



**The genus *Sicoderus* Vanin 1986 (Coleoptera: Curculionidae: Curculioninae: Erodiscini) in the West Indies**

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## Abstract

The genus *Sicoderus* Vanin is revised for the West Indies. A total of 32 species are known with 18 new species described herein as follows: *Sicoderus aeneus* (Haiti), *S. alternatus* (Dominican Republic), *S. bautistai* (Dominican Republic, Haiti), *S. beatyi* (Cuba), *S. bipunctiventris* (Cuba), *S. caladeler* (Cuba), *S. detonnancouri* (Dominican Republic), *S. franzi* (Puerto Rico), *S. guanyangi* (Dominican Republic), *S. humeralis* (Dominican Republic), *S. lucidus* (Dominica), *S. medranae* (Dominican Republic, Haiti), *S. perezi* (Dominican Republic), *S. pseudostriatolateralis* (Dominican Republic, Haiti), *S. striatolateralis* (Dominican Republic), *S. thomasi* (Haiti), *S. turnbowi* (Dominican Republic), and *S. woodruffi* (Grenada). All species are described or redescribed, natural history information is summarized and a listing of locality data from all specimens examined is included. A key is provided to all West Indian species of the genus. All species distributions are mapped and all (excepting *S. propinquus* Vanin) are represented by habitus images and images of male genitalia.

**Key words:** biodiversity, new species, islands, species discovery, weevils, endemism

## Introduction

*Sicoderus* are small, generally 2.5–7.0 mm long, black shining weevils that are most frequently caught beating various vines and other hanging dead vegetation. A few, particularly in Cuba, have been collected in berlese or winkler sampling of forest leaf litter. The rostrum is very long and thin and the adults generally feign death when dislodged from the vegetation. They have been collected in lowland dry thorn forest into wet, mountain cloud forest. No specific plant associations are known although collecting on dead vines seems to repeatedly yield numbers of specimens. Further details of biology and immature stages are unknown.

The genus was recently described and comprehensively revised by Vanin (1986). He documented the presence of 11 species throughout the Caribbean, seven of which he described as new. These species were placed in two species groups, the *S. delauneyi* group with four species in the Lesser Antilles and the *S. tinamus* group with six species from the Greater Antilles, the Bahamas and southern Florida. One species, *S. morio* (Suffrian) from Cuba was left as *incertae sedis* as no specimens could be found for examination. Anderson (1999) subsequently added three new species in the *S. tinamus* group from the Virgin Islands.

Here, I document and describe 18 additional *Sicoderus* species from the Dominican Republic (10), Cuba (3), Haiti (2), Puerto Rico (1), Dominica (1) and Grenada (1) and provide a key to all West Indian species of the genus and redescribe the previously known 14 species (including *S. morio*), most redescriptions referencing new specimens not included in Vanin (1986). Images are provided for dorsal and lateral habitus and male aedeagus for all West Indian species available (excepting *S. propinquus* Vanin). As Vanin (1986) had access to a limited number of specimens, complete locality data are also presented for all specimens examined herein of each species. Maps are provided of the distribution of all known West Indian specimens.

The genus *Sicoderus* is not restricted to the West Indies and has numerous species in mainland Central and South America. The genus belongs to the tribe Erodiscini of the Curculioninae (Vanin 1986). Eight genera are recognized in the tribe, most known from South America (Vanin 1986).

## Materials and methods

Descriptive format follows Anderson (1999) and Vanin (1986). Measurements are made with an ocular micrometer. Total body length is measured in dorsal view from the apex of the elytra to the apex of the pronotum. Rostral length is measured from the point of insertion of the mandibles to the point of junction of the base of rostrum and the head in a straight line between the two. This method will underestimate the length of a more strongly curved rostrum but if applied consistently will provide the basis for an easily measured ratio to determine rostrum length relative to the length of the elytra. In describing the punctation of the pronotum it is important to distinguish between the dorsal surface or disc and the lateral surfaces or flanks. Punctures can vary from very small, widely spaced and shallow to large, deep and dense. If the punctures are deeper and denser, the areas around the punctures may also be depressed forming vague to very distinct, deep striolae, best seen by looking at the surface at an oblique angle. Distinguishing pronotal punctation patterns is critical in recognition of the various species. Some specimens of a number of *Sicoderus* species will have varying numbers of fine, elongate, whitish

setae on the dorsal surface of the pronotum and especially the elytra. In many cases these are lacking and may simply be broken or worn; as such they are not used extensively in this study although they have been so used in the past.

Sexing specimens of *Sicoderus* is easy as the males of all but one species (*S. beattyi*) have some kind of obvious (but small) tubercle or setose patch(es) towards the posterior margin of ventrite 1 and have a variously impressed ventrite 5. The size and location of these patches is often important in species recognition. Tubercles or patches are lacking in females and ventrite 5 is not impressed. Males also have a slightly more distally placed antennal insertion on the rostrum than females but using this to determine sex is difficult unless both sexes are present and side by side comparisons can be made. Adults of many species of *Sicoderus* in the West Indies are flightless, lack wings and have rounded humeri. On the other hand, a few species are fully winged and have strong, distinctly angulate humeri. There are also a few in which the humeri are present but less strongly angulate and the elytra tends to be somewhat inflated posteriorly and wider towards the middle rather than having the lateral margins subparallel. Degree of development of the humeri separates the fauna into these three rather distinct morphological (but likely not phylogenetic) groups.

As in most weevils, definitive species determinations are best made with male genitalia. *Sicoderus* is no different and males of all species can be distinguished by the form of the aedeagus and the sclerites of the internal sac. There do not appear to be good characters in female genitalia for the separation of the species and details of female genitalia are not reported. Species are arranged alphabetically and numbered sequentially in the text and in images. Maps were prepared with SimpleMappr© ([www.simplemappr.net](http://www.simplemappr.net)).

It is important to emphasize that the excellent and well-illustrated revision by Vanin (1986), while underestimating the West Indian diversity of the genus, did so due to the lack of specimens that are now currently available, not because of any other shortcomings. Specimens of *Sicoderus* are not commonly collected and as such an attempt was made to procure as many specimens (408 in total) as possible for study from a wide variety of sources. To date, among the larger West Indian islands, no specimens have been collected on Martinique, St. Lucia, Monserrat and Jamaica. Specimens have been examined from, and are deposited in the following institutions:

ASUHC	Arizona State University Collection, Tempe, Arizona; N.M. Franz, S. Lee.
BMNH	The Natural History Museum, London, UK; M.V. Barclay, B. Garner
CMNC	Canadian Museum of Nature, Ottawa, Ontario, Canada; F. Génier
CMNH	Carnegie Museum of Natural History, Pittsburgh, Pennsylvania; R. Davidson
CWOB	Charles W. O'Brien collection, Green Valley, Arizona; C.W. O'Brien
FSCA	Florida State Collection of Arthropods, Gainesville, Florida; P. Skelley, K. Schnepf
INHS	Illinois Natural History Survey, Champaign, Illinois; T. McElrath
MCZC	Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; P.D. Perkins
MHND	Museo Nacional de Historia Natural, Santo Domingo, Dominican Republic; C. Suriel
NHRS	Naturhistoriska Riksmuseet, Stockholm, Sweden; J. Bergsten
NMPC	National Museum (Natural History), Prague, Czech Republic; M. Fikáček
USNM	United States National Museum, Washington, District of Columbia; L. Chamorro, F. Shockley
UPRM	University of Puerto Rico, Mayagüez, Puerto Rico; A. van Dam
WIBF	West Indian Beetle Fauna Project, Montana State University, Bozeman, Montana; M.A. Ivie

## Taxonomy

### *Sicoderus* Vanin, 1986

*Sicoderus* Vanin, 1986: 520. Type species *Lixus antilope* Fabricius 1801 by original designation. Gender masculine.

*Sicoderus* was described by Vanin (1986) to accommodate one of three groups of species formerly placed in *Erodiscus sensu* Schoenherr 1826, the others being *Pimelerodius* and *Prosicoderus*.

Recognition of the genera was based mainly on the structure of the mouthparts, abdominal ventrites and male genitalia (Vanin 1986). A total of 57 species placed in 16 species groups were recognized by Vanin (1986). West Indian species belong to the *S. tinamus* and *S. delauneyi* groups. Vanin (1986) presents a key to the species groups and to species within each group.

## Checklist of species of *Sicoderus* in the West Indies

<i>Sicoderus aeneus</i> Anderson, <b>n. sp.</b>	Haiti
<i>Sicoderus alternatus</i> Anderson, <b>n. sp.</b>	Dominican Republic
<i>Sicoderus bautistai</i> Anderson, <b>n. sp.</b>	Dominican Republic, Haiti
<i>Sicoderus beattyi</i> Anderson, <b>n. sp.</b>	Cuba
<i>Sicoderus bipunctiventris</i> Anderson, <b>n. sp.</b>	Cuba
<i>Sicoderus caladeler</i> Anderson, <b>n. sp.</b>	Cuba
<i>Sicoderus championi</i> Vanin	Dominican Republic
<i>Sicoderus contiguous</i> Vanin	St. Vincent
<i>Sicoderus delauneyi</i> (Chevrolat)	Guadeloupe
<i>Sicoderus detonnancouri</i> Anderson, <b>n. sp.</b>	Dominican Republic
<i>Sicoderus franzi</i> Anderson, <b>n. sp.</b>	Puerto Rico
<i>Sicoderus guanyangi</i> Anderson, <b>n. sp.</b>	Dominican Republic
<i>Sicoderus hirsutiventris</i> Anderson	Virgin Islands
<i>Sicoderus humeralis</i> Anderson, <b>n. sp.</b>	Dominican Republic
<i>Sicoderus ivieorum</i> Anderson	Virgin Islands, British Virgin Islands, Puerto Rico
<i>Sicoderus lucidus</i> Anderson, <b>n. sp.</b>	Dominica
<i>Sicoderus medranae</i> Anderson, <b>n. sp.</b>	Dominican Republic, Haiti
<i>Sicoderus morio</i> (Suffrian)	Cuba
<i>Sicoderus perezi</i> Anderson, <b>n. sp.</b>	Dominican Republic
<i>Sicoderus propinquus</i> Vanin	Grenadines
<i>Sicoderus pseudostriatolateralis</i> Anderson, <b>n. sp.</b>	Dominican Republic, Haiti
<i>Sicoderus ramosi</i> (Sleeper)	Dominican Republic
<i>Sicoderus remotus</i> Vanin	St. Vincent
<i>Sicoderus schoenherri</i> Vanin	Dominican Republic
<i>Sicoderus sleeperi</i> Vanin	Cuba
<i>Sicoderus striatolateralis</i> Anderson, <b>n. sp.</b>	Dominican Republic
<i>Sicoderus thomasi</i> Anderson, <b>n. sp.</b>	Haiti
<i>Sicoderus tinamus</i> (LeConte)	USA (Florida), Bahamas
<i>Sicoderus truncatipennis</i> Vanin	Dominican Republic, Haiti
<i>Sicoderus turnbowi</i> Anderson, <b>n. sp.</b>	Dominican Republic
<i>Sicoderus vanini</i> Anderson	British Virgin Islands
<i>Sicoderus woodruffi</i> Anderson, <b>n. sp.</b>	Grenada

## Key to West Indian Species of *Sicoderus* Vanin

- 1 Elytra with alternate interstriae distinctly elevated; interstria 5 towards the base with prominent tubercle which grades posteriorly into the raised interstria (figs. 3, 4); Dominican Republic (Pedernales) . . . . . *S. alternatus* **n. sp.**
- 1' Elytra with all interstriae uniformly flat, not raised or convex . . . . . 2
- 2 Elytra with humeri present, weakly to strongly developed (e.g., fig. 17, 53, 67) . . . . . 3
- 2' Elytra with humeri absent, basal corners of elytra not at all angulate (e.g., figs. 1, 15, 51) . . . . . 10
- 3 Elytra with humeri weakly developed, greatest width of elytra at about midlength and distinctly wider than width at humeri (figs. 17, 53, 77) . . . . . 4
- 3' Elytra with humeri strongly developed, greatest width of elytra at or near humeri, width at midlength of elytral at most only slightly wider than width at humeri (figs. 39, 49, 65, 67) . . . . . 7
- 4 Species from USA (Florida) and Bahamas; aedeagus as in fig. 83. . . . . 5
- 4' Species from Dominican Republic; aedeagus as in figs. 23, 59 . . . . . 6
- 5 Pronotum with punctures fine, individually distinct dorsally on disc, larger and deeper laterally, forming weak lateral striolae (Florida, Bahamas [most]) . . . . . *S. tinamus* LeConte (part)
- 5' Punctures large and deep dorsally and laterally, forming distinct dorsal and lateral striolae (Bahamas; Crooked Island) . . . . . *S. tinamus* LeConte (part)
- 6 Rostrum length subequal to, to slightly shorter than elytral length in male (0.94–1.02), shorter than elytral length to very slightly longer in female (0.97–1.08); male with ventrite 5 of abdomen with impression small, shallow, and confined to the posterior half of the ventrite; aedeagus as in fig. 23; Dominican Republic (Hato Mayor, La Altigracia, Samaná, San Cristobal,

