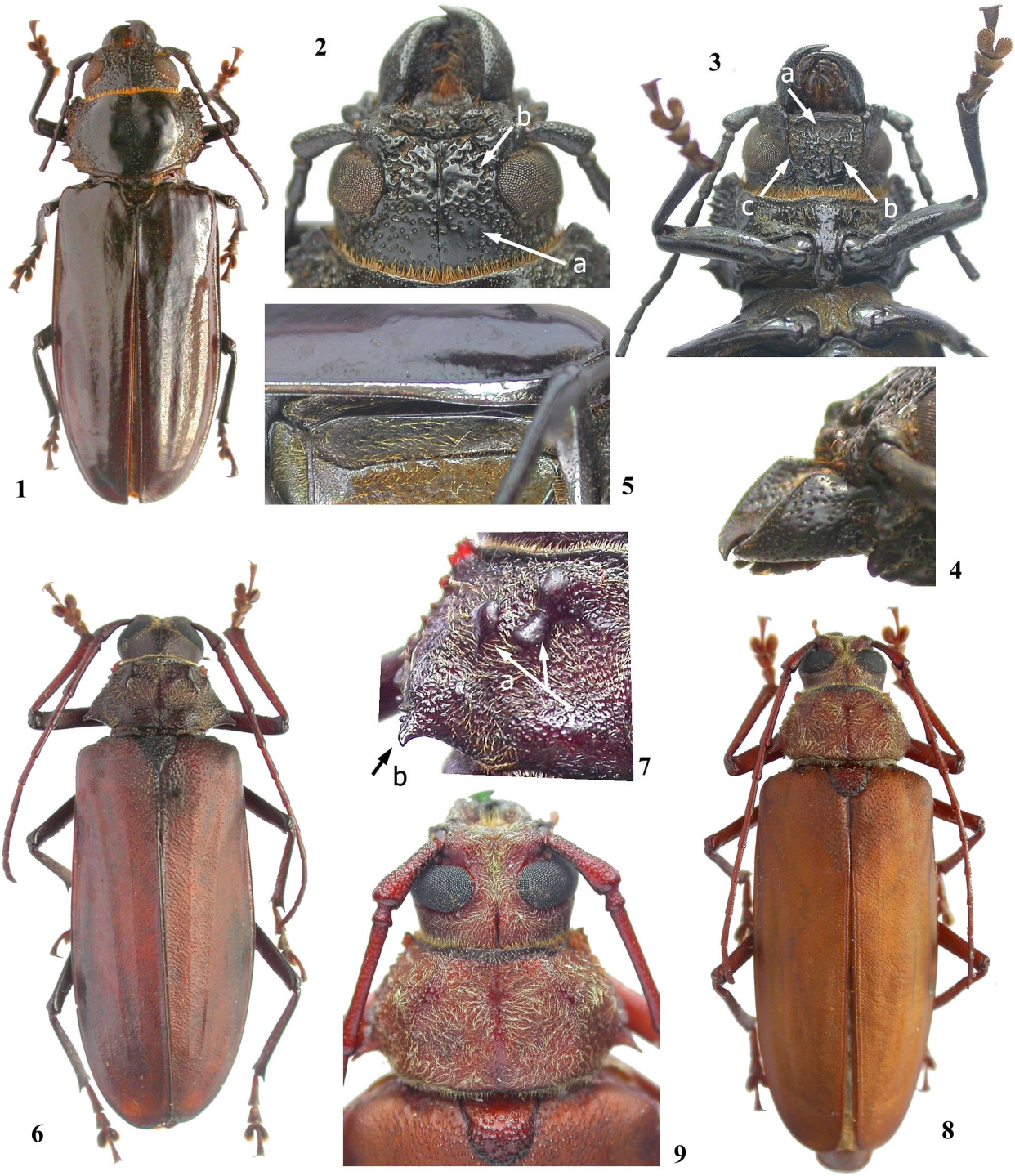

Figure 1-9. **1-5)** *Nothopleurus subsulcatus* (Dalman, 1823), female. **1)** Habitus, dorsal view. **2)** Head, dorsal view. **3)** Head and prothorax, ventral view. **4)** Mandibles, lateral view. **5)** Metepisternum. **6-7)** *Strongylaspis bullata* Bates, 1872, female. **6)** Habitus, dorsal view. **7)** Left side of pronotum, dorsal view. **8-9)** *Strongylaspis championi* Bates, 1884, female. **8)** Habitus, dorsal view. **9)** Head and prothorax, dorsal view.

6(5). Hypostomal area with a plate parallel to the hypostomal carina ..... ***N. madericus***
— Hypostomal area without plate parallel to the hypostomal carina ..... ***N. subsulcatus***"

Although the dorsal carina of *N. subsulcatus* is not as elevated in females of *N. madericus*, it is distinctly more elevated than in females of *N. castaneus* (Casey, 1912) and *N. lobigenis* Bates, 1884. Thus, the key to the genus in Santos-Silva et al. (2010) remains correct.

