

HILIPINUS NEARCTICUS,
NEW SPECIES IN A GENUS NEW TO THE
UNITED STATES (CURCULIONIDAE: COLEOPTERA)

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ABSTRACT

A new species, *nearcticus* O'Brien, is described in the weevil genus *Hilipinus* Champion (Hylobiinae). This is the first record of the genus from the United States. An outline illustration of the rostrum and specialized scrobe, the ♂ phallus and endophallus, and ♀ 8th sternite and spermatheca are included, along with diagnoses of related genera.

RESUMEN

Se describe una especie nueva de gorgojo, *nearcticus* O'Brien, en el género *Hilipinus* Champion (Hylobiinae). Esta es la primera vez que se reporta el género para EE.UU. Se incluyen ilustraciones del contorno del rostro y escrobo especializado, del falo y endofalo del ♂, y de 8° esternito y espermatheca de la ♀, así como diagnosis de géneros vecinos.

During the past several years I have accumulated a small series of a distinctive species of Hylobiinae from the southern United States. Following a careful check of the literature and various collections, including all available types, I have determined it to be a new species in the genus *Hilipinus*, a genus not previously known from the Nearctic Region.

Pascoe (1881) established the genus *Arniticus* with 3 Brazilian species, designating *gladiator* Pascoe as the type-species. Subsequently many other species were described from South and Central America.

Champion (1902) established the genus *Hilipinus* separating it from *Arniticus* with only a few characters, e.g., the continuation of the scrobes on the underside of the rostrum in the ♂ is sometimes long enough to receive the entire antenna; the ventral projections of the scrobes in some ♂ form sharp teeth; and the tibiae are usually more or less sulcate in most species. All of these characters are variable and represent extremes of characters found in *Arniticus* spp. Dalla Torre et al. (1932) treated *Hilipinus* as a synonym of *Arniticus*. However, Kuschel (1955) recognized *Hilipinus* as a valid genus based on a single character, presence or absence of a stridulatory structure on the costal margin ["*interstria marginal*"] of the elytra. He included this character in his key to the genera of the Neotropical Hylobiinae, Hylobiini. This stridulatory file extends externally along the costal margin of the elytra as a single row of raised transverse lines or tubercles of varying lengths in different species of *Arniticus*. The stridulatory scraper is located on the inner surface of the hind femur. Both file and scraper are lacking in *Hilipinus*.

In addition to the above structures, another stridulatory file is present on the internal area of the apex of the elytra in both of these genera. I

recognize this as a subfamilial character since the following tribes and genera of Hylobiinae have a similar stridulatory apparatus: Anthonini, *Anthonus* Schoenherr; Hylobiini, *Arniticus* Pascoe, *Eudociminus* Leng, *Heilipodus* Kuschel, *Heilipus* Germar, *Heilus* Kuschel, *Hilipinus* Champion, *Hylobius* Germar, *Marshallius* Kuschel, *Pachylobius* LeConte, and *Rhineilipus* Kuschel; Plinthini, *Steremnius* Schoenherr; and Sternechini, *Sternechus* Schoenherr. This type of stridulatory apparatus is present also in members of the Ceutorhynchinae, Cryptorhynchinae, Eirrhininae, and Ithaurinae.

Kissinger (1964) keyed the genera of Hylobiinae in America north of Mexico. I have modified his key as follows to include *Hilipinus*.

5. Elytral stria punctures with fine, hairlike scales; elytral intervals clothed with very fine to coarse hairlike scales; ascending comb of hind tibia formed by a single row of bristles *Hylobius* Germar
- Elytral stria punctures with broad scales; elytral intervals clothed with broad scales; ascending comb of hind tibia formed by a single row of bristles or with a 2nd short row, as well 5a.
- 5a. Femora unarmed; uncus of foretibia arising from middle of apical carina in both sexes; frons slightly wider than rostrum at middle in dorsal view; ascending comb of hind tibia formed by a single row of bristles *Eudociminus* Leng
- Femora armed; uncus of foretibia arising from inner apical margin in male; frons narrower than rostrum at middle in dorsal view, ascending comb of hind tibia formed by 1 long row of bristles and a 2nd short row, as well *Hilipinus* Champion

Hilipinus Champion

Elongate oval to broadly oblong oval; medium sized to large, 7.5 to 22 mm.

Rostrum with epistome truncate across middle; scrobe directed towards lower 1/3 of eye, ventral margin of scrobe usually ending sharply and abruptly, at times evanescent posteriorly, scrobe extending forward ventrally at base of rostrum to receive at least segment 1 of funicle (Fig. 1), in ♂ extending onto ventral surface of rostrum for reception of much or all of funicle. *Head* with frons narrower than rostrum at middle, in dorsal view. *Antennae* inserted near apex in both sexes. *Elytra* with broad scales in stria punctures; apices often emarginate and projecting acutely, may be conjointly rounded; internal apical area of elytra with large interstria stridulatory structure. *Legs* with femora armed with strong tooth; tibiae strongly mucronate, often sulcate on outer edge; hind tibia with ascending comb composed of more than single row of bristles, usually with uneven sparse second row. *Venter* with hind margin of abdominal sternum 1 sinuate, not projecting over sternum 2.