	San Pedro de Macoris) . . . . .	<i>S. championi</i> Vanin
6'	Rostrum length longer than elytral length in male (1.11–1.26) and female (1.20–1.34); male with ventrite 5 of abdomen with impression large, deep, extended throughout most of the length of the ventrite; aedeagus as in fig. 59; Dominican Republic (Barahona, Pedernales) . . . . .	<i>S. perezi</i> n. sp.
7	Pronotum with dorsal and lateral punctures deep and dense, most subcoalescent and forming lateral and dorsal striolae; aedeagus as in fig. 46; Dominican Republic (Santiago Rodriguez) . . . . .	<i>S. humeralis</i> n. sp.
7'	Pronotum with dorsal punctures not at all approximate or subcoalescent . . . . .	8
8	Body size large, 4.5–5.6 mm; all femora with a distinct ventral tooth; aedeagus as in fig. 57; Dominican Republic (Monsenor Nouel, La Vega, San Cristobal), Haiti . . . . .	<i>S. medranae</i> n. sp.
8'	Body size small, 2.4–3.9 mm; front femora with small tooth, middle and hind femora with tooth minute, if present . . . . .	9
9	Antenna with article 2 of antennal funicle 1.1–1.3x as long as article 3; elytra usually with a few setae present; aedeagus as in fig. 72.; Cuba (Granma, Guantanamo, Pinar del Rio) . . . . .	<i>S. sleeperi</i> Vanin
9'	Antenna with article 2 of antennal funicle 1.4–1.5x as long as article 3; elytra without setae present; aedeagus as in fig. 71.; Dominican Republic (Duarte, Elías Piña, Hato Mayor, La Vega, San Cristobal, Santo Domingo, San Pedro de Macoris) . . . . .	<i>S. schoenherri</i> Vanin
10	Elytral in lateral view with apex abruptly truncate (fig. 80); aedeagus as in fig. 84; Dominican Republic (Independencia), Haiti . . . . .	<i>S. truncatipennis</i> Vanin
10'	Elytral in lateral view with apex evenly tapered . . . . .	11
11	Abdomen with ventrite 2 with a pair of large, deep pits on the declivitous posterior face; aedeagus as in fig. 21; Cuba (Cienfuegos) . . . . .	<i>S. bipunctiventris</i> n. sp.
11'	Abdomen with ventrite 2 lacking large, deep pits . . . . .	12
12	Species from Lesser Antilles . . . . .	13
12'	Species from Greater Antilles . . . . .	18
13	Pronotum with punctures fine and isolated, even laterally, almost impunctate on disc . . . . .	14
13'	Pronotum with punctures fine to coarse, shallow and isolated on disc but deeper and subcoalescent laterally . . . . .	15
14	Tarsal claws with small basal tooth; abdominal ventrite 1 in male with tubercles placed more anteriorly, about equidistant from anterior and posterior margins; aedeagus as in fig. 33; Guadeloupe . . . . .	<i>S. delauneyi</i> (Chevrolat)
14'	Tarsal claws simple, without small basal tooth; abdominal ventrite 1 in male with tubercles placed close to posterior margin; aedeagus as in fig. 48; Dominica . . . . .	<i>S. lucidus</i> n. sp.
15	Abdominal ventrite 1 in male with tubercles placed more anteriorly, about equidistant from anterior and posterior margins; aedeagus as in fig. 92; Grenada . . . . .	<i>S. woodruffi</i> n. sp.
15'	Abdominal ventrite 1 in male with tubercles placed close to posterior margin . . . . .	16
16	Abdominal ventrite 1 in male with tubercles nearly contiguous; aedeagus as in fig. 24; St. Vincent . . . . .	<i>S. contiguous</i> Vanin
16'	Abdominal ventrite 1 in male with tubercles separated . . . . .	17
17	Abdominal ventrite 1 in male with tubercles separated by a distance nearly equal to the width of the abdominal process at base; aedeagus as in fig. 70; St. Vincent . . . . .	<i>S. remotus</i> Vanin
17'	Abdominal ventrite 1 in male with tubercles separated by a distance of from 1/4 – 1/3 width of the abdominal process at base; Grenadines, Mustique Island . . . . .	<i>S. propinquus</i> Vanin
18	Pronotum with punctures of disc separated dorsally, not at all approximate or subcoalescent . . . . .	19
18'	Pronotum with punctures of disc dorsally subcoalescent and forming striolae . . . . .	30
19	Pronotum with posterolateral flange (approximate to humeral region of elytra) with dense distinct microstriae; pronotum very finely, uniformly punctate throughout . . . . .	20
19'	Pronotum with posterolateral flange not or faintly microstriate; pronotum with punctation various . . . . .	21
20	Front femur with only very small, blunt tooth on inner margin; aedeagus as in fig. 81; Dominican Republic (Barahona) . . . . .	<i>S. striatolateralis</i> n. sp.
20'	Front femur simple, lacking tooth on inner margin; aedeagus as in fig. 60; Dominican Republic (Pedernales), Haiti . . . . .	<i>S. pseudostriatolateralis</i> n. sp.
21	Front femora with a distinct sharp tooth, middle and hind femora each with small blunt tooth; aedeagus as in fig. 47; US Virgin Islands, British Virgin Islands, Puerto Rico . . . . .	<i>S. ivieorum</i> Anderson
21'	Femora lacking tooth or at most only the front femora with small blunt tooth . . . . .	22
22	Elytra more slender, maximum length/maximum width 2.25 (n=1); hind femora with exterior face of swollen portion distinctly striate throughout; abdominal ventrite 1 of male lacking tubercle(s); aedeagus as in fig. 82; Haiti . . . . .	<i>S. thomasi</i> n. sp.
22'	Elytra less slender, maximum length/maximum width less than 2.10 (n=10, various species); hind femora with exterior face of swollen portion not striate; abdominal ventrite 1 of male with or without tubercle(s) . . . . .	23
23	Pronotum with punctures very small, fine, well-separated both dorsally on disc and laterally on flanks, no striolae; Cuba, Haiti, Puerto Rico, U.S. Virgin Islands . . . . .	24
23'	Pronotum with punctures small to moderately large, well-separated only dorsally on disc (moreso towards base in some specimens), otherwise moderately large, deep and somewhat elongate, some subcontiguous on flanks forming striolae; Cuba, Dominican Republic, Haiti . . . . .	27
24	Front femur lacking tooth on inner margin; male with abdominal ventrite 5 not impressed, sparsely setose . . . . .	25
24'	Front femur with small blunt tooth on inner margin; male with abdominal ventrite 5 impressed, medially setose laterally, around impression . . . . .	26
25	Basal margin of pronotum evenly rounded laterally, with a number of small scattered punctures; male with abdominal ventrite 1 with a pair of low, indistinct setose patches located medially, slightly anterior to posterior margin of ventrite 1; aedeagus as in	

- fig. 12; Cuba (Granma) . . . . . *S. beatyi* n. sp.
- 25' Basal margin of pronotum angulate laterally, dorsal and lateral faces interrupted by an acute angulation, dorsal face flat and with a row of 4 or 5 linearly arranged larger punctures across width; male with abdominal ventrite 1 with a low, conical median tubercle at posterior margin of ventrite 1; aedeagus as in fig. 35; Puerto Rico . . . . . *S. franzi* n. sp.
- 26 Male with abdominal ventrite 1 simple, lacking tubercles; male with abdominal ventrite 5 slightly impressed medially, sparsely setose laterally around impression; pronotum dorsally towards base with very fine but distinct punctures; aedeagus as in fig. 9; Haiti . . . . . *S. aeneus* n. sp.
- 26' Male with abdominal ventrite 1 with single conical tubercle; male with abdominal ventrite 5 deeply impressed medially, densely setose laterally around impression; pronotum dorsally towards base virtually impunctate; aedeagus as in fig. 45; US Virgin Islands . . . . . *S. hirsutiventris* Anderson
- 27 Front femur lacking tooth on inner margin . . . . . 28
- 27' Front femur with very small, blunt tooth on inner margin . . . . . 29
- 28 Rostrum of male and female very long, length 1.26–1.54x length elytra (n=6); pronotum with punctures of disc dorsally very small, smaller towards base; aedeagus as in fig. 36, with pair of elongate basal sclerites not strongly convergent and with long basal extension; Dominican Republic (Independencia, La Vega, Monsenor Nouel) . . . . . *S. guanyangi* n. sp.
- 28' Rostrum of male and female moderately long, 1.12–1.32x length elytra (n=6, 2 species); pronotum with punctures of disc dorsally small to moderately large, deep, well separated, not subcontiguous; Cuba . . . . . *S. caladeler* n. sp. (part)
- 29 Aedeagus as in fig. 69, internal sac with pair of elongate basal sclerites straight, convergent but separate anteriorly, each with short basal straight extension; Dominican Republic (San Cristobal) . . . . . *S. ramosi* (Sleeper)
- 29' Aedeagus as in fig. 91, internal sac with pair of elongate basal sclerites straight, convergent but separate, each lacking basal extension; Dominican Republic (Barahona, Pedernales) . . . . . *S. turnbowi* n. sp.
- 29'' Aedeagus as in fig. 11, internal sac with pair of elongate curved basal sclerites, convergent and conjoined anteriorly, each lacking basal extension; Dominican Republic (La Vega, Elías Piña), Haiti . . . . . *S. bautistai* n. sp.
- 30 Front femur only with very small, blunt tooth on inner margin; aedeagus as in fig. 34; Dominican Republic (Maria Trinidad Sanchez) . . . . . *S. detonnancouri* n. sp.
- 30' All femora simple, lacking tooth on inner margin . . . . . 31
- 31 Antennae with article 2 of funicle short, 1.22–1.33x as long as article 3; British Virgin Islands . . . . . *S. vanini* Anderson
- 31' Antennae with article 2 of funicle long, 1.50–2.00x as long as article 3; Cuba . . . . . 32
- 32 Elytral striae flat, punctures small, those of sutural interstria towards base separated more than their own diameter; aedeagus as in fig. 22; Cuba (Santiago de Cuba) . . . . . *S. caladeler* n. sp. (part)
- 32' Elytral striae slightly elevated and rounded, punctures moderately large, those of sutural interstria towards base separated by about their own diameter or less; aedeagus as in fig. 58; Cuba (Cienfuegos, Havana, Matanzas) . . . . . *S. morio* (Suffrian)

## Species treatments

### *Sicoderus aeneus* Anderson, n. sp.

(Figures 1–2, 9. Map 2)

<http://zoobank.org/urn:lsid:zoobank.org:act:D57E3303-1AAC-4182-8F7D-409E5EFAF3C0>

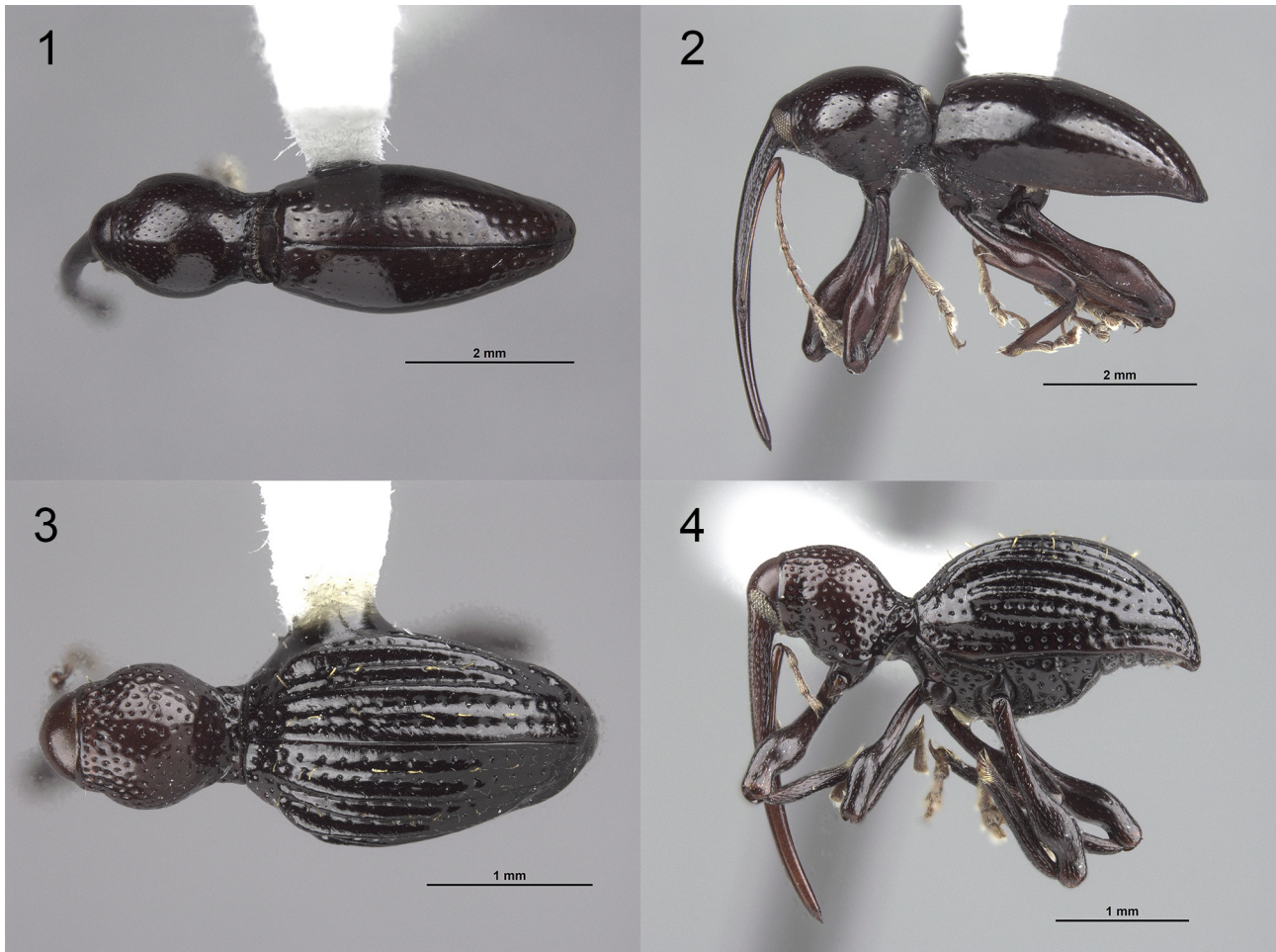
**Description:** Length male, 5.5 mm; female, 6.1 mm. Integument black, shining with somewhat greenish-brown reflection. Eyes rather widely separated by a distance about two-thirds width rostrum at midlength. Rostrum 1.11x length elytra in male; 1.41x length elytra in female. Antennal insertion slightly beyond midlength in male, at about midlength in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures widely spaced, very small, very shallow on disc and laterally on flanks; no setae present. Elytra in dorsal view widest at about midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; no setae present. Strial punctures evident, very small, very shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male near posterior margin with two small patches of fine setosity; of female, uniformly convex in middle near posterior margin. Ventrite 5 impressed medially in male, uniformly convex in female. Legs with front femora with small tooth on ventral margin, middle and hind femora simple, lacking tooth; tarsal claws with small basal tooth. Aedeagus (fig. 9) widest at apex, internal sac with pair of basal sclerites subparallel, slightly hooked at base. Female not dissected.

**Material examined:** 1 male, 1 female. Holotype male (CWOB), labelled HAITI: Department du Sud, Formond, 1650m, 28.i.1984, S.R. Yocum, beating bamboo and ferns. Paratype. Data as holotype (1 female; CWOB).

**Derivation of species name:** This species is named 'aeneus' after the greenish-brown metallic reflection of the cuticle.

**Natural History:** Two specimens were collected beating bamboo and ferns at 1650m elevation.

**Comments:** This species is similar to *S. striatolateralis* and *S. pseudostriatolateralis* in the very fine punctation of the pronotum, but unlike those two species the posterolateral pronotal flange is not microstriate.



**FIGURES 1–4.** Species of *Sicoderus*. 1. *Sicoderus aeneus*, dorsal habitus. 2. *Sicoderus aeneus*, lateral habitus. 3. *Sicoderus alternatus*, dorsal habitus. 4. *Sicoderus alternatus*, lateral habitus.

***Sicoderus alternatus* Anderson, n. sp.**

(Figures 3–4, 10. Map 2)

<http://zoobank.org/urn:lsid:zoobank.org:act:089CBA7D-28FF-4AE1-9678-127DD5ACF9EA>

**Description:** Length male, 3.3 mm. Integument rufous (pronotum, head and legs) or black, shining. Eyes moderately narrowly separated by a distance about one-half width rostrum at midlength. Rostrum 1.00x length elytra in male. Antennal insertion slightly beyond midlength in male. Prothorax constricted anteriorly, globose, widest at about middle; punctures widely spaced, moderate in size and depth, slightly deeper laterally on flanks, not striolate; no setae present. Elytra in dorsal view widest at about basal one-third, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; short scattered recurved setae present. Strial punctures evident, moderately large, deep; striae distinctly impressed. Elytral interstriae convex but interstriae 3, 5 and 7 more elevated; interstria 5 most strongly elevated, towards base with prominent tubercle which grades posteriorly into remainder of raised interstria. Membranous wings absent. Abdominal ventrite 1 of male flattened medially near posterior margin, lacking any patches of setosity or tubercles. Ventrite 5 flattened, finely setose posteromedially in male. Legs with all femora lacking tooth on ventral margin; tarsal claws lacking basal tooth. Aedeagus (fig. 10) widest towards base, internal sac with pair of basal sclerites slightly convergent apically, hooked at base, also with field of elongate, dense, spicules at about midlength. Female not known.

**Material examined:** 1 male. Holotype male (CMNH), labelled DOMINICAN REPUBLIC: Pedernales, 3.3 km N.E. Los Arroyos, 18-15N, 71-45W, 1450m, 16–18 July 1990, L. Masner, J. Rawlins, forest sweep samples.

