



New Curculioninae (Coleoptera: Curculionidae) in Dominican amber

George Poinar, Jr. and Andrei A. Legalov

ABSTRACT

A new genus and four new species of Curculioninae are described from Dominican amber. *Neosibinia* gen. nov. differs from the extant genera *Tychius* and *Sibinia* by the tibiae lacking a mucro and uncus, the elongate pronotum distinctly narrower than the elytral humeri and the sharp bend in the rostrum. *Derelomus thalioculus* sp. nov. differs from other *Derelomus* species by the body covering of fine, dense setae. *Anthonomus cruraluma* sp. nov. is similar to the extant *A. filicornis* but differs by the tibiae with mucro, elongate body, shorter rostrum, and the smaller body size. *Anthonomus browni* sp. nov. is distinguished from the extant *A. sulcipygus* by its narrow elongate body, femora with minute distal tooth and shorter and thicker rostrum. These new taxa further demonstrate the diversity of weevil fauna in Dominican amber.

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Keywords: Derelimini; Anthonomini; Tychiini; new genus, new species; Dominican amber

INTRODUCTION

Weevils of the subfamily Curculioninae are diverse with respect to morphology and physiology. Recent studies by the authors have shown that the Dominican amber weevil fauna is represented by 73 species from 32 genera in the families Belidae, Brentidae and Curculionidae (Poinar, 2009; Poinar and Brown, 2011; Poinar et al., 2013; Poinar and

Legalov, 2014a, 2014b, 2014c, 2014d, 2015a, 2015b 2015c, 2015d).

Dating of Dominican amber is controversial with the latest purported age of 20-15 Ma based on foraminifera (Iturralde-Vinent and MacPhee, 1996) and the earliest of 45-30 Ma based on coccoliths (Cêpek in Schlee, 1990). In addition, Dominican amber is secondarily deposited in sedimentary rocks, which makes a definite age determination

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difficult (Poinar and Mastalerz, 2000). A range of ages for Dominican amber is possible as the amber is associated with turbiditic sandstones of the Upper Eocene to Lower Miocene Mamey Group (Draper et al., 1994). Dominican amber was produced by the leguminous tree, *Hymenaea protera* Poinar (Poinar, 1991) and a re-construction of the Dominican amber forest based on amber fossils indicated that the environment was similar to that of a present day tropical moist forest (Poinar and Poinar, 1999).

The present study describes representatives of Curculioninae from Dominican amber, including a new species of *Derelomus* Schoenherr, 1825 in the tribe Derelomini, two new species of *Anthonomus* Germar, 1817 in the tribe Anthonomini and a new genus in the tribe Tychiini.

MATERIALS AND METHODS

The specimens were obtained from amber mines in the Cordillera Septentrional of the Dominican Republic. Most types are deposited in the Poinar amber collection maintained at Oregon State University (PACO, Corvallis, OR, USA). One type is deposited in the American Museum of Natural History (AMNH, New York, NY, USA) collection.

Descriptions and photographs were produced by the authors using a Nikon SMZ-10 stereoscopic microscope and Zeiss, Stemi-2000-C. Helicon Focus Pro X64 was used to stack photos for better clarity and depth of field. All measurements were made using an ocular micrometer.

SYSTEMATIC PALAEONTOLOGY

Family CURCULIONIDAE Schoenherr, 1825
 Subfamily CURCULIONINAE Schoenherr, 1825
 Tribe DERELOMINI Lacordaire, 1866
 Genus *Derelomus* Schoenherr, 1825
Derelomus thalioculus sp. nov.

Figure 1, Figure 2

zoobank.org/136AD4A5-4DCD-4080-BAE8-8D86E498E333

Holotype. Deposited in the PACO (accession # C-82).