***Strongylaspis bullata* Bates, 1872**
(Fig. 6-7)

Strongylaspis bullatus Bates, 1872: 167; 1879: 6, pl. 2, fig. 10; Berry 1957: 17 (distr.); Gibson and Carrillo 1959: 116 (distribution); Chemsak et al. 1992: 16 (cat.); Maes et al. 1994: 6 (distr.); Monné and Giesbert 1994: 7 (checklist); Monné 1995: 2 (cat.); Monné and Santos-Silva, 2003: 40, figs. 10, 28; Monné and Hovore, 2005: 14 (checklist); 2006: 14 (checklist); Hovore 2006: 371 (distribution); Monné 2006: 60 (cat.); Monné and Bezark 2010: 16 (checklist).
Strongylaspis (*Strongylaspis*) *bullata*; Lameere 1903: 33; Lameere 1913: 10 (cat.); Lameere 1919: 25.
Strongylaspis bullata; Gemminger and Harold 1872: 2766 (cat.); Blackwelder 1946: 552 (checklist); Santos-Silva and Esteban-Durán 2009: 354 (key).

Redescription. Female (Fig. 6). Integument dark-brown (almost blackish is some areas); elytra lighter. Dorsal surface of head between the clypeus and middle of eyes, asperate-punctate, gradually becoming asperate towards occiput and area behind eyes; pilosity decumbent, short, longer and more abundant on area between eyes. Clypeus scabrous; pilosity decumbent, long and abundant. Labrum large (length greater than one-half that of clypeus; width greater than half that of clypeus), coplanar with distal margin of clypeus; pilosity long, erect and abundant. Eye large; distance between upper lobes from 0.5 to 0.6 times length of scape; distance between inferior lobes approximately equal to length of scape. Length of mandible about 0.7 times that of scape; dorsal and latero-outer surface rugose-punctate, with long and abundant hairs; inner margin and apex smooth and glabrous; apex bifid; inner margin with a large rounded tooth. Antenna distinctly surpassing middle of elytra; scape coarse, confluently punctate on dorsal surface, scabrous on latero-outer surface; length of antennomere III from 1.2 to 1.4 times that of scape.

Pronotum (Fig. 7, arrow a) with two very prominent and shining callosities on each side, interconnected by another unelevated callosity, all callosities glabrous, smooth; remaining surface granulate laterally, except for two protuberances on each side of base which are confluently punctate; lateral angles with large spine (Fig. 7, arrow b) directed upward and back, placed near the posterior angle; posterior angles rounded; pilosity short, decumbent, moderately abundant. Scutellum tumid; granules small and abundant. Elytral surface glabrous, except for short, sparse hairs on basal extreme; microsculptured, with abundant small granules throughout, larger on basal third, gradually smaller towards apex; elytral carinae distinct; sutural apex with small spine. Proepisternum narrow. Metasternum and metepisternum with pilosity long and abundant. Urosternites with abundant, short, decumbent, pilosity laterally.

Dimensions (mm). Total length (including mandibles), 27.9-36.0; prothoracic length, 3.8-5.0; anterior prothoracic width (between apices of anterior angles), 4.9-5.9; posterior prothoracic width (between the apices of the lateral spines), 7.5-10.2; humeral width, 7.5-10.0; elytral length, 20.1-26.3.

Geographical distribution. *Strongylaspis bullata* is known from Mexico (Guerrero), El Salvador (Berry 1957), Guatemala (Hovore 2006) and Nicaragua. Monné and Giesbert (1994), Monné and Hovore (2005, 2006), and Monné and Bezark (2010) also list this species from Costa Rica.

Material examined. COSTA RICA, *Guanacaste*: Cañas, 2 males, 1 female, V.5-7.1989, D. Thomas & F. Parker col. (ACMT); Hacienda La Pacifica (near Cañas), 2 males, 1 female, V.22-26.1984, E. Riley, D. Rider & D. LeDoux col. (ACMT).

Comments. Lameere (1903) wrote that he only examined Bates' co-type at the British Museum, and that the female was glabrous "very probably by accident". He also stated the sculpture of the pronotum in both sexes show shinning spaces that are completely smooth and strongly raised.

Regarding the "types", as recorded by Monné and Santos-Silva (2003), the female cannot be a type as the species was described by Bates based on a single male. Although Lameere (1903) thought that the specimen examined by him had accidentally lost the pubescence (he did not specify where), the elytra in females are glabrous, except for the extreme base, which has very short, sparse hairs.

***Strongylaspis championi* Bates, 1884**
(Fig. 8-9)

Strongylaspis championi Bates, 1884: 233; Monné 2006: 60 (cat.).

Bates (1884) described *S. championi* (Fig. 8-9) based on males and females from Guatemala. Chemsak and Linsley (1975) recorded this species from Mexico (no State mentioned), and Monné and Santos-Silva (2003) added Costa Rica to the known distribution. We record below specific States in Mexico for the first time.

Material examined. MEXICO, *Yucatán*: Chichén Itzá, male, VI.10-11.1983, J. E. Wappes col. (ACMT). *Quintana Roo*: 20 km N. Felipe Carrillo Puerto, 2 females, VI.12-14.1983, J. E. Wappes col. (ACMT). *Jalisco*: Mismaloya River 5 km E Hwy 200, female, VI.8.1991, [no collector indicated] (ACMT). GUATEMALA, *Peten*: Parque Nacional Tikal, female, VI.8-9.1991, J. E. Wappes col. (ACMT).

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