**Derivation of species name:** This species is named ‘alternatus’ after the alternately elevated elytral interstriae.

**Natural History:** The holotype was collected in a forest sweep sample at 1450m elevation.

**Comments:** This species is unique within *Sicoderus* in having the elytra with interstriae alternately raised, especially interstria 5 near the base which is subtuberculate. No other known *Sicoderus* has an elytral form similar to the one exhibited by this species. In the holotype, the pronotum, head and legs are rufous in color with the rest of the body black. No other *Sicoderus* is similarly bicolored.

***Sicoderus bautistai* Anderson, n. sp.**

(Figures 5–6, 11. Map 3)

<http://zoobank.org/urn:lsid:zoobank.org:act:316C938B-26EF-4B4B-9E43-38F034E83D8B>

**Description:** Length male, 3.2–3.8 mm; female, 2.9–3.8 mm. Integument black, shining. Eyes separated by a distance of about one half width of rostrum at midlength. Rostrum 1.00–1.08x length elytra in male, 1.09–1.17x length elytra in female. Antennal insertion slightly beyond middle in male, at about middle in female. Prothorax constricted anteriorly, globose, widest at middle; punctures sparse, moderately large and deep, well-separated, not forming striolae on disc but with vague striolae laterally on flanks; scattered erect setae present. Elytra in dorsal view widest at about midlength, lateral margins convergent anteriorly and posteriorly; humeri fully reduced, not at all angulate; numerous erect setae present. Strial punctures large, shallow; striae very slightly impressed throughout length. Membranous wings absent. Abdominal ventrite 1 of male not raised in middle near posterior margin but with small tuft of fine setosity; of female, uniformly convex in middle near posterior margin. Ventrite 5 of male with shallow, finely setose, median impression extended about one-half length of ventrite 5; of female, uniformly convex. Legs with front femora with very small, blunt tooth, middle and hind femora lacking tooth; tarsal claws with small basal tooth. Aedeagus (fig. 11) widest at apex, internal sac with pair of elongate curved basal sclerites, strongly convergent and conjoined anteriorly, each lacking basal extension. Female not dissected.

**Material examined:** 9 males, 3 females. Holotype male (CMNC), labelled DOMINICAN REPUBLIC: Province La Vega, Constanza, 1160m, 30.VIII.1988, beating in secondary pine/guava forest, M. Ivie, K. Phillips, K. Johnson. Paratypes: Data as holotype (1 male; WIBF). Province La Vega, 4.7 km S. Jarabacoa, 24–25.V.1992, R. Turnbow (1 male, CMNC). Province Elías Piña, La Estrella, 8 km E Hondo Valle, 7.VIII.1979, L.B. O'Brien (2 males, 1 female; CWOB). 10 km E Hondo Valle, 7.VIII.1979, C.W. O'Brien (1 male; CWOB). 11 km E Hondo Valle, 7.VIII.1979, C.W. O'Brien (1 male, 1 female; CWOB). HAITI: Furcy, 4000', 9.VII.1956, B. & B. Valentine (1 male, 1 female; FSCA). Mount Puilsboreau [Morne Puilsboreau], 11.X.1960, H.L. Dozier (1 male; BMNH).

**Derivation of species name:** This species is named after José Antonio Bautista, a Dominican professional baseball right fielder formerly for the Toronto Blue Jays of Major League Baseball.

Natural History: Two specimens were collected beating vegetation in secondary pine/guava forest (1160 m).

**Comments:** Along with *S. ramosi*, *S. guanyangi* and *S. turnbowi*, these four species form a complex of closely related species distinguished by the form of the basal sclerite of the internal sac of the male genitalia, form of the male ventrite 1 and presence and size of femoral teeth.

***Sicoderus beatyi* Anderson, n. sp.**

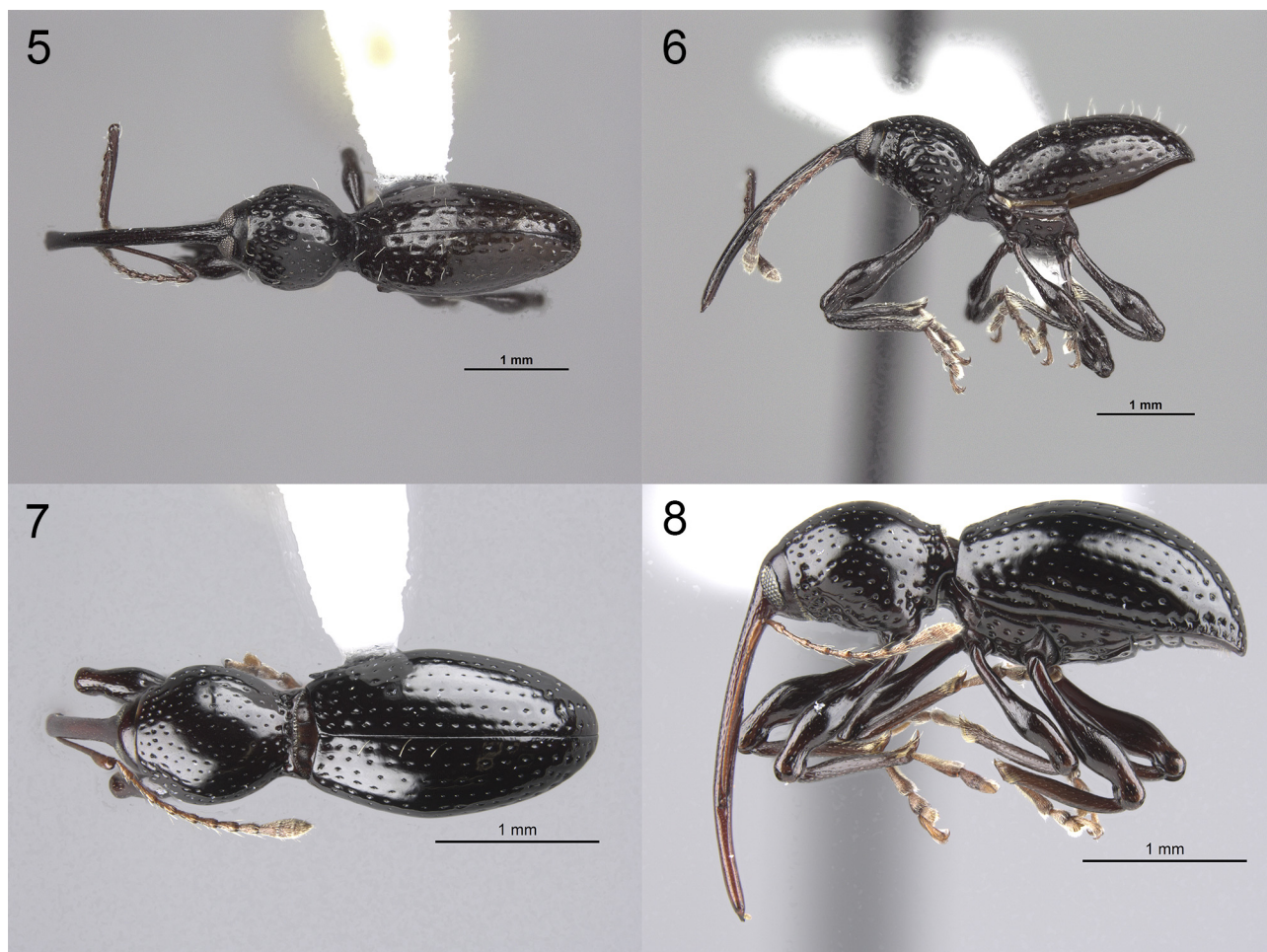
(Figures 7–8, 12. Map 1)

<http://zoobank.org/urn:lsid:zoobank.org:act:316C938B-26EF-4B4B-9E43-38F034E83D8B>

**Description:** Length male, 2.8–3.3 mm; female, 3.6–4.0 mm. Integument black, shining. Eyes rather widely separated by a distance slightly less than width rostrum at midlength. Rostrum 1.06–1.09x length elytra in male; 1.08–1.11x length elytra in female. Antennal insertion slightly before middle in male and female. Prothorax constricted anteriorly, globose, widest at about anterior one-third; punctures well-separated, sparse, very fine and shallow on disk, not much deeper or larger in anterior one-quarter or on flanks; erect setae absent. Elytra in dorsal view widest at about midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; with scattered, very fine erect setae. Strial punctures evident, shallow, moderately fine; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male flat basally, in middle near posterior margin with two very small setose points, not tuberculate; of female, uniformly convex in middle near posterior margin. Ventrite 5 of male flattened medially towards apex; of female, uniformly convex. Legs with all femora simple,



ventral margin lacking any trace of tooth; tarsal claws simple, no basal tooth. Aedeagus (fig. 12) subparallel-sided, internal sac with pair of elongate sinuate basal sclerites, convergent but separate anteriorly, and basal patch of dense, fine spicules. Female not dissected.



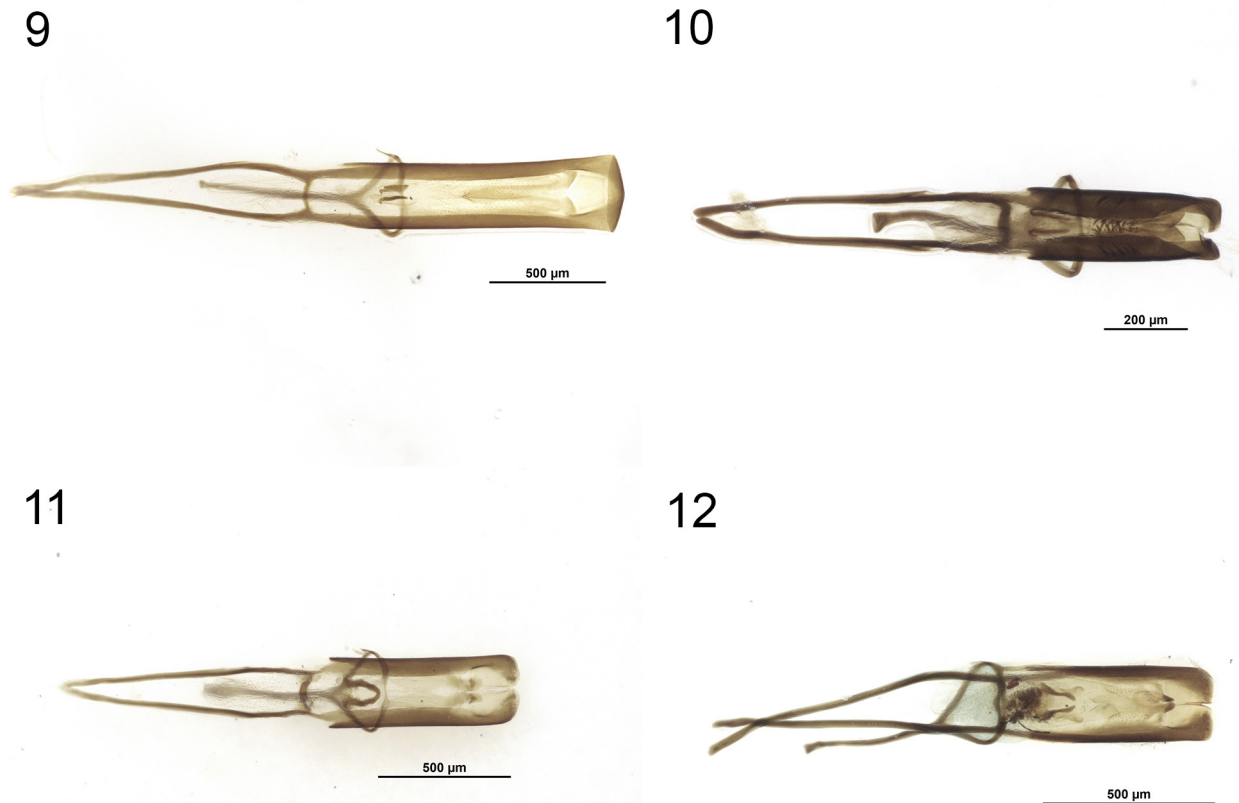
**FIGURES 5–8.** Species of *Sicoderus*. 5. *Sicoderus bautistai*, dorsal habitus. 6. *Sicoderus bautistai*, lateral habitus. 7. *Sicoderus beatyi*, dorsal habitus. 8. *Sicoderus beatyi*, lateral habitus.

**Material examined:** 10 males, 18 females. Holotype male (CMNC), labelled CUBA: Granma Province, Parque Nacional Pico Turquino, Bosque de la Siguapa, 1200m, 20.008 -76.865, 3.II.2012, R. Anderson, dry cloud forest litter, 2012-024. Paratypes. Data as for holotype (1 male, 3 females; CMNC, WIBF). Parque Nacional Pico Turquino, Aguada de Joachin, 1370m, 20.015 -76.840, 3.II.2012, R. Anderson, mixed forest (1 male; CMNC). Parque Nacional Pico Turquino, Aguada de Joachin, 1368m, 20.01472 -76.83972, 24.III.2012, CarBio Team, montane forest, CU-01 (1 male; CMNC). Parque Nacional Pico Turquino, Aguada de Joachin, 1368m, 20.01463 -76.83971, III/IV.2012, CarBio Team, montane forest litter (1 female; CMNC). Alto de Merino, near biological station, 958 m, 5–10.III.2013, 19°59'9"N, 77°0'57"W, pluviselva litter, F. Cala Riquelme, A. Deler Hernandez (2 males; CMNC). Pico Turquino, S. side, 1500', 25.VI.1936, P.J. Darlington Jr. (1 male, 1 female; MCZC). Pico Turquino, S. side, 3000', VI.1936, P.J. Darlington Jr. (1 female; MCZC). Pico Turquino, S. side, 3000–5000', VI.1936, P.J. Darlington Jr. (3 males, 12 females; ASUHC, BMNH, FSCA, MCZC).

**Derivation of species name:** This species is named after Ross Beaty of British Columbia, Canada in recognition of his financial investment in the research programs of the Canadian Museum of Nature.

**Natural History:** Adults were collected in pluviselva (term used in Cuba for a montane wet forest) and dry cloud forest litter (958–1370 m) and beating vegetation along trails.

**Comments:** In contrast to all other members of the genus from the Greater Antilles, this species, *S. bipunctivenris*, *S. caladeler* and *S. morio* all lack a small basal tooth on the tarsal claws. With the exception of *S. lucidus* from Dominica, all of the species from the Lesser Antilles lack the basal tooth on the tarsal claws as well.



**FIGURES 9–12.** Species of *Sicoderus*. 9. *Sicoderus aeneus*, aedeagus, dorsal view. 10. *Sicoderus alternatus*, aedeagus, dorsal view. 11. *Sicoderus bautistai*, aedeagus, dorsal view. 12. *Sicoderus beatiyi*, aedeagus, dorsal view.

***Sicoderus bipunctiventris* Anderson, n. sp.**

(Figures 13–14, 14a, 21. Map 1)

<http://zoobank.org/urn:lsid:zoobank.org:act:EE5360CF-2945-4FC5-8FFD-28686738F54E>

**Description:** Length male, 3.0–3.5 mm; female, 2.8–3.0 mm. Integument black, shining. Eyes rather widely separated by a distance slightly less than width of rostrum at midlength. Rostrum 1.09–1.15x length elytra in male; 1.09–1.28x length elytra in female. Antennal insertion at about apical 2/5 in male, slightly before middle in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures dense, large and deep, subcontiguous, forming striolae on disc and laterally on flanks; erect setae absent. Elytra in dorsal view widest at about midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; setae absent. Strial punctures evident, large, deep; striae deeply impressed throughout length. Membranous wings absent. Abdominal ventrite 1 of male flat basally, in middle near posterior margin with two very small, approximate swellings, each with minute patch of setosity at tip; of female, uniformly convex in middle near posterior margin. Ventrite 2 of both sexes with two large, deep pits on steeply declivious posterior face (fig. 14a). Ventrite 5 of male with rounded very shallow impression in apical one-half; of female, uniformly convex. Legs with all femora simple, ventral margin lacking any trace of tooth; tarsal claws simple, no basal tooth. Aedeagus (fig. 21) subequal in width towards apex and base, internal sac with pair of elongate basal sclerites subparallel, joined anteriorly as a fine arch, each with distinct basal projection. Female not dissected.