Description. Length body, 2.4 mm; length rostrum, 0.5 mm. Body reddish-brown, appearing glabrous but actually with a covering of fine, dense setae. Rostrum elongate, equal in length to pronotum, 4.6 times longer than wide in the middle, weakly curved, without carinae, finely punctate; antennal scrobes lateral and directed toward lower edge of the eyes; forehead wide, flattened, punctate; eyes large, rounded, distinctly convex, diameter slighter greater than rostrum at base; vertex weakly convex

and finely punctate; temples elongate, equal in length to eye; antennae inserted in middle of rostrum, elongate, almost reaching apex of pronotum; scape elongate, 8.0 times longer than wide; funicle with first to seventh antennomeres conical; first antennomere 2.1 times longer than wide; second antennomere 1.3 times longer than wide, 0.3 times as long and 0.4 times as narrow as first antennomere; third to fifth antennomeres subequal in length; third antennomere equal in length and width, 1.3 times as wide as second antennomere; fourth antennomere 0.8 times longer than wide, 1.2 times as wide as third antennomere; fifth antennomere equal to fourth antennomere; sixth antennomere 0.9 times longer than wide, 1.4 times as long and 1.3 times as wide as fifth antennomere; seventh antennomere 0.7 times longer than width, 1.3 times as wide as sixth antennomere; club compact, 1.4 times longer than wide, 0.4 times as long as funicle.

Pronotum almost conical; 1.6 times longer than wide at apex, of equal length and width in middle, 0.9 times longer than wide at base, with lateral carinae; disk flattened, densely and finely punctate; scutellum trapezoidal.

Elytra elongate and distinctly flattened, 1.7 times longer than wide at base, 1.6 times longer than wide in middle, 2.4 times longer than wide at apical fourth, 2.4 times as long as pronotum; greatest width behind middle, humeri weakly convex; striae regular and thin; strial punctures small, oval, dense; elytral intervals flattened, wide, 4.0-5.0 times as long as striae; apices of elytra not rounded; pygidium concealed.

Thorax punctate; precoxal portion of prosternum elongate, 2.3 times as long as procoxal cavities, 14.0 times as long as postcoxal portion; procoxal cavities contiguous; mesocoxal cavities widely separated, metepisternum narrow, 3.7 times longer than wide in middle.

Abdomen weakly convex ventrally; first and second ventrites elongate, equal in length; third and fourth ventrites short, equal in length; third ventrite 0.5 times as long as second ventrite; fifth ventrite elongate, 1.3 times as long as fourth ventrite.

Legs long; pro- and mesocoxae round; metacoxae transverse; femora weakly clavate, without teeth; trochanters obconical; metafemora 3.2 times longer than wide; tibiae with very small, blunt mucro; protibia almost straight; meso- and metatibiae slightly curved; metatibiae 3.8 times longer than wide in middle; tarsi long; first to third tarsomeres conical; fifth elongate; tarsomeres with pulvilli on underside; tarsal claws free, large, clearly diverg-



FIGURE 1. Lateral view of *Derelomus thalioculus* sp. nov. in Dominican amber. Bar equals 0.550 mm.

ing, with basal teeth; metatarsus: first tarsomere 1.7 times longer than wide at apex; second tarsomere 1.5 times longer than wide at apex; third tarsomere bilobed, 0.8 times longer than wide at apex; fifth tarsomere 5.0 times longer than wide at apex, 2.0 times as long as third tarsomere.

Type Locality. Amber mine in the Cordillera Septentrional of the northern portion of the Dominican Republic.

Etymology. The specific epithet is from the Latin “thalus” = dome and the Latin “oculus” = eye in regards the convex eyes.

Remarks. The pronotum with lateral carinae, concealed pygidium, antennal scrobes directed to the eye, short precoxal portion of the prosternum and convex eyes are features of the genus *Derelomus* of the tribe Derelomini. The covering of fine, dense setae separates this species from other members of the genus whose bodies are all glabrous.

Tribe ANTHONOMINI Thomson, 1859

Genus *Anthonomus* Germar, 1817

Subgenus *Anthomorphus* Weise, 1883

Anthonomus (Anthomorphus) cruraluma sp. nov.

Figure 3, Figure 4, Figure 5

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Holotype. Female; deposited in the PACO (accession # C-125).

Paratype. Male; deposited in the AMNH (accession # AMNH DR-8-414).

Since many diagnostic features are obscured in the male specimen, we have designated the female as holotype.

Description. Length body, 2.0-2.2 mm; length rostrum, 0.8-0.9 mm. Body reddish brown, with dense covering of light, recumbent, setiform scales.