TYPE-SPECIES: *Heilipus ascius* Germar. Subsequent designation, Kuschel, 1955: 293.

REMARKS AND COMPARATIVE NOTES: Among the Hylobiinae, *Hilipinus* is most closely related to the genus *Heilipus* in our region, but the latter has a single row of bristles forming the ascending comb of the hind tibia. Also the rostrum is much more strongly curved in *Heilipus*, and lacks the anterior ventral continuation of the scrobes. The single Nearctic species, *Heilipus squamosus* LeConte, has large stripes and spots of dense white scales not found in *Hilipinus nearcticus*. In addition to the characters listed in the key,

the specialized anterior ventral continuation of the scrobe and the attenuately narrowed, emarginate, apically acute elytra will readily separate *Hilipinus* from the remaining U.S. Hylobiini, *Hylobius*, *Pachylobius* and *Eudociminus*, which have normal lateral scrobes and conjointly rounded elytral apices.

Hilipinus nearcticus O'Brien, NEW SPECIES.

HOLOTYPE ♂. Oblong ovate, moderately robust; black with reddish brown declivital fascia; clothed unevenly with sparse and dense pale brown, and white, broad scales. *Rostrum* weakly curved, stout; dorsally weakly impressed at apical 1/4; with distinct dorsal median carina in middle 1/2, and with indefinite lateral carina above suprascrobal groove; basal 3/4 with dense coarse rugose punctures, apical 1/4 with sparser finer non-rugose punctures; basal 1/4 with moderately dense, recumbent brown oval scales, apically sparsely setose to glabrous; at base with 2 sharp prominences beneath formed by inner margin of ventrally developed scrobe, scrobe continuing on ventral surface to near apex for reception of entire funicle and basal segments of club. *Head* with large dense coarse punctures, with sparse to dense setae and oval brown scales, scales denser around eyes; frons broadly impressed, clothed with rather dense oval recumbent brown scales, densely coarsely punctate, with distinct deep median fovea. *Antennae* with segment 2 of funicle slightly longer than segment 1; club elongate oval, ca. as long as funicular segments 1 and 2 together. *Prothorax* transverse, ca. 1/3 wider than long, sides rounded from base to middle, there narrowed sharply to strongly constricted apex, apical margin multisinuate; disc coarsely confluent rugosely punctate, with short subcarinate impunctate

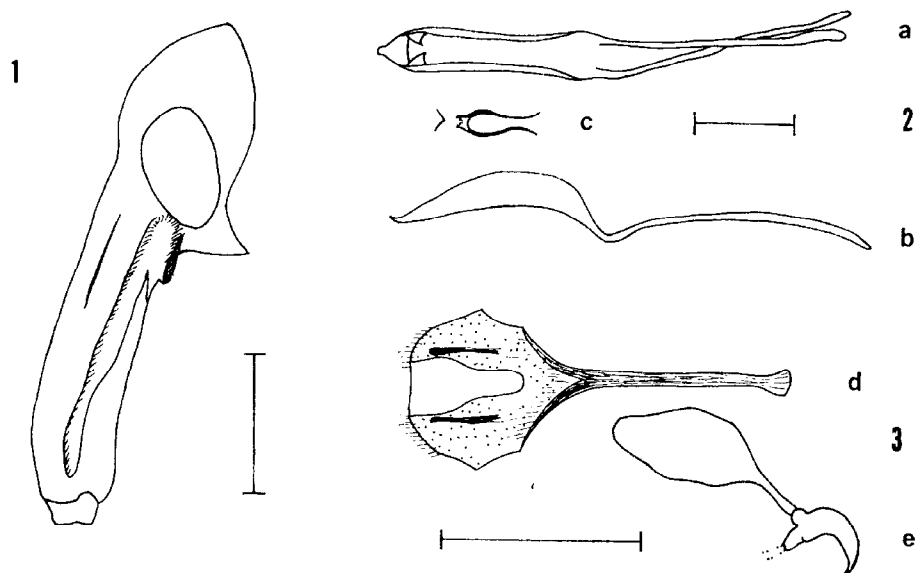


Fig. 1-3. *Hilipinus nearcticus* O'Brien, new species: 1. Head and rostrum, lateral view. 2. Phallus, (a) dorsal and (b) lateral view; (c) endophallus, dorsal view. 3. ♀: (d) 8th sternite, dorsal view; (e) spermatheca and spermathecal gland, lateral view. Scales are 1 mm.