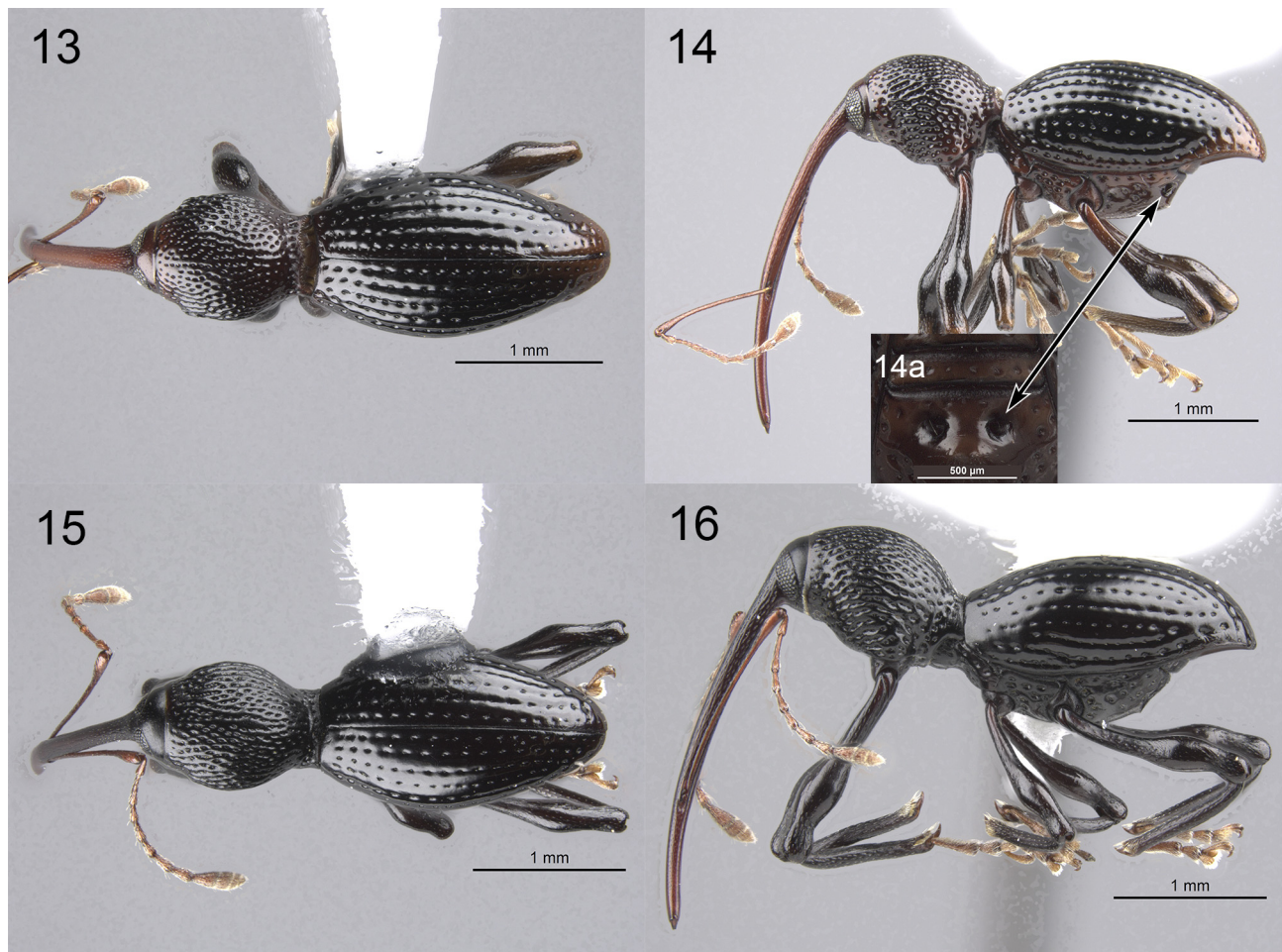
**Material examined:** 11 males, 8 females. Holotype male (CMNC), labelled CUBA: Cienfuegos Province,

Parque Nacional Pico San Juan, road, 21.98542 -80.14873, 1026m, 19.v.2013, A. Deler Hernandez, 2013-025, hardwood forest litter. Paratypes. Data as holotype (2 males, 1 female; CMNC). Parque Nacional Pico San Juan, road, 21.98542 -80.14873, 1026m, 19.v.2013, R.Anderson, 2013-023, hardwood forest litter (3 males, 1 female; CMNC, WIBF). Parque Nacional Pico San Juan, road, 21.98495 -80.15188, 934m, 19.v.2013, R.Anderson, 2013-021, hardwood forest litter (1 male, 1 female; CMNC). Parque Nacional Pico San Juan, road, 21.98812 -80.14632, 1086m, 19.v.2013, R.Anderson, 2013-022X, hand collections (1 female; CMNC). Parque Nacional Pico San Juan, road, 21.98812 -80.14632, 1086m, 19.v.2013, F. Cala Riquelme, 2013-024, elfin forest litter (2 females; CMNC). Mayari, 4 km E., 21.95754 -80.09966, 912m, 18.v.2013, R.Anderson, 2013-019, hardwood forest litter (1 male; CMNC). Mayari, 2 km E., 21.96651 -80.11497, 842m, 18.v.2013, R.Anderson, 2013-017, hardwood forest litter (1 male; CMNC). Mayari, 1 km E., 21.97114 -80.12172, 866m, 18.v.2013, R.Anderson, 2013-018, karst forest litter (1 male; BMNH). Mayari, 1.5 km E., 21.97100 -80.11644, 866m, 18.v.2013, R.Anderson, 2013-020x, hardwood forest, hand collections (2 females; CMNC, FSCA). Mayari, 2.5 km E., 21°58'15.6"N, 80°07'05.81"W, 860m, 18.v.2013, G. Zhang, CB-13, L-20 (1 male; ASUHC).

**Derivation of species name:** This species is named ‘bipunctiventris’ after the two large, deep pits on the posterior face of abdominal ventrite 2 (fig. 14a).

**Natural History:** Adults were collected in elfin and hardwood forest litter (842–1086 m) and beating vegetation.

**Comments:** The two large, deep pits on the posterior face of abdominal ventrite 2 of both sexes (fig. 14a) is distinctive for this species.



**FIGURES 13–16.** Species of *Sycoderus*. 13. *Sycoderus bipunctiventris*, dorsal habitus. 14. *Sycoderus bipunctiventris*, lateral habitus. 14a. Inset, ventrite 2 showing large, deep pits. 15. *Sycoderus caladeler*, dorsal habitus. 16. *Sycoderus caladeler*, lateral habitus.

***Sicoderus caladeler* Anderson, n. sp.**

(Figures 15–16, 22. Map 1)

<http://zoobank.org/urn:lsid:zoobank.org:act:D3BA25EB-DC83-4D83-8A7C-7D2BC2E1CD6F>

**Description:** Length male, 3.4–4.9 mm; female, 2.7–4.8 mm. Integument black, shining. Eyes separated by a distance about 2/3 width rostrum at midlength. Rostrum 1.21–1.32x length elytra in male; 1.12–1.32x length elytra in female. Antennal insertion slightly beyond apical 1/3 in male, at about apical 1/3 in female; antennae with article 2 of funicle long, 1.66–2.00x as long as article 3. Prothorax constricted anteriorly, globose, widest at about middle; punctures dense, large and deep, subcontiguous, forming striolae on disc and laterally on flanks (Gran Piedra) or small and individually distinct dorsally, slightly larger and subcontiguous laterally forming weak lateral striolae (Loma del Gato); erect setae absent. Elytra in dorsal view widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; setae absent. Strial punctures evident, small, shallow; striae very slightly impressed throughout length. Membranous wings absent. Abdominal ventrite 1 of male slightly raised in middle near posterior margin with a small patch of setosity at tip; of female, uniformly convex in middle near posterior margin. Ventrite 5 of male flattened medially towards apex; of female, uniformly convex. Legs with all femora simple, ventral margin lacking any trace of tooth; tarsal claws simple, no basal tooth. Aedeagus (fig. 22) subequal in width towards apex and base, internal sac with pair of elongate basal sclerites curved inwardly. Female not dissected.

**Material examined:** 12 males, 14 females. Holotype male (CMNC), labelled CUBA: Santiago de Cuba Province, Parque Nacional Gran Piedra, 1000–1100m, 20.003 -75.613, 26–28.I.2012, R. Anderson, general collecting. Paratypes. Data as holotype (4 males, 3 females; CMNC, WIBF). Parque Nacional Gran Piedra, Gran Piedra Trail, 1180m, 20.011 -75.627, 29.I.2012, R. Anderson, wet pluviselva litter, 2012–014 (1 female; CMNC). Parque Nacional Gran Piedra, 19.9989 -75.5989, 4–8.V.2012, F. Cala Riquelme, A. Deler Hernandez, pluviselva litter (4 males; BMNH, CMNC). Parque Nacional Gran Piedra, Segundo Chorrito, km. 8, 600m, 7.XII.1995, S. Peck, tree base litter, 82 (1 male; CMNC). Parque Nacional Gran Piedra, Isabelica, 6–7.XII.1995, 1110m, L. Masner, sweep (1 female; CMNC). Loma del Gato, Cobre Range, 3–7.VII.1936, about 3000', Cuba 1936 Darlington Collector (2 males, 5 females; ASUHC, FSCA, MCZC). Loma (Pico) del Gato, 26–28.v.1959, M.W. Sanderson, C59-5 (4 females, CMNC, INHS).

**Derivation of species name:** This species is named after my Cuban colleagues and friends Franklyn Cala Riquelme and Albert Deler Hernandez of Santiago de Cuba. Without the help of these two men and the support of their institution, none of our recent fieldwork in Cuba could have taken place. The name should be considered an arbitrary combination of letters.

**Natural History:** Adults were collected in wet pluviselva (cloud forest) litter (1000–1180 m) and beating vegetation around the main hotel at Parque Nacional Gran Piedra, Cuba.

**Comments:** Specimens from the type locality of Gran Piedra (east of Santiago de Cuba) have the pronotal punctures large, deep and subcontiguous forming distinct dorsal and lateral striolae whereas specimens from the Cobre Range, Loma del Gato (ca. 20.010 –76.037; west of Santiago de Cuba) have the dorsal punctures smaller and individually distinct, not forming striolae. Males from both localities have been examined and no differences in genital structure can be seen. This is one of two species (the other being *S. tinamus* from Crooked Island, Bahamas) where there appears to be significant geographic variation in pronotal punctation without any other external differences or differences in male genital structure. Note that a second locality to the northeast of Santiago de Cuba named Loma del Gato is at 20.1304 –75.6877. Elevations in this area do not exceed 350m and this is not the locality of these specimens.

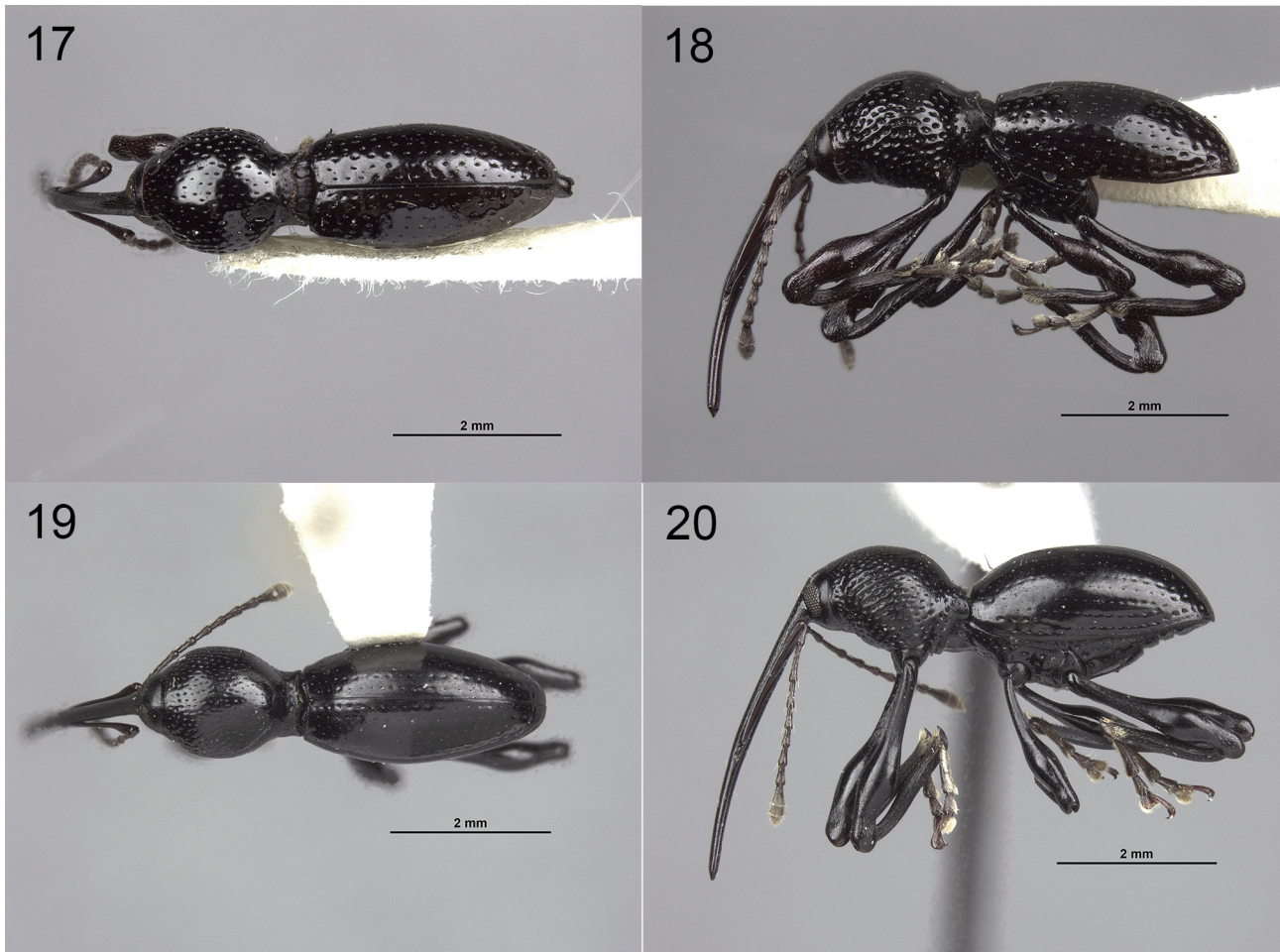
***Sicoderus championi* Vanin**

(Figures 17–18, 23. Map3)

*Sicoderus championi* Vanin 1986: 593. Holotype male (USNM) from Dominican Republic, Samana, examined. Anderson 1999: 134. Perez-Gelabert 2008: 136.