Rostrum elongate, 1.3 (male) - 1.8 (female) times as long as pronotum, 7.5 (male) - 9.6 (female) times longer than wide at apex, 6.4 (male) - 8.4 (female) times longer than wide in middle, 6.0 (male) - 7.4 (female) times longer than wide at base, distinctly curved, without carinae, finely and slightly punctate; antennal scrobes lateral and directed toward middle of eye; forehead narrow, flattened, punctate; eyes large, rounded, distinctly convex, diameter much greater than rostrum at base; vertex weakly flattened, punctate; temples



FIGURE 2. Dorsal view of *Derelomus thalioculus* sp. nov. in Dominican amber. Bar equals 0.440 mm.

quite short, 0.4 times as long as eye, punctate; antennae inserted in apical third of rostrum, elongate, almost reaching base of pronotum; scape elongate, 15.2 times longer than wide, 1.2 times as long as funicle length; funicle with first to seventh antennomeres conical-elongate; first antennomere

2.7 times longer than wide, 0.2 times as long as and 1.2 times as wide as scape; second to sixth antennomeres almost of equal width; second antennomere 3.0 times longer than wide, 0.8 times as long as first antennomere; third antennomere 2.0 times longer than wide, 0.7 times as long as



FIGURE 3. Lateral view of Holotype *Anthonomus cruraluma* sp. nov. in Dominican amber. Bar equals 0.730 mm.

second antennomere; fourth antennomere equal to third antennomere; fifth antennomere 1.5 times longer than wide, 0.8 times as long as fourth antennomere; sixth antennomere equal to fifth antennomere; seventh antennomere 1.6 times longer than wide, 1.3 times as long as and 1.3 times as wide as sixth antennomere; club compact, 2.4 times longer than wide, 0.4 times as long as funicle; first club almost of equal length and width, equal to length and 1.6 times as wide as seventh antennomere; second club equal to first club article; third club article distinctly acuminate at apex.

Pronotum bell shaped; 1.8 times longer than wide at apex, 0.94 times longer than wide in middle, 0.91 times longer than wide at base; disk weakly convex, weakly narrowed at apex and base, densely punctate; scutellum trapezoidal, convex.

Elytra elongate and distinctly convex, 1.6 times longer than wide at base, 1.5 times longer than

wide in middle, 2.2 times longer than wide at apical fourth, 2.1-2.4 times as long as pronotum, without transverse basal patch of scales; greatest width behind the middle, humeri distinctly convex; striae regularly and distinctly punctate; strial punctures oval, quite dense; elytral intervals convex, 1.2-2.0 times as long as striae; apex of elytra separately acuminate.

Thorax punctate; procoxal cavities more or less equidistant from anterior and posterior margin of prosternum; procoxal portion 0.4 times as long as procoxal cavity length; procoxal cavities contiguous; mesocoxal cavities widely separated, metepisternum narrow, 5.0 times longer than wide in middle.

Abdomen convex ventrally; ventrites almost homogeneous; first and second ventrites equal in length; third and fourth ventrites slightly shorter than previous; fifth ventrite elongate, 1.4 times as long as



FIGURE 4. Dorsal view of Holotype *Anthonomus cruraluma* sp. nov. in Dominican amber. Bar equals 0.780 mm.

fourth ventrite; fifth ventrite subquadrately emarginate of male; pygidium sulcate; pygidial channel broad and deep.

Legs long; pro- and mesocoxae conical; metacoxae transverse; femora weakly clavate; trochanters obconical; profemora bidentate, first tooth large and second tooth small; meso- and metafemora toothed; profemora 3.9-5.4 times longer than wide; mesofemora 6.1 times longer than wide; metafemora 4.6-4.8 times longer than wide; tibiae with weak prominence on ventral margin; protibia almost straight, with large mucro; meso- and metatibiae slightly curved, with mucro; protibiae 7.0-7.8 times longer than wide in middle; metatibiae 5.5 times longer than wide in middle, without ventral fringe of setiform scales; tarsi long; first to third tarsomeres conical; fifth elongate; tarsomeres

with pulvilli on underside; tarsal claws free, large, with basal teeth.

Type Locality. Amber mine in the Cordillera Septentrional of the northern portion of the Dominican Republic.

Etymology. The specific epithet is from the Latin "luma" = thorne and the Latin "cruris" = leg in regards to the large mucro on the fore tibia.

Comparison. The new species is similar to *Anthonomus filicornis* Hustache, 1929 from Guadeloupe and South America but differs by the tibiae with mucro, body elongate, rostrum shorter, and the smaller body size.