median line; margins of punctures raised, producing granulate appearance; sparsely clothed with moderately fine to coarse recumbent brown and/or white setalike scales, coarse scales forming 2 oblique lateral lines from base to near apex and 1 short median basal line and 2 small mesal spots between lateral lines and impunctate median line; hind margin shallowly bisinuate. *Scutellum* large, broadly transverse, apex rounded; densely clothed with large recumbent imbricate white scales. *Elytra* ca. 1/4 wider than prothorax; elongate, ca. twice as long as wide; weakly convex; anterior margin sharply reflexed; humeri angulately rounded, not produced anteriorly; striae scarcely impressed, with large deep dense punctures, becoming smaller and sparser towards declivity and apex; sides subparallel, gradually narrowed from in front of declivity to subacute, slightly divergent apices; intervals weakly convex, subequal to or slightly wider than striae punctures, granulately wrinkled; moderately sparsely clothed with recumbent, oval, brown, and white scales; with indefinite, scale covered, declivital fascia; with weakly developed posterior declivital calli. *Legs* with femora sparsely clothed with coarse setalike scales, armed with large acute tooth; tibiae with coarse shallow confluent rugose punctures, with anterior surface shallowly broadly sulcate, with anterior inner margin carinate; unci nearly horizontal, arising from inner apical margin. *Venter* with prosternum, mesosternum, lateral areas of metasternum and margins of abdominal sternum 1 clothed with moderately sparse large pale whitish scales; remainder with sparse fine setae, apical 1/2 of sternum 5 with denser longer erect fine setae; sterna 1 and 2 with broad shallow median impression; sternum 5 with weak median impression, with apex weakly emarginate. *Length, pronotum and elytron*: 8.8 mm.

ALLOTYPE ♀: Same as ♂ except as follows: *Rostrum* slightly more slender and curved; with punctures sparser and finer on apical 2/3; lacking sharp prominences at base beneath, scrobe ventrally developed only for reception of funicular segment 1, scrobe not continued further. *Head* lacking distinct frontal fovea. *Elytra* with sides gradually expanding to declivity, there suddenly narrowed to apex. *Legs* with tibial unci arising obliquely from middle of apical carinae. *Venter* with abdominal sterna 1 and 2 with narrow median flat area (subimpressed); sternum 5 medially evenly convex, with apex evenly rounded. *Length, pronotum and elytron*: 9.1 mm.

TYPE-LOCALITY: Mississippi, Hancock County, Gainesville.

ETYMOLOGICAL NOTE: The specific epithet is based on the distribution of the species. This is the first species of the genus known from the Nearctic Region. All previously described species are from the Neotropical Region.

REMARKS AND COMPARATIVE NOTES: This new species is not likely to be confused with any of the described species in the genus. It resembles most closely the Central American species *punctatoscabrosus* (Boheman). However, *punctatoscabrosus* has larger, coarser, and deeper thoracic punctures. These punctures have flat margins which lack a granulate appearance. Also the latter has a nearly straight broad rostrum, and a much more convex thorax and elytra, with a very robust appearance.

A second allied species, *alternatus* Champion from Guatemala, is more robust with a short broad rostrum and an evenly densely distributed scale covering over the elytra. Each elytron has a usually distinct black median spot and the apices of the elytra are not acuminate.

The remaining related Central American species *biguttatus* Champion, *ingens* Champion, *laticollis* Champion and *latipennis* Champion are all much larger (14.5-21.5 mm.) and much more robust.

No South American species should be confused with *nearcticus*.

RANGE: Known from Florida, Louisiana and Mississippi.

MATERIAL EXAMINED: The 10 specimens on hand range in size from 7.7 to 10.1 mm.

HOLOTYPE ♂: MISS[ISSIPPI]. Hancock County, Gainesville, 17-V-1966, H. R. Hepburn. ALLOTYPE ♀: L[OUISIAN]A. [Natchitoches Parish] Natchitoches, 16-VI-71, G. Heinrich. PARATYPES.—FLORIDA: Alachua Co., Gainesville, 30-IV-68, blacklight trap (1) F. W. Mead, 25-V-70, UV trap (1) F. W. Mead, Paynes Prairie, 11-15-IV-1977, Insect Flight Trap (1) G. B. Fairchild & H. V. Weems, Jr.; Hernando Co., Brooksville (7 mi. N.W.), 6-IV-66, buttress debris, Oak (1) W. Suter; Liberty Co., Torreya State Park, 6-V-79 (1) M. C. Thomas. LOUISIANA: Avoyelles Parish, Eola, 5-11-VII-72 (2) G. Heinrich; Feliciana Parish, Idlewild Exp. Sta., 27-V-81 (1) E. G. Riley.

The holotype, allotype and 4 paratypes are deposited in the author's collection. Four paratypes are also deposited in the following collections: British Museum (Natural History), London, England; Florida State Collection of Arthropods, Gainesville, FL; and National Museum of Natural History, Washington, DC.

ACKNOWLEDGEMENTS

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