**Description:** Length male, 3.3–4.5 mm, female, 2.9–4.5 mm. Integument black, shining. Eyes narrowly separated by a distance of about 2–3 ommatidia. Rostrum 0.94–0.98x length elytra in male, 0.97–1.08x length elytra in

female. Antennal insertion slightly beyond middle in male, at about middle in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures various from widely spaced, small and deep dorsally on disc to large and deep, subcontiguous on disc and flanks, forming weak to distinct striolae; sparse erect setae present. Elytra in dorsal view widest at about midlength, lateral margins slightly convergent anteriorly and posteriorly; humeri present, weakly angulate; setae present, few. Strial punctures large, deep; striae not impressed throughout length. Membranous wings present. Abdominal ventrite 1 of male slightly to moderately raised in middle near posterior margin to small tubercle with small transverse patch of setosity at tip, of female, evenly convex. Ventrite 5 of male with median circular impression, of female evenly convex, not setose in either sex. Legs with all femora with inner margin with small blunt tooth; tarsal claws with small basal tooth. Aedeagus (fig. 23) subequal in width throughout length, internal sac with pair of elongate basal sclerites subparallel, variable in width, each with slight basal outwardly directed extension. Female not dissected.



**FIGURES 17–20.** Species of *Sicoderus*. 17. *Sicoderus championi*, dorsal habitus. 18. *Sicoderus championi*, lateral habitus. 19. *Sicoderus contiguus*, dorsal habitus. 20. *Sicoderus contiguus*, lateral habitus.

**Material examined:** DOMINICAN REPUBLIC: Distrito Nacional, La Malena, Boca Chica, 20.IX.1979, Marciano (1 male; MHND). Boca Chica, 6.VII.1985, W.E. Clark (1 female; CWOB). 2 km E Boca Chica, 31.VII.1979, G.B. Marshall (2 females; CWOB). 2 km E Boca Chica, 11.VIII.1979, L. & C.W. O'Brien & G.B. Marshall (3 males, 1 female; CMNC, CWOB). 1 km W Boca Chica, 30.V.1978, C.W. and L. O'Brien and G.B. Marshall (1 female; CWOB). 2.9 km NE Boca Chica, 10.IX.1983, W.E. Clark (1 female; CWOB). 24 km E Santo Domingo, 30.V.1978, C.W. and L. O'Brien, G.B. Marshall (1 male, 1 female; CMNC, CWOB). Province Hato Mayor, Parque Nacional Los Haitises, W of Sabana de la Mar, 17.VII.1993, beating vegetation, D. Sikes & R. Rosenfeld (1 male; CMNC). Province La Altagracia, Parque Nacional de Este, Boca de Yuma, 18°21.904'N 68°37.094'W, 5–6.VIII.1999, 2m, at light, M. Ivie & K. Guerrero (3 males; CMNC, WIBF). Parque Nacional de Este, Boca de Yuma, 18.365° N, 68.618° W, 5–6.VIII.1999, R.S. Miller (9 males, 5 females; BMNH, CMNC,

WIBF). Punta Cana, rural, 11–19.XI.2005, L. Masner, malaise trap (1 male, 1 female; CMNC). Guaraguao, 12–13.VII.1985, W.E. Clark (1 female; CWOB). Higüey, Macao, 10.IV.1982, H. Dominguez (2 females; MHND). Higüey, Arena Gorda, 9.IV.1982, H. Dominguez (1 male, 1 female; MHND). Higüey, El Cortecito, 5.IV.1980, H. Dominguez (1 female; MHND). 31 km N Higüey, 1.VIII.1979, L.B. O'Brien (1 female; CWOB). Nisibon, Finca Papagayo, 7.iv.2000, R.E. Woodruff & T.J. Henry, beating (2 females; FSCA). Parque Nacional de Este, Boca de Yuma, 3–20m, 6.VII.2006, 18°21.508'N, 68°36.956'W, D.E. Perez-Gelabert (1 female; USNM). Parque Nacional de Este, Boca de Yuma, 19.VII.2004, 18°21.508'N, 68°36.956'W, C.J. Micheli (1 female; USNM). Parque Nacional de Este, Guaraguao, 0–5m, 3.VII.2006, 18°19.568'N, 68°48.500'W, S.W. Lingafelter (1 female; USNM). 9 km SW Campo Nuevo, 1.VIII.1979, G.B. Marshall (1 female; CWOB). Boca de Chavón, 7.IX.1997, C.W. O'Brien, P. Kovarik (4 males, 8 females; CMNC, CWOB). Province Puerto Plata, 14 km W Puerto Plata, 10–11.V.1985, E. Giesbert (1 male; CWOB). Province Samaná, MN Cabo Samaná, track to Playa Madama, 4.1 km E Las Galeras, 19°17.83'N 69°9.93'W, 40m, 3.IX.2014, Deler, Fikáček, Gimmel, DR30a (1 male, 3 females; CMNC, NMPC). Samaná, El Valle, 1.V.1981, H. Dominguez (1 male, 1 female; MHND). Province San Cristobal, San Cristobal, Haina, 17.VII.1981, H. Dominguez (2 females; MHND). Province San Pedro de Macoris, 13 km E. Boca Chica, 14.V.1992, R. Turnbow (1 male, 1 female; CMNC, MHND). near Juan Dolio, 4.v.1985, J. E. Wappes (1 male, 4 females; CWOB, FSCA). 8 km W San Pedro de Macoris, 30.V.1978, C.W. and L. O'Brien and G.B. Marshall (1 male; CWOB).

**Comments:** An additional locality from Vanin (1986) is: Dominican Republic: Arroyo Hondo (near Ciudad Trujillo); this specimen was not examined. This species is very similar to *S. perezii* and was confused with the latter by me during early manuscript preparation. The rostrum is shorter in both sexes in *S. championi* and the basal sclerite of the internal sac is different (compare figs. 23 and 59). Vanin (1986) noted a similarity to *S. tinamus*, which has a less deeply and densely punctate pronotum and a different basal sclerite of the internal sac. *Sicoderus championi* exhibits some variation in the extent of punctuation of the pronotum, especially dorsally on the disc which can vary from widely spaced and shallow to deep and subcontiguous, forming weak to distinct striolae.

This species appears to be common and widespread in low elevation or coastal areas throughout the Dominican Republic.

### ***Sicoderus contiguus* Vanin**

(Figures 19–20, 24. Map 10)

*Sicoderus contiguus* Vanin 1986: 589. Holotype male (BMNH) from St. Vincent, examined. Anderson 1999: 135.

**Description:** Length male, 4.7–5.5 mm; length female 4.5–5.0 mm. Integument black, shining. Eyes separated by a distance about one-half width rostrum at midlength. Rostrum 1.13–1.15x length elytra in male; 1.25–1.32x length elytra in female. Antennal insertion slightly beyond middle in male, at about middle in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures closely spaced, moderately large, elongate on disc, larger and deeper, forming weak striolae laterally on flanks; no setae present. Elytra in dorsal view widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; no setae present. Strial punctures evident, small, shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male in middle near posterior margin with two small raised patches of fine setosity; of female, uniformly convex in middle near posterior margin. Ventrite 5 narrowly slightly impressed medially in male, rounded in female. Legs with femora each with ventral margin with small tooth; tarsal claws lacking small basal tooth. Aedeagus (fig. 24) subequal in width throughout length, internal sac with pair of elongate thick basal sclerites subparallel, each with slight laterally directed basal extension. Female not dissected.

**Material examined:** ST. VINCENT: St. Andrew Parish, Vermont Nature Trail, 31.VIII.1991, C.W. & L. O'Brien (3 males, 1 female; CMNC, CWOB). Charlotte Parish, La Soufriere Trail (east), 2.IX.1991, C.W. & L. O'Brien (2 females; CWOB). The type series from St. Vincent, West Indies (holotype, 2 male paratypes, 5 female paratypes; BMNH) was examined.

**Comments:** Vanin (1986) named this species from specimens taken from a number of unspecified sites on St. Vincent.

21



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**FIGURES 21–24.** Species of *Sicoderus*. 21. *Sicoderus bipunctiventris*, aedeagus, dorsal view. 22. *Sicoderus caladeler*, aedeagus, dorsal view. 23. *Sicoderus championi*, aedeagus, dorsal view. 24. *Sicoderus contiguous*, aedeagus, dorsal view.

### *Sicoderus delauneyi* (Chevrolat)

(Figures 25–26, 33. Map 10)

*Hammacerus delauneyi* Chevrolat 1880: xxvi. Holotype male (NHRS) from Guadeloupe, not examined.

*Hammatostylus delauneyi*; Champion 1903: 272. Voss 1935: 10. Blackwelder 1947: 836.

*Erodiscus delauneyi*; Champion 1903: 272. O'Brien and Wibmer 1982: 100.

*Sicoderus delauneyi*; Vanin 1986: 582. Anderson 1999: 135. Peck *et al.* 2014: 128.

**Description:** Length male, 3.9–4.9 mm; female, 3.4–7.0 mm. Integument black, shining. Eyes separated by a distance about equivalent to width of 2–3 ommatidia. Rostrum 0.91–0.96x length elytra in male; 1.02–1.25x length elytra in female. Antennal insertion at about apical 1/3 in male, slightly beyond midlength in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures widely spaced, very small, very shallow on disc and laterally on flanks; no setae present. Elytra in dorsal view widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; no setae present. Strial punctures evident, small, shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male in middle with two small raised patches of fine setosity at distance from posterior margin of ventrite 1 by about length of ventrite 3; of female, uniformly convex in middle near posterior margin. Ventrite 5 impressed medially in male, margins of impression finely setose, rounded in female, not setose. Legs with front femora with ventral margin with small blunt tooth, middle and hind femora each with very small blunt tooth; tarsal claws with small basal tooth. Aedeagus (fig. 33) subequal in width throughout length, margins slightly sinuate, internal sac with pair of thick elongate basal sclerites subparallel, each widest towards apex and base, also with a pair of outwardly directed cone-shaped sclerites at about midlength. Female not dissected.

**Material examined:** GUADELOUPE: Route les Mamelles, 11.V.1969, at night, C.W. O'Brien (1 male, 1 female; CWOB). Piton de Ste. Rose, 11.V.1969, C.W. O'Brien (1 male, 1 female; CWOB). Trois Rivières, Forêt de Moscou, 6.V.1965 (1 male; CWOB). Soufrière 29.v.2012, 16.0338 -61.67707, 800–900m beating along road, R.S. Anderson (1 female; CMNC).

**Comments:** This species is very similar to *S. lucidus* from Dominica however the latter species lacks the small basal tooth on the tarsal claws and the setose patches on abdominal ventrite 1 are located much closer to the posterior margin of ventrite 1.



**FIGURES 25–28.** Species of *Sicoderus*. 25. *Sicoderus delauneyi*, dorsal habitus. 26. *Sicoderus delauneyi*, lateral habitus. 27. *Sicoderus detonnancouri*, dorsal habitus. 28. *Sicoderus detonnancouri*, lateral habitus.

***Sicoderus detonnancouri* Anderson, n. sp.**

(Figures 27–28, 34. Map 2)

<http://zoobank.org/urn:lsid:zoobank.org:act:E73908AA-EE2D-41C9-B0A8-8C61E9D78B6A>

**Description:** Length male, 3.3–3.9 mm. Integument black, shining. Eyes narrowly separated by a distance about width of 2–3 ommatidia. Rostrum 1.20–1.22x length elytra in male. Antennal insertion slightly beyond midlength in male; antennae with article 2 of funicle 1.33–1.46x as long as article 3. Prothorax constricted anteriorly, globose, widest at about middle; punctures dense, large and deep, subcontiguous, forming striolae on disc and laterally on flanks; no setae present. Elytra in dorsal view just before midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; few setae present. Strial punctures evident, moderately large, deep; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male slightly raised in middle near posterior margin with two small patches of setosity at tip. Ventrite 5 flattened medially in male. Legs with front femora with small tooth on ventral margin, middle and hind femora simple, lacking tooth; tarsal claws with small



basal tooth. Aedeagus (fig. 34) subequal in width throughout length, internal sac with pair of short basal sclerites strongly convergent apically, each with oblique basal extension. Female not known.

**Material examined:** 2 males. Holotype male (CMNC) labelled DOMINICAN REPUBLIC: Province Maria Trinidad Sanchez, Cabrera, 29.vii.2011, Pierre de Tonnancour, suchage plantes grimpanes [drying vines]. Paratype. Data as holotype (1 male; CMNC).

**Derivation of species name:** This species is named after Pierre de Tonnancour of Montreal who collected the two known specimens of this species.

**Natural History:** Two specimens were collected beating drying vines.

**Comments:** This species is the only species known from the Dominican Republic that fully lacks humeri and in which the pronotum is deeply striolate dorsally as well as laterally. The only other *Sicoderus* known with fully absent humeri and a dorsally striolate pronotum are *S. caladeler* (Cuba) and *S. vanini* (British Virgin Islands), both of which have simple front femora lacking a tooth. *Sicoderus vanini* is known only from females and *S. detonnancouri* is known only from males but it is unlikely the two are conspecific.

### ***Sicoderus franzi* Anderson, n. sp.**

(Figures 29–30, 35. Map 8)

<http://zoobank.org/urn:lsid:zoobank.org:act:9846FED0-5509-4F3B-ADB8-6D560182CA80>

**Description:** Length male, 4.9–5.5 mm; female, 4.2–4.4 mm. Integument black, shining. Eyes separated by a distance about one-half width rostrum at midlength. Rostrum 1.28–1.32x length elytra in male; 1.27–1.37x length elytra in female. Antennal insertion at about apical 2/5 in male, at about midlength in female. Prothorax constricted anteriorly, globose, widest anterior to middle; punctures widely spaced, very small, very shallow on disc, slightly larger and deeper laterally on flanks, not forming striolae; no erect setae present. Basal margin of pronotum angulate laterally, dorsal and lateral faces interrupted by an acute angulation, dorsal face flat and with a row of 4 or 5 linearly arranged larger punctures across width. Elytra in dorsal view widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; no setae present. Strial punctures evident, small, shallow; striae slightly impressed. Membranous wings absent. Abdominal ventrite 1 of male slightly raised in middle near posterior margin with a small patch of setosity at tip; of female, uniformly convex in middle near posterior margin. Ventrite 5 flat at middle in male, uniformly convex in female, not setose in either sex. Legs with all femora simple, ventral margin lacking any trace of tooth; tarsal claws with very small basal tooth. Aedeagus (fig. 35) widest towards apex, internal sac with pair of elongate basal sclerites hooked basally. Female not dissected.

**Material examined:** 4 males, 3 females. Holotype male (CWOB), labelled PUERTO RICO: Caribbean National Forest, El Toro Negro, Hwy 143 Km 18H6, 22.VII.1979, G.B. Marshall. Paratypes, Caribbean National Forest, El Toro Negro, Hwy 143 Km 16H4, 21.VII.1979, L.B. O'Brien (1 male; CMNC). Caribbean National Forest, El Toro Negro, Hwy 143 Km 19H9, 22.VII.1979, G.B. Marshall (1 female; CWOB). Guilarte Forest Reserve, Hwy 131 & 518, 24.VII.1979, L.B. O'Brien (1 female; CWOB). Mayagüez, VI, 1962, C. Maldonado (1 female; USNM). Mayagüez, 27.v.1932, F. Mora (1 male [damaged], MCZC). Jayuya, Cano de Punta, 18 10°21'N, 66 35°31'W, 1338 m, 5.II.2010, H. Cancel (1 male, CMNC).

**Derivation of species name:** This species is named after Nico M. Franz, professor of entomology at Arizona State University, Tempe, AZ where he works on the systematics and evolution of weevils. He was formerly a professor at the University of Puerto Rico in Mayagüez and also a field companion on the 2012 Cuba trip.