Remarks. Placement of *Anthonomus cruraluma* sp. nov. (AMNH DR-8-414 and C-125) in the tribe Anthonomini was based on the antennal scrobes directed toward the eyes, the short prosternum,

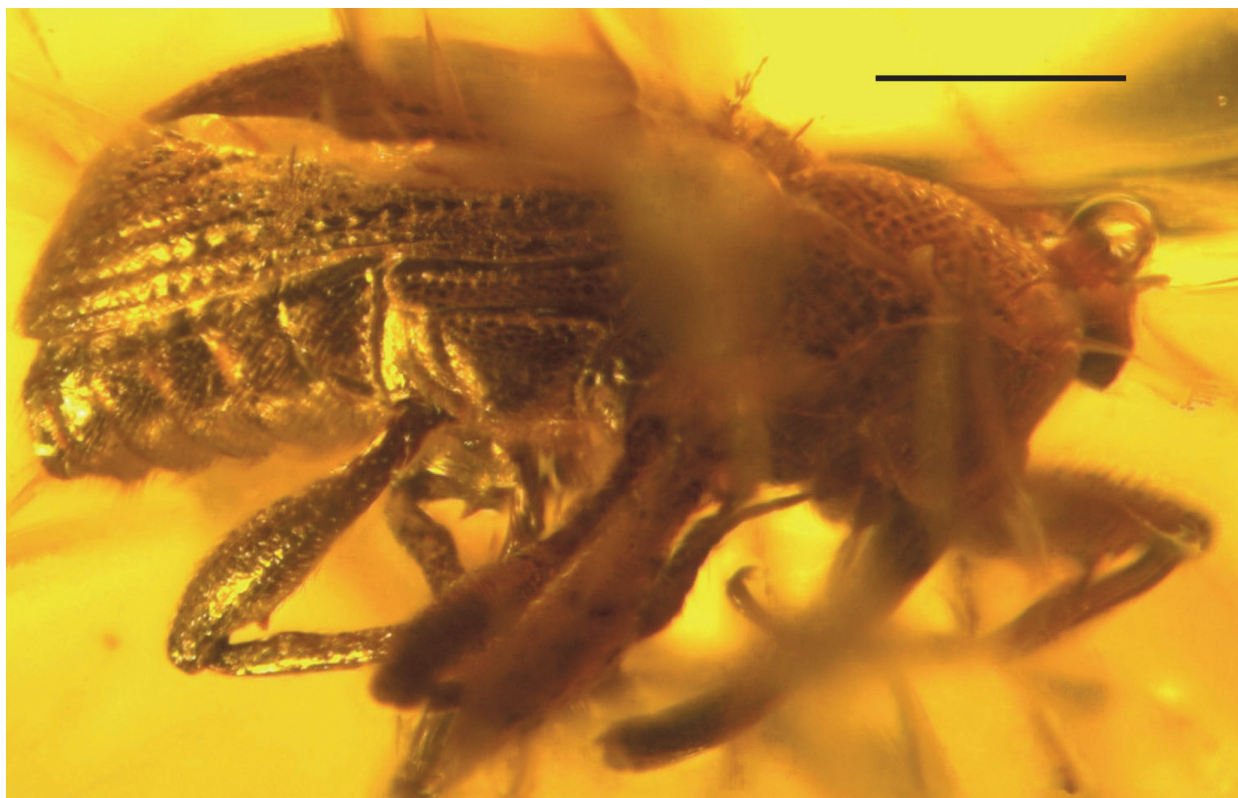


FIGURE 5. Lateral view of Paratype *Anthonomus cruraluma* sp. nov. in Dominican amber. Bar equals 0.500 mm.

convex eyes, and the nature of the scutellum. Placement of this species in the genus *Anthonomus* is based on the tarsal claws with basal teeth, contiguous procoxae, widely separated meso-coxae, slender rostrum, longer than pronotum along dorsal midline, 7-articled antennal funicle, bidentate femora lateral antennal scrobes directed toward the middle of the eye, large eyes with the diameter much greater than the rostrum at base, elytra without a transverse basal patch of scales and straight protibia. The new species belongs to the subgenus *Anthomorphus* (Clark and Burke, 1987) based on the fifth ventrite subquadrately emarginate and pygidium sulcate.

Anthonomus (Anthomorphus) browni sp. nov.
Figure 6, Figure 7

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Holotype. Deposited in the PACO (accession # C-20).

Description. Length body, 3.0 mm; length rostrum, 1.3 mm.

Body elongate, reddish-brown, with dense, light setiform scales. Scape, flagellum, base of femora, tibiae, and basal portions of tarsi yellow.

Rostrum elongate, 1.6 times as long as pronotum, 7.5 times longer than wide at apex, 9.0 times lon-

ger than wide in middle and at base, weakly curved, without carinae, finely punctate; antennal scrobes lateral and directed toward and reaching near middle of eye; forehead narrow, flattened, punctate; eyes large, distinctly convex, rounded, diameter slightly greater than rostrum at base; vertex weakly convex, punctate; temples quite long, equal in length to eye, punctate; antennae inserted near middle of rostrum, elongate, almost reaching base of pronotum; scape elongate, 8.0 times longer than wide, 0.8 times as long as funicle length; first to seventh antennomeres conical-elongate; first antennomere 3.0 times longer than wide, 0.5 times as long as and 1.3 times as wide as scape; second and third antennomeres almost equal in width; second antennomere 2.0 times longer than wide, 0.3 times as long and 0.5 times as wide as first antennomere; third to sixth antennomeres almost equal in width; third antennomere 0.8 times as wide as second antennomere; fourth antennomere 2.0 times longer than wide, 0.8 times as long as width of third antennomere; fifth antennomere 1.8 times longer than wide, 0.9 times as long as fourth antennomere; sixth antennomere equal to fifth antennomere; seventh antennomere 1.3 times longer than wide, 1.1 times as long and 1.5 times



FIGURE 6. Lateral view of *Anthonomus browni* sp. nov. in Dominican amber. Bar equals 0.630 mm.

as wide as sixth antennomere; club compact, elongate, 5.0 times longer than wide, 0.6 times as long as funicle; first club 1.8 times longer than wide, 1.8 times as long and 1.3 times as wide as seventh antennomere; second club 1.4 times longer than wide, equal in length and 1.3 times as wide as first club article; third club article 3.1 times longer than wide at base, 1.6 times as long as and 0.7 times as wide as second club article, acuminate at apex.

Pronotum bell-shaped, 2.2 times longer than wide at apex, 0.8 times longer than wide in middle and at base; disk densely punctate, weakly convex, narrowed at apex; scutellum trapezoidal, convex.

Elytra elongate and convex, 1.9 times longer than wide at base, 1.8 times longer than wide in middle, 2.0 times longer than wide at apical fourth, 3.5 times as long as pronotum; greatest width behind middle; humeri weakly convex; elytral striae regular and deep; strial punctures oval, dense; elytral intervals convex, wide, 2.5-3.0 times as long as striae; apex of elytra separately acuminate.

Thorax punctate; precoxal portion 0.5 times as long as procoxal cavity length; procoxal cavities more or less equidistant from anterior and posterior margin of prosternum; procoxal cavities slightly separated; mesocoxal cavities separated; metepisternum narrow.

Abdomen convex ventrally; ventrites almost homogeneous; first and second ventrites equal in length; third ventrite 0.7 times as long as second ventrite; third and fourth ventrites equal in length; fifth ventrite 1.2 times as long as fourth ventrite; fifth ventrite subquadrately emarginate; pygidium sulcate.

Legs long; pro- and mesocoxae conical; metacoxae transverse, 0.3 times as long as metasternum; trochanters obconical; femora distinctly clavate, with a minute distal tooth; profemora 3.7 times longer than wide; mesofemora 4.7 times longer than wide; metafemora 3.9 times longer than wide; protibia weakly curved, with large mucro; meso- and metatibiae slightly curved, with mucro; protibiae 5.9 times longer than wide in mid-



FIGURE 7. Dorsal view of *Anthonomus browni* sp. nov. in Dominican amber. Bar equals 0.550 mm.

dle; metatibiae 5.6 times longer than wide in middle; tarsi long; first to third tarsomeres conical; fifth elongate; tarsomeres with pulvilli on underside; tarsal claws free, very small, without basal teeth.

Type Locality. Amber mine in the Cordillera Septentrional of the northern portion of the Dominican Republic.

Etymology. The species epithet is named in honor of A.E. Brown.

Comparison. The new species differs from Palearctic *A. phyllocola* (Herbst, 1795) by its tarsal claws lacking basal teeth by the narrow elongate body, curved rostrum and clavate profemora. It differs from other *Anthomorpha* species by the tarsal claws lacking basal teeth. It is distinguished from *A. sulcipygus* Champion, 1903 of Central and South America by the narrow elongate body, fem-

ora with minute distal tooth and shorter and thicker rostrum.