**Natural History:** Specimens were collected beating.

**Comments:** This is one of two species of *Sicoderus* known from Puerto Rico, the other being *S. ivieorum*.

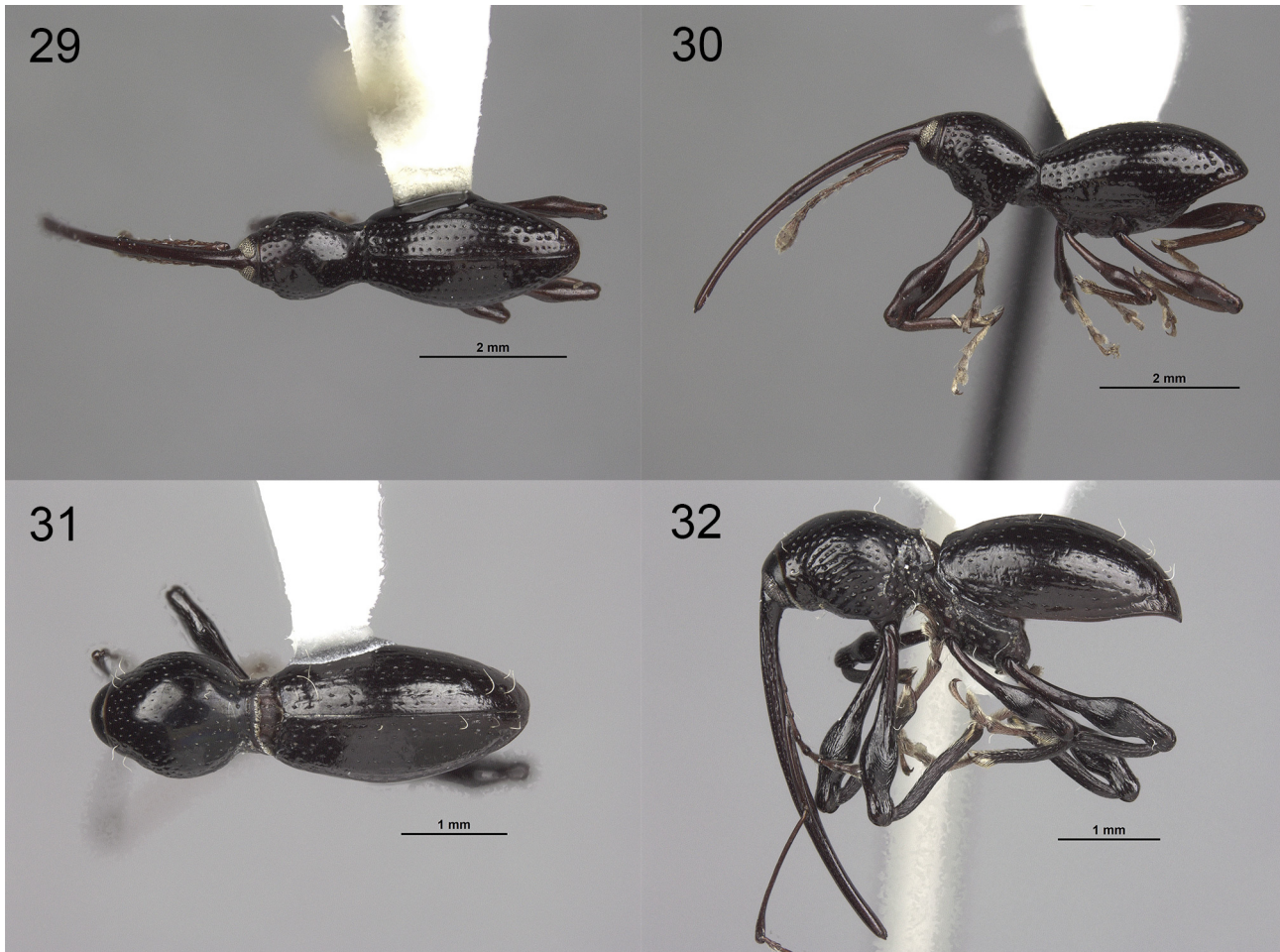
### ***Sicoderus guanyangi* Anderson, n. sp.**

(Figures 31–32, 36. Map 4)

<http://zoobank.org/urn:lsid:zoobank.org:act:F9A3172C-0244-486D-8D38-566CC3261F79>

**Description:** Length male, 2.8–3.9 mm; female, 2.5–3.8 mm. Integument black, shining. Eyes rather widely separated by a distance about two-thirds width rostrum at midlength. Rostrum 1.24–1.50x length elytra in male;

1.35–1.61x length elytra in female. Antennal insertion at about apical 2/5 in male, slightly before midlength in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures widely spaced, very small, very shallow on disc, larger and deeper, forming striolae laterally on flanks; scattered erect setae present, especially along anterior margin. Elytra in dorsal view widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; a few long, fine setae present. Strial punctures evident, very small, very shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male with conical tubercle near posterior margin with a small patch of setosity at tip; of female, uniformly convex in middle near posterior margin. Ventrite 5 slightly impressed at middle with sparse setae laterally around impression, uniformly convex in female, not setose. Legs with all femora simple, ventral margin lacking tooth; tarsal claws with small basal tooth. Aedeagus (fig. 36) subequal in width throughout length, internal sac with pair of elongate basal sclerites convergent apically, but separate, each with elongate subparallel basal extension. Female not dissected.



**FIGURES 29–32.** Species of *Sicoderus*. 29. *Sicoderus franzi*, dorsal habitus. 30. *Sicoderus franzi*, lateral habitus. 31. *Sicoderus guanyangi*, dorsal habitus. 32. *Sicoderus guanyangi*, lateral habitus.

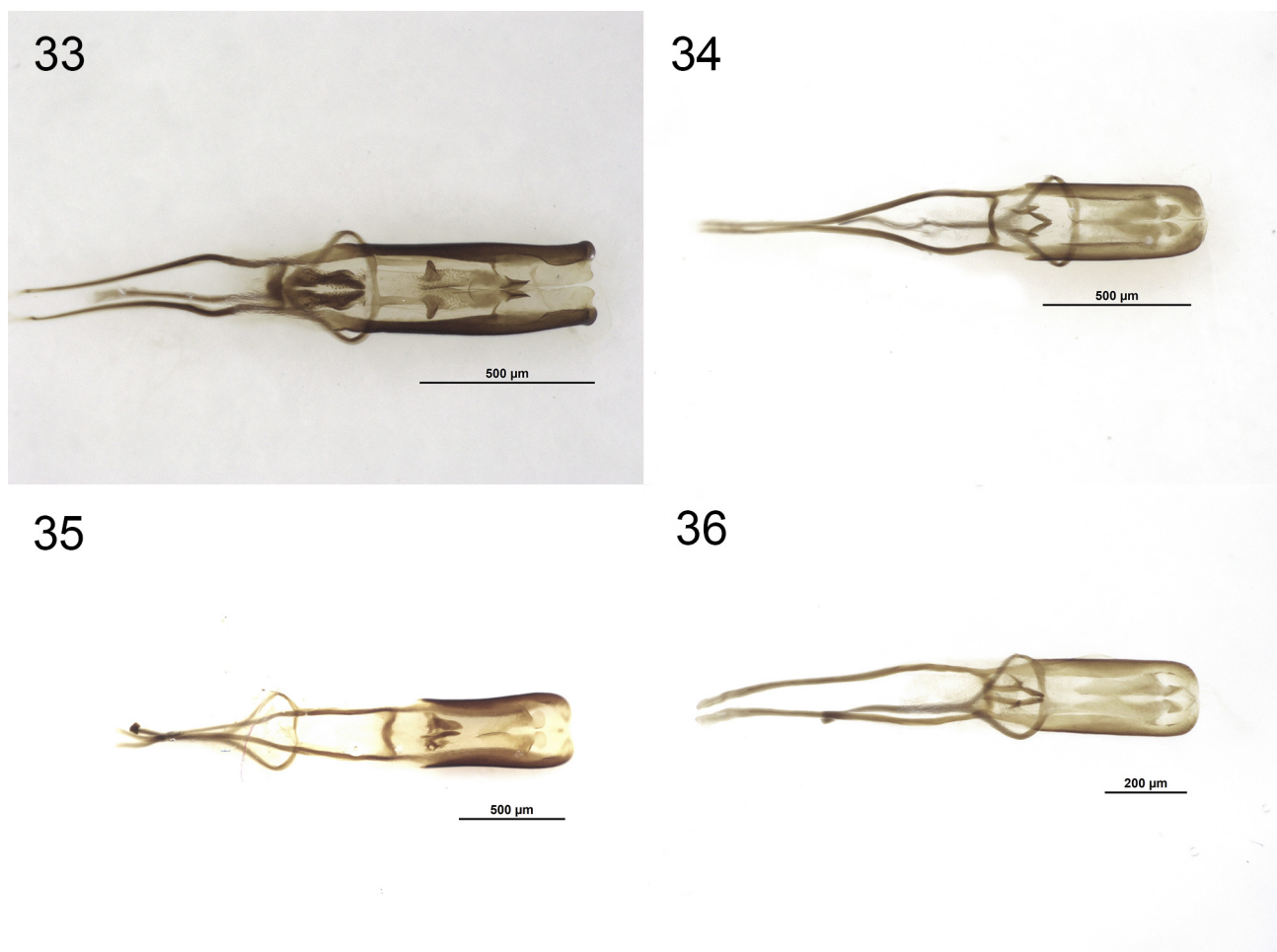
**Material examined:** 16 males, 11 females. Holotype male (CMNC), labelled DOMINICAN REPUBLIC: Province Monsenor Nouel, 25 km E El Rio (La Vega), 945m, 1.IX.1988, M.A. Ivie, T.K. Phillips & E.A. Johnson. Paratypes: Data as holotype (1 female, WIBF). Province Independencia, Sierra de Neiba, 1515m, 18°39.680'N, 71°46.418'W, 25.VII.1999, cloud forest, M. Ivie & K. Guerrero (1 female, WIBF). Province La Vega, Parque Nacional Armando Bermudez, La Cienaga, 1000m, 19.VII–2.VIII.1995, S. Peck, 95–32, tropical evergreen forest FIT (2 females; CMNC). Parque Nacional Armando Bermudez, La Cienaga, Rio Yaque N., 19°04.07'N, 70°52'W, 1100m, 4.IV.1992, M.A. Ivie, D. Sikes, W. Lanier (1 female; CMNC). Parque Nacional Armando Bermudez, trail west of La Cienaga, 900–1300m, 22.VI.2005, 19°03.988'N 70°51.764'W, L. Chamorro & A. Konstantinov (1 male; USNM). Parque Nacional Armando Bermudez, La Cienaga de Manabao, trail to Los Tablones, 19 03'41"N, 70 51'53"W, 1150m, 13.VI.2008, N. Franz (6 males, ASUHC, BMNH, CMNC, FSCA). 20 km SW Piedra Blanca,

29.V.1978, C.W. & L.B. O'Brien, G.B. Marshall (1 male; ASUHC: 1 male, 1 female; CWOB). 18 km SE Constanza, 4.VIII.1979, C.W. O'Brien (1 male; CWOB). 15 km S El Rio, 5.IX.1997, P.W. Kovarik (1 female; CWOB). 10 km W Jima, 27.V.1992, R. Turnbow (1 male, 1 female; CMNC). Distrito Nacional, Santo Domingo, 14.VII.1974, J. & S. Klapperich (2 females; CWOB). Province Elías Piña, La Estrella, 8 km E Hondo Valle, 7.VIII.1979, L.B. O'Brien (1 male; CWOB). Province Monsenor Nouel, Casabito, Cordillera Central, 5.VI.1974, J. & S. Klapperich (1 male, 1 female; CWOB). Province Santiago, Diego de Ocampo, 2000–4000', vii.1938, P.J. Darlington Jr. (2 males, MCZC).

**Derivation of species name:** This species is named after Guanyang Zhang, presently at the Florida Museum of Natural History, University of Florida, formerly at Arizona State University, Tempe, Arizona where he studied weevils of the subfamily Entiminae (and Heteroptera). He was also a field companion on the 2013 Cuba field trip.

**Natural History:** This species has been collected in tropical evergreen forest (1000–1100 m) and in cloud forest (1515 m).

**Comments:** This species is very similar to *S. turnbowi*, *S. ramosi* and *S. bautistai*, but can be distinguished by the shape of the basal sclerite in the male aedeagus, the lack of femoral teeth and the conical tubercle of abdominal ventrite 1 of males.



**FIGURES 33–36.** Species of *Sicoderus*. 33. *Sicoderus delauneyi*, aedeagus, dorsal view. 34. *Sicoderus detonnancouri*, aedeagus, dorsal view. 35. *Sicoderus franzi*, aedeagus, dorsal view. 36. *Sicoderus guanyangi*, aedeagus, dorsal view.

***Sicoderus hirsutiventris* Anderson**

(Figures 37–38, 45. Map 8)

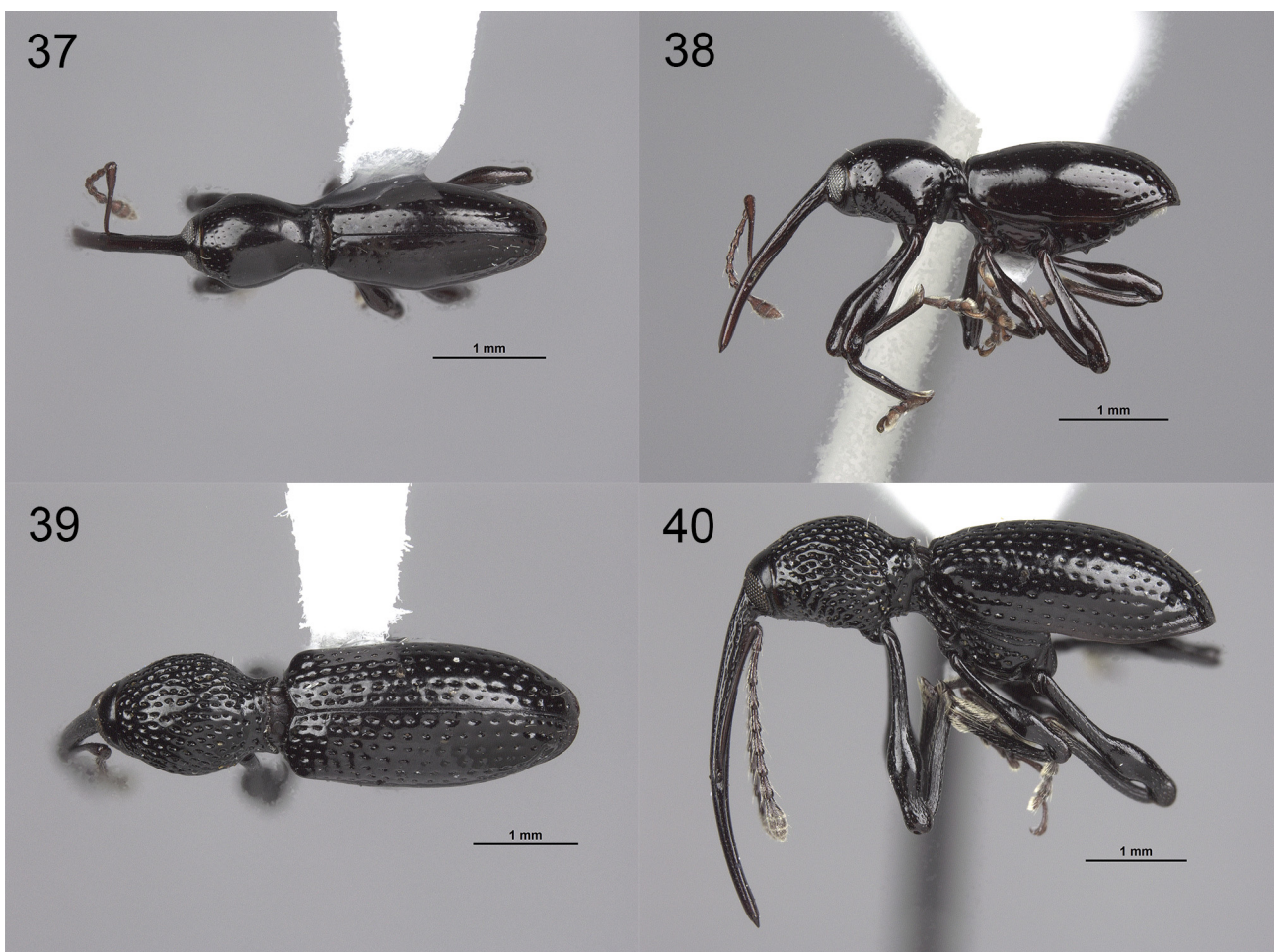
*Sicoderus hirsutiventris* Anderson 1999: 131. Holotype male (CWOB) from St. Thomas, Virgin Islands, examined in 1999.