Remarks. Placement of this species in the genus *Anthonomus* is based on the contiguous procoxae, widely separated mesocoxae, slender rostrum longer than pronotum along dorsal midline, 7-articled antennal funicle, bidentate femora, lateral scrobes directed toward and reaching near middle of eye, large eyes with the diameter much greater than the rostrum at base, elytra without a transverse basal patch of scales and straight protibia. This new species belongs to the subgenus *Anthomorphus* (Clark and Burke, 1987) based on the sulcate pygidium and subquadrately emarginated fifth ventrite.

Tribe TYCHIINI Thomson, 1859

Neosibinia gen. nov.

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Type Species. *Neosibinia lepidosoma* sp. nov.

Diagnosis. Body with wide, densely placed scales, and some semi-erect narrow scales; head not constricted behind eyes; rostrum quite long, distinctly curved, especially in the middle; antennal scrobes lateral and directed toward base of rostrum; forehead narrow, flattened; eyes large, rounded, weakly convex; vertex weakly flattened, punctate; temples long, slightly larger than the eyes, punctate; antennae inserted beyond middle of rostrum, elongate, almost reaching base of pronotum; funicle with first to sixth antennomeres conical; club compact, elongate; pronotum elongate and bell-shaped; disk weakly convex, slightly narrowed at apex and base, densely punctate; scutellum wide trapezoidal; elytra elongate and weakly convex; greatest width behind the middle; humeri weakly convex; striae regular and distinct; ninth elytral striae short and connate with tenth striae; pygidium covered by elytra; procoxal cavities more or less equidistant from anterior and posterior margin of prosternum; procoxal cavities separated; suture between second and third ventrites markedly extended posteriorly towards lateral margins between third and fourth ventrites; legs long; femora weakly clavate, without teeth; apex of tibia without mucro and uncus; tarsal claws connate at base, large, with basal teeth.

Etymology. The generic epithet is from the Greek “νέος” = new and the genus “*Sibinia*”.

Comparison. The new genus differs from the genera *Tychius* Germar, 1817 and *Sibinia* Germar, 1817 by the tibiae lacking a mucro and uncus, the elongate pronotum distinctly narrower than the elytral humeri and the sharp bend in the rostrum.

Remarks. The abdomen with the suture between the second and third ventrites markedly extended

posteriorly towards the lateral margins of the third and fourth ventrites places the genus in the tribe Tychiini.

Neosibinia lepidosoma sp. nov.

Figure 8, Figure 9

zoobank.org/86D3530E-DE80-443A-A1C7-8C15DC9B1341

Holotype. Deposited in the PACO (accession # C-134).

Description. Length body, 2.2 mm; length rostrum, 0.4 mm.

Body brown, covered with reclining to erect scales. Rostrum 0.8 times as long as pronotum, 5.8 times longer than wide at apex, 3.9 times longer than wide in middle, 3.4 times longer than wide at base, without carinae, punctate; forehead 0.5 times as wide as eye width, punctate; diameter of eye slightly greater than rostrum at base; scape elongate, 6.0 times longer than wide, 1.1 times as long as funicle length; first antennomere 1.3 times longer than wide, 0.3 times as long as and 1.5 times as wide as scape; club 4.3 times longer than wide, equal in length to funicle.

Pronotum 1.6 times longer than wide at apex, 1.1 times longer than wide in middle, 1.2 times longer than wide at base. Elytra 1.6 times longer than wide at base, 1.4 times longer than wide in middle, 1.7 times longer than wide at apical fourth, 2.2 times as long as pronotum; striae punctures oval, large and dense; elytral intervals weakly convex, quite wide, 2.0-3.5 times as long as striae.

Thorax punctate; procoxal cavities more or less equidistant from anterior and posterior margin of prosternum; procoxal portion 0.4 times as long as procoxal cavity length; mesocoxal cavities widely separated, metepisternum narrow, 5.7 times longer than wide in middle.

Abdomen convex ventrally; first ventrites longer than second ventrite; third and fourth ventrites almost equal in length; fifth ventrite elongate. Pro- and mesocoxae conical; metacoxae transverse; trochanters obconical; profemora 4.5 times longer than wide; metafemora 2.8 times longer than wide; protibia slightly curved; metatibiae 4.6 times longer than wide in middle; tarsi long; first to third tarsomeres conical; fifth elongate; tarsomeres with pulvilli on underside.

Type Locality. Amber mine in the Cordillera Septentrional of the northern portion of the Dominican Republic.

Etymology. The specific epithet is from the Latin “lepis” = scale and the Latin “soma” = body in reference to the scales covering the body.



FIGURE 8. Lateral view of *Neosibinia lepidosoma* sp. nov. in Dominican amber. Bar equals 0.570 mm.

DISCUSSION

The oldest Curculioninae (*Curculio elegans* Piton, 1940 and *C. havighorstensis* Zherikhin, 1995 of the tribe Curculionini) date from the Palaeogene of France and Germany (Piton, 1940; Zherikhin, 1995), with the Burmese *Anchineus dolichobothris* Poinar and Brown, 2009 transferred to the subfamily Carinae of the family Ithyceridae (Legalov and Poinar, 2015).

The tribe Derelomini sensu Kojima and Morimoto (2005) consists of two genera, or more than 40 genera according to Franz (2006). Most of the species are distributed in the Old World (Alonso-Zarazaga and Lyal, 1999). Three species are recorded from the West Indies and Brazil (O'Brien and Wibmer, 1982; Wibmer and O'Brien, 1986). The Derelomini is represented by only a single species in the West Indies, *Derelomus albidus* Suffrian, 1872 from Cuba and Puerto Rico. Thus *Derelomus thalioculus* sp. nov. is the first fossil representative of this genus in Hispaniola. Very little is

known about the habits of *Derelomus* spp. other than the adults are collected from various flowers. Perhaps the best studied members of the tribe are species of *Elaeidobius* Kuschel, 1952 that are important pollinators of the African oil palm, *Elaeis guineensis* Jacquin. The larvae develop on the flowers and the adult beetles transfer pollen from plant to plant during their feeding, mating and oviposition activities (Syed et al., 1982). The first reliable description of a Derelomini (*Protoceletes wolfschweningerae* Rheinheimer, 2007) is from Eocene Baltic amber (Rheinheimer, 2007).

The tribe Anthonomini, which is abundant in the New World, is represented in Hispaniola by 10 species groups and 19 species in two subgenera (Clark and Burke, 1985, 1986, 1996; Clark, 1987a, 1987b, 1990, 1991a, 1991b, 1991c, 1991d; Soto-Hernández et al., 2013). *Anthonomus cruraluma* sp. nov. and *A. browni* sp. nov. are the first members of this genus described from Dominican amber. The subgenus *Anthomorpha* is not recorded from Hispaniola. Several fossil represen-