**Description:** Length male, 4.3–6.5 mm. Integument black, shining. Eyes separated by a distance about one-half

width rostrum at midlength. Rostrum 0.80–0.85x length elytra in male. Antennal insertion at apical two-fifths in male. Prothorax constricted anteriorly, globose, widest at anterior one-third; punctures well-separated, very sparse, very fine and shallow on disk, slightly deeper and larger in anterior one-quarter and slightly deeper on flanks; with scattered, appressed setae along anterior constriction. Elytra in dorsal view distinctly widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; with isolated, erect but short (perhaps abraded or broken), scattered setae. Strial punctures evident, shallow, moderately fine; striae not impressed throughout length. Membranous wings present, slightly shorter than elytra in length. Abdominal ventrite 1 of male raised in middle near apical margin forming a markedly elevated tubercle with two small subcontiguous patches of setosity at tip. Ventrite 5 of male with large rounded deep, densely setose impression almost as large as entire ventrite 5. Legs with front femora with small, blunt ventral tooth; middle and hind femora lacking tooth; tarsal claws with small basal tooth. Aedeagus (fig. 45) widest at about middle, internal sac with group of elongate curved sclerites at about basal 2/3 of length. Female not known.

**Material examined:** VIRGIN ISLANDS: St. John Est., Gt. Cinnamon Bay, Cinnamon Bay Trail, 17 July 1994, M.S. Becker, beating (male paratype, WIBF).

**Comments:** This species was described by Anderson (1999) from two males collected on the Virgin Islands.



**FIGURES 37–40.** Species of *Sicoderus*. 37. *Sicoderus hirsutiventris*, dorsal habitus. 38. *Sicoderus hirsutiventris*, lateral habitus. 39. *Sicoderus humeralis*, dorsal habitus. 40. *Sicoderus humeralis*, lateral habitus.

***Sicoderus humeralis* Anderson, n. sp.**

(Figures 39–40, 46. Map 2)

<http://zoobank.org/urn:lsid:zoobank.org:act:3EA36BDA-3FFC-4197-8B3C-5CB7B34E0B79>

**Description:** Length male, 4.4 mm. Integument black, shining. Eyes narrowly separated by a distance of about 2 to 3 ommatidia. Rostrum 0.97x length elytra in male. Antennal insertion slightly beyond middle in male. Prothorax

constricted anteriorly, globose, widest at about middle; punctures dense, large and deep, subcontiguous, forming striolae on disc and laterally on flanks; sparse erect setae present near posterior margin. Elytra in dorsal view widest at about midlength, lateral margins subparallel anteriorly and posteriorly; humeri present, strongly angulate; setae present, few (perhaps abraded or broken). Strial punctures large, deep; striae very slightly impressed throughout length. Membranous wings present. Abdominal ventrite 1 of male slightly raised in middle near posterior margin to small tubercle with small patch of setosity at tip. Ventrite 5 of male with median circular impression towards apex. Legs with all femora with weakly developed small tooth; tarsal claws with small basal tooth. Aedeagus (fig. 46) distinctly widest at middle, internal sac with pair of very elongate basal sclerites subparallel, each slightly sinistrally curved, conjoined apically. Female not known.

**Material examined:** 1 male. Holotype male (CMNC), labelled DOMINICAN REPUBLIC: Province Santiago Rodriguez, Sabaneta, Gurabo, 5.VII.1980, Abud-Mota.

**Derivation of species name:** This species is named 'humeralis' after the well-developed humeri, an uncommon feature in West Indian *Sicoderus*, where so many of the species are flightless.

**Natural History:** No details of biology are known.

**Comments:** The single male of this species known is very similar to *S. championi*; however, in dorsal view the elytral humeri of *S. humeralis* are more pronounced with the elytra not noticeably inflated towards the middle and the form of the basal sclerite of the internal sac of the male genitalia is different (compare figs. 23 and 46).

### ***Sicoderus ivieorum* Anderson**

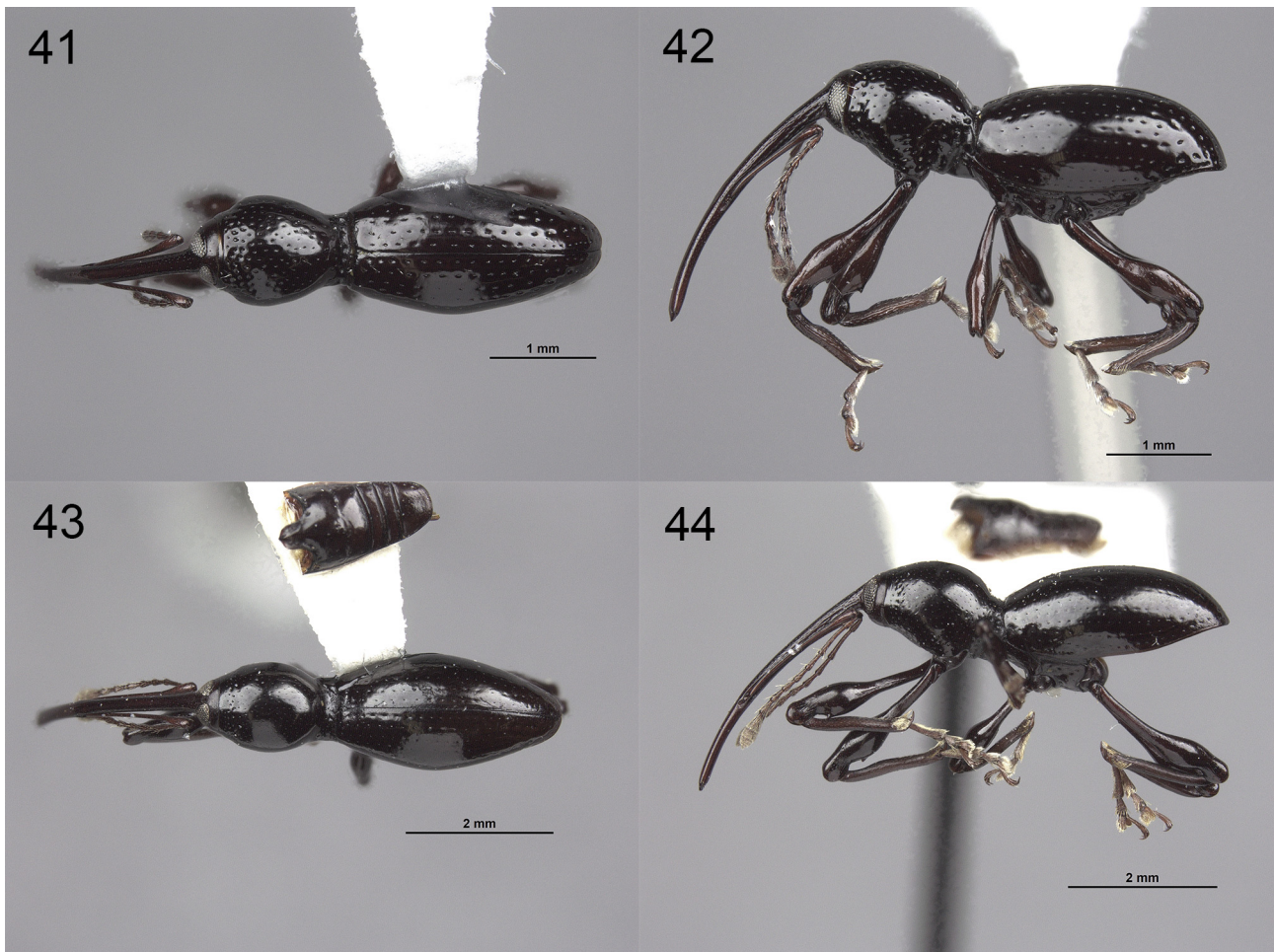
(Figures 41–42, 47. Map 7)

*Sicoderus ivieorum* Anderson 1999: 129. Holotype male (USNM) from St. John, Virgin Islands, examined in 1999.

**Description:** Length male, 5.2–6.2 mm; female, 4.8–7.2 mm. Integument black, shining. Eyes separated by a distance about one-half width rostrum at midlength. Rostrum 0.97–1.00x length elytra in male; 1.09–1.17x length elytra in female. Antennal insertion at about midlength in male and female. Prothorax constricted anteriorly, globose, widest at about anterior one-third; punctures well-separated, sparse, very fine and shallow on disk, slightly deeper and larger in anterior one-quarter and very slightly deeper on flanks; with scattered, erect setae along anterior constriction. Elytra in dorsal view distinctly widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; with isolated, erect but short (perhaps abraded or broken), setae in sutural region. Strial punctures evident, shallow, moderately fine; striae not impressed throughout length. Membranous wings lacking. Abdominal ventrite 1 of male moderately raised in middle near apical margin forming a moderately elevated tubercle with two small subcontiguous patches of setosity at tip; of female, moderately swollen in middle near apical margin. Ventrite 5 of male with rounded shallow impression in apical three-quarters; of female, uniformly convex. Legs with all femora with ventral margin with distinct ventral tooth; tooth slightly larger on anterior legs; tarsal claws with small basal tooth. Aedeagus (fig. 47) widest at about apical 1/3 but also widened at apex, internal sac with pair of elongate basal sclerites very slightly convergent, each with short basal outwardly directed extension. Female not dissected.

**Material examined:** 3 males, 8 females. PUERTO RICO: Cambalache Forest Reserve, 28.VII.1979, G.B. Marshall (2 males, 6 females; CWOB). Cambalache State Forest, 3.VIII.1999, at night, C.W. O'Brien & P. Kovarik (1 female; CWOB). 8 mi. SE Arecibo, 8.II.1969, L. & C.W. O'Brien (1 female; CWOB). Mayaguez, Bosque Miradero, Cart. 108, km. 2.6, 18 12'50"N, 67 08'18"W, 45 m, 5.IV.2009, R. Colon (1 male, UPRM). BRITISH VIRGIN ISLANDS: Virgin Gorda Island, sweeping, 23.X.2011, S.C. Valentine-Cooper (1 male; FSCA). Guana Island, north side, malaise, IX.2011, B.D. & S.C. Valentine (1 male; FSCA). Tortola Island, Chalwell, 1550', at light, IX.2011, C. Petrovic collector (1 female; FSCA). Additional specimens were examined by Anderson (1999).

**Comments:** This species was described by Anderson (1999) from specimens collected on the Virgin Islands and British Virgin Islands. Anderson (1999) also recorded a single female of a *Sicoderus* species thought to be *S. ivieorum* from Puerto Rico. Male specimens now available for study from Puerto Rico confirm that this species is *S. ivieorum*.



**FIGURES 41–44.** Species of *Sicoderus*. 41. *Sicoderus ivieorum*, dorsal habitus. 42. *Sicoderus ivieorum*, lateral habitus. 43. *Sicoderus lucidus*, dorsal habitus. 44. *Sicoderus lucidus*, lateral habitus.

***Sicoderus lucidus* Anderson, n. sp.**

(Figures 43–44, 48. Map 10)

<http://zoobank.org/urn:lsid:zoobank.org:act:63F7B178-05FC-4FBC-A5B7-F6F9B0F1E746>

*Sicoderus* new sp. (near *contiguous* Vanin); O'Brien and Turnbow 2011: 9

**Description:** Length male, 4.5–6.0 mm; female, 4.7–5.8 mm. Integument black, shining. Eyes separated by a distance about one-half width rostrum at midlength. Rostrum 1.03–1.13x length elytra in male; 1.20–1.36x length elytra in female. Antennal insertion at about apical 1/3 in male, slightly beyond midlength in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures widely spaced, very small, very shallow on disc and laterally on flanks; no setae present. Elytra in dorsal view widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; no setae present. Strial punctures evident, small, shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male in middle near posterior margin with two small raised patches of fine setosity; of female, uniformly convex in middle near posterior margin. Ventrite 5 flattened medially in male, rounded in female. Legs with front femora with ventral margin with small sharp tooth, middle and hind femora each with small blunt tooth; tarsal claws lacking small basal tooth. Aedeagus (fi.g 48) widest towards apex, internal sac with pair of elongate thick basal sclerites subparallel. Female not dissected.

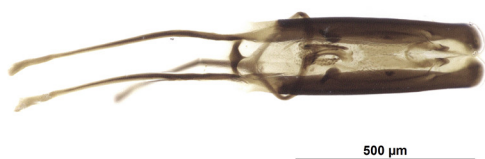
**Material examined:** 8 males, 3 females. Holotype male (CWOB), labelled DOMINICA: St. George Parish, Morne Trois Pitons National Park, Freshwater Lake Road, 2600', 13.VIII.1986, L. & C.W. O'Brien. Paratypes. Data as holotype (2 males, 2 females, CMNC, CWOB). 21.VIII.1986, L. & C.W. O'Brien (1 male; CWOB).

16.VIII.1986, L. & C.W. O'Brien (1 male, 1 female; CWOB). 25.VI.2004, C.W. & L. O'Brien (1 male; CWOB). St. David Parish, Emerald Pool Trail, 20.VI.2004, R. Turnbow (1 male; CMNC). Syndicate Falls Nature Trail, 1600', 28.VI.2994, C.W. and L. O'Brien (1 male; CWOB).

**Derivation of species name:** This species is named 'lucidus' after its shining, almost glabrous and impunctate appearance.

**Comments:** This species is very similar to *S. delauneyi* from Guadeloupe but *S. lucidus* has a small basal tooth on each tarsal claw, the setose patches on ventrite 1 of the abdomen of males are located at the posterior margin of the ventrite, and the basal sclerite of the internal sac of the male genitalia is different.

45



46



47



48



**FIGURES 45–48.** Species of *Sicoderus*. 45. *Sicoderus hirsutiventris*, aedeagus, dorsal view. 46. *Sicoderus humeralis*, aedeagus, dorsal view. 47. *Sicoderus ivieorum*, aedeagus, dorsal view. 48. *Sicoderus lucidus*, aedeagus, dorsal view.

***Sicoderus medranae* Anderson, n. sp.**

(Figures 49–50, 57. Map 5)

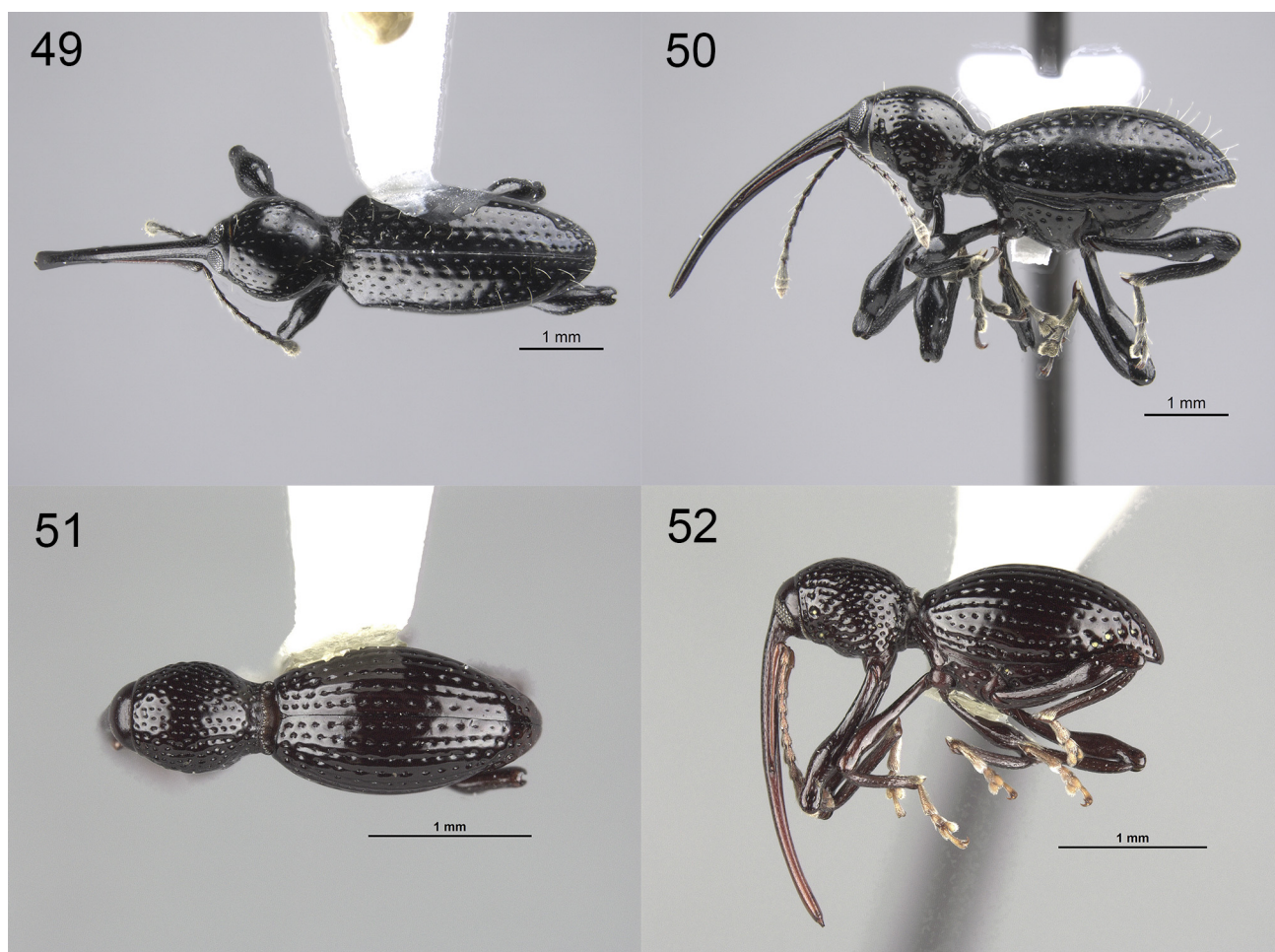
<http://zoobank.org/urn:lsid:zoobank.org:act:F9F09DA2-1B04-450D-9770-672E1A3C18D5>

**Description:** Length male, 5.1–5.6 mm; female, 4.5–5.3 mm. Integument black, shining. Eyes closely separated by a distance equivalent to about 2 or 3 ommatidia. Rostrum 0.82–0.98x length elytra in male; 0.96–0.99x length elytra in female. Antennal insertion slightly beyond middle in male, at about middle in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures dense, small and shallow on disc, slightly larger, deeper and forming weak striolae laterally on flanks; erect setae present. Elytra in dorsal view widest at about midlength, lateral margins subparallel anteriorly and posteriorly; humeri present, strongly angulate; erect setae present, long, fine. Strial punctures evident, small, shallow; striae not, to very slightly impressed throughout length. Membranous wings present. Abdominal ventrite 1 of male slightly raised in middle near posterior margin with a

pair of small patches of setosity at tip; of female, uniformly convex in middle near posterior margin. Ventrite 5 of male concave medially towards apex; of female, uniformly convex. Legs with all femora with ventral margin with small to moderately large tooth (largest on front femora); tarsal claws with small basal tooth. Aedeagus (fig. 57) slightly widest at middle, internal sac with pair of elongate thick basal sclerites very slightly convergent apically, conjoined anteriorly. Female not dissected.

**Material examined:** 3 males, 6 females. Holotype male (CMNC), labelled DOMINICAN REPUBLIC: Province Monsenor Nouel, La Presa de Blanco, 11–14.V.2001, M. Takizawa. Paratypes. Data as holotype (1 female; MHND). Province La Vega, Parque Nacional Armando Bermudez, Cienaga, 1020m, 19.VII–2.VIII.1995, S. Peck, 95-34, tropical evergreen forest FIT (1 female; CMNC). Parque Nacional Armando Bermudez, 7 km SE Jarabacoa, 970m, 23.VI.2005, 19°05.092'N 70°35.864'W, L. Chamorro & A. Konstantinov (1 male; USNM). Province San Cristobal, Borbon, Cuevas Pomier, 200m, 13–28.VII.1995, S. Peck, tropical deciduous forest FIT. 95-23 (1 female; CMNC). Province San Pedro de Macoris, 12 km W San Pedro de Macoris, 5.V.1985, E. Giesbert (1 female; CWOB). Province Santiago, Diego de Ocampo, 2000–4000', vii.1938, P.J. Darlington Jr. (1 female, MCZC). Distrito Nacional, Villa Mella, 1.V.1959, M.W. Sanderson, RD59-1 (1 female; CWOB). HAITI: Massif La Hotte, N.E. foothills, 2000–4000', 10.x.1934, P.J. Darlington Jr. (1 male, MCZC).

The male from Haiti was dissected and matches other specimens from the Dominican Republic. A single female from Puerto Rico, near Guajataco, 28.iv.1959, M.W. Sanderson, PR59-21 (INHS) may be this same species but a male is needed for confirmation.



**FIGURES 49–52.** Species of *Sicoderus*. 49. *Sicoderus medranae*, dorsal habitus. 50. *Sicoderus medranae*, lateral habitus. 51. *Sicoderus morio*, dorsal habitus. 52. *Sicoderus morio*, lateral habitus.

**Derivation of species name:** This species is named after Sardis Medrano Cabral, of Santo Domingo in the Dominican Republic, in recognition of her assistance in the study of various Dominican Republic weevils.



**Natural History:** Two adults were collected in flight intercept traps in tropical deciduous and evergreen forests (200–1020 m).

**Comments:** This species is similar to *S. championi* but differs in the fine punctuation of the pronotum and the elytral humeri more strongly developed. Male genitalia are very similar in the form of the basal sclerite of the internal sac.

### ***Sicoderus morio* (Suffrian)**

(Figures 51–52, 58. Map 1)

*Toxentes morio* Suffrian 1871: 151. Holotype not located.

*Erodiscus morio*; Chevrolat 1879: 10. Voss 1935. Blackwelder 1947: 836. O'Brien and Wibmer 1982: 101. Peck 2005: 219.

*Sicoderus morio*; Vanin 1986: 616.

**Description:** Length male, 3.7 mm; female, 2.7–3.1 mm. Integument black, shining. Eyes separated by a distance about 2/3 width rostrum at midlength. Rostrum 1.13x length elytra in male; 1.15x length elytra in female. Antennal insertion slightly beyond apical 1/3 in male, at about middle in female; antennae with article 2 of funicle long, 1.50–1.66x as long as article 3. Prothorax constricted anteriorly, globose, widest at about middle; punctures dense, large and moderately deep, subcontiguous, forming striolae on disc and laterally on flanks; erect setae absent. Elytra in dorsal view widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; setae absent. Strial punctures evident, large; interstriae slightly elevated, rounded; striae impressed throughout length. Membranous wings absent. Abdominal ventrite 1 of male slightly raised in middle near posterior margin with a small patch of setosity at tip; of female, uniformly convex in middle near posterior margin. Ventrite 5 of male flattened medially towards apex; of female, uniformly convex. Legs with all femora simple, ventral margin lacking any trace of tooth; tarsal claws simple, no basal tooth. Aedeagus (fig. 58) widest towards apex, internal sac with oval basal sclerite complex somewhat omega-shaped. Female not dissected.

**Material examined:** CUBA: Cienfuegos, mountains 10 mi. E. Soledad, 28.xi.1926, P.J. Darlington Jr., sweep woods (1 male, CMNC; 1 female, MCZC). Havana Province, Sierra Bonilla, 27.I.1932, A. Bierig (1 female; CMNC).

**Comments:** Suffrian (1871) described this species from an unstated number of specimens from Cardenas, Cienfuegos and Guantanamo. Vanin (1986) was unable to find any specimens of this species and left the status as *incertae sedis* within *Sicoderus*. Like Vanin, I have not seen type material for *Sicoderus morio*, and have not examined material in the Suffrian voucher collection in Havana; Peck (2005) states that this is species #1000 in the collection but this has not been verified. Suffrian's descriptions are rather wordy and it is difficult to extract characters with diagnostic value. He describes the humeri as being 'shallowly rounded', apparently supporting an interpretation of the species as flightless, the elytra lacking humeri. The elytral striae are stated as 'coarsely punctate, interstriae slightly raised'. The pronotum and prosternum are coarsely punctate with the punctuation confluent on the flanks. These character states would appear to fit three specimens as follows: a male and female from near Soledad (Cienfuegos) and a female specimen from Sierra Bonilla (Havana). Peck (2005) lists Cienega de Zapata (Matanzas) but I have not seen any specimens from this locality.

### ***Sicoderus perezii* Anderson, n. sp.**

(Figures 53–54, 59. Map 4)

<http://zoobank.org/urn:lsid:zoobank.org:act:598DFB29-4221-4536-9E5B-7EA282588284>

**Description:** Length male, 3.9–6.2 mm, female, 4.0–5.8 mm. Integument black, shining. Eyes narrowly separated by a distance of about 2–3 ommatidia. Rostrum 1.11–1.26x length elytra in male, 1.20–1.34x length elytra in female. Antennal insertion slightly beyond middle in male, at about middle in female. Prothorax constricted anteriorly, globose, widest slightly before middle; punctures closely spaced, large and deep, subcontiguous on disc and flanks forming distinct dorsal and lateral striolae; sparse erect setae present. Elytra in dorsal view widest at about midlength, lateral margins slightly convergent anteriorly and posteriorly; humeri present, weakly angulate; setae present, few. Strial punctures large, deep; striae not impressed throughout length. Membranous wings present.

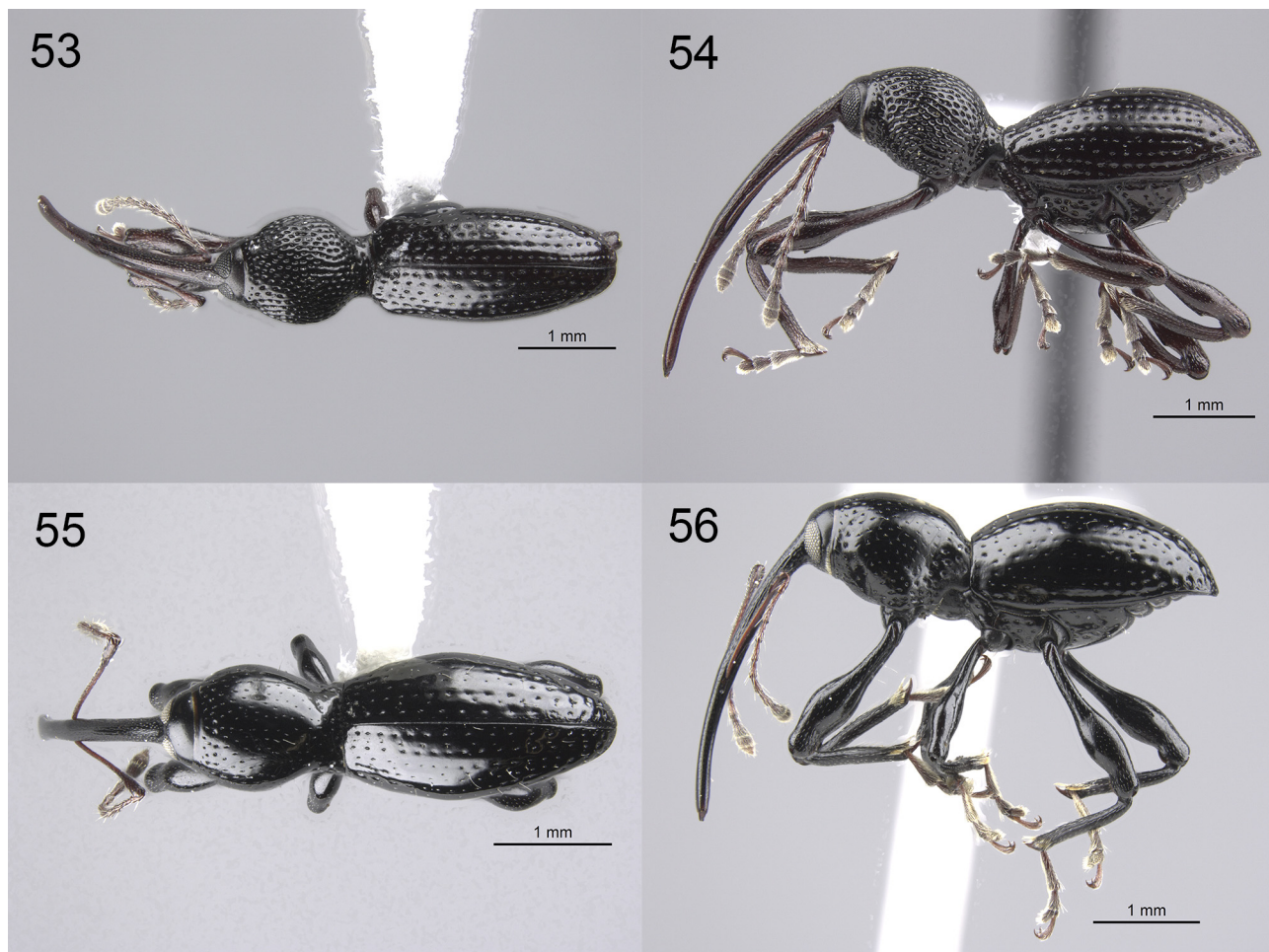
Abdominal ventrite 1 of male slightly raised in middle near posterior margin to small tubercle with small transverse patch of setosity at tip, of female, evenly convex. Ventrite 5 of male with median longitudinal finely setose impression, margins slightly raised and tufted with longer, fine setae at about midlength; of female tumid medially, not setose. Legs with all femora with inner margin with small tooth, tooth acute or blunt on front femur, very small, blunt on middle and hind femora; tarsal claws with small basal tooth. Aedeagus (fig. 59) widest at middle, internal sac with pair of elongate slightly sinistrally curved basal sclerites subparallel and two basal small patches of fine spicules. Female not dissected.

**Material examined:** 4 males, 3 females. Holotype male (CMNC), labelled DOMINICAN REPUBLIC: Province Barahona, 4.5 km S. Barahona, 17.V.1992, R.H. Turnbow, Jr