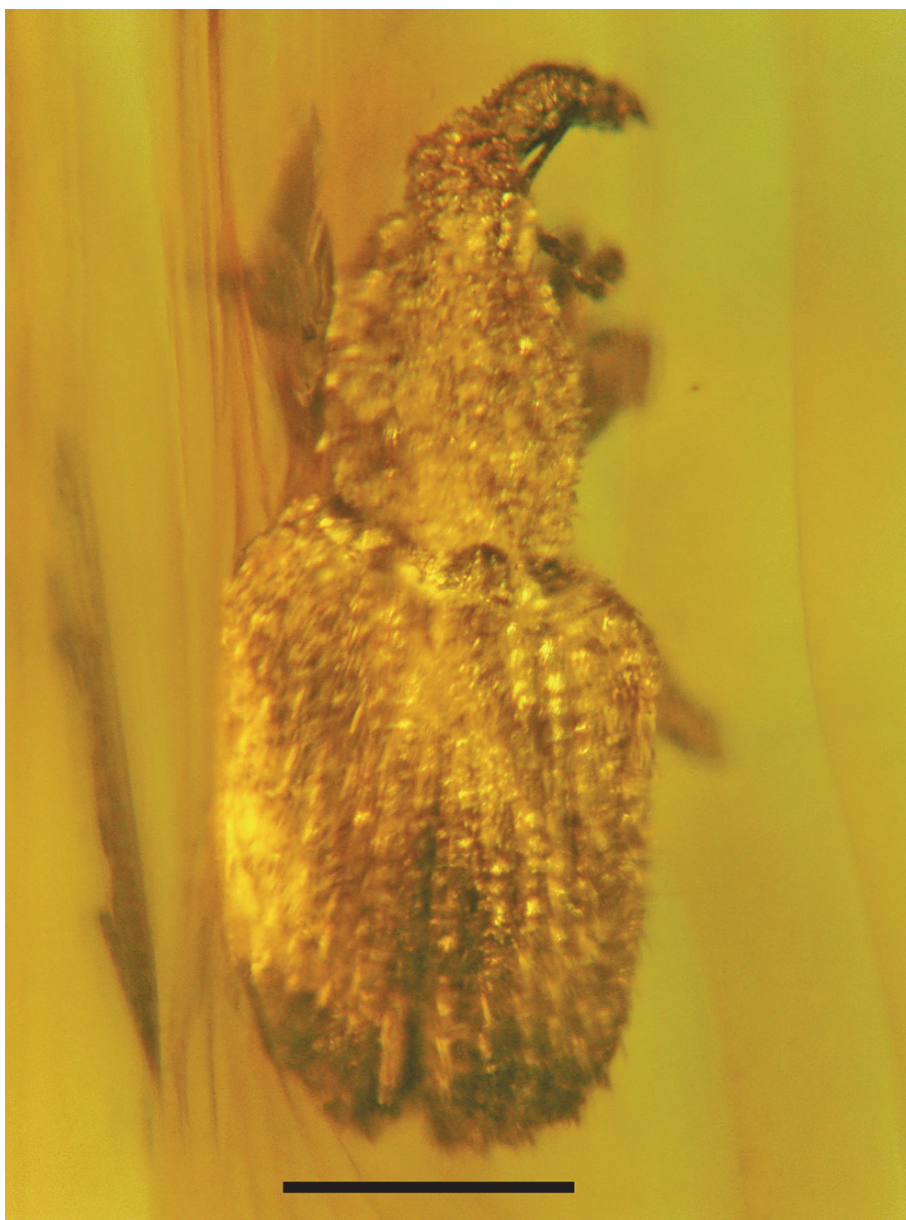


FIGURE 9. Dorsal view of *Neosibinia lepidosoma* sp. nov. in Dominican amber. Bar equals 0.540 mm.

tatives of the genus *Anthonomus* Germar, 1817 have been reported (Scudder, 1893, 1900; Wickham, 1912; Cockerell, 1925); however, the transfer of "*A.*" *sunchalensis* Cockerell, 1925 from the Palaeocene of Argentina and "*A.*" *sopor* Scudder, 1890 and "*A.*" *revictus* Scudder, 1893 from the Middle Eocene Green River deposits to the genus *Anthonomus* is not confirmed. In fact, only *A. debilitatus* Scudder, 1893 from the terminal Eocene of may belong to this genus. A single representative (*Anthonomus* sp.) of this tribe was previously recorded from Dominican amber (Poinar and Poinar, 1999).

Fossil Tychiini are also known from the Eocene of North America and the Oligocene France, and the Miocene of Germany (Heyden and Heyden, 1866; Oustalet, 1874; Foerster, 1891; Scudder, 1893; Wickham, 1917). *Neosibinia lepidosoma* gen. et sp. nov. is closely related to the genera *Tychius* Germar, 1817 and *Sibinia* Germar, 1817 which comprise the tribe Tychiini. This tribe (sensu Alonso-Zarazaga and Lyal, 1999) is represented by more than 130 species in North America, Central America and the West Indies (O'Brien and Wibmer, 1982). However there are only eight species of extant Tychiini known from the West Indies and only three genera (*Lignyodes* Dejean, 1835,

Plocetes LeConte, 1876 and *Sibinia*) occur in Haiti (O'Brien and Wibmer, 1982; Perez-Gelabert, 2008). The genus *Neosibinia* has some unique features. Typically, representatives of the tribe have a mucro and uncus, although these structures are missing in some tibiae of a few members of the genus *Sibinia* (Clark, 1978). The trend toward a reduction of these structures can be observed in various tribes of the subfamily (Zherikhin and Egorov, 1991). *Neosibinia* is also characterized by separated procoxae, a feature also present in *Sibinia sulcifera* Clark, 1978. However the rounded elytral apices and covered pygidium in *Neosibinia* distinguishes it from *Sibinia*. We propose that *Neosibinia* is a specialized descendant of *Sibinia* close to the *hispida* group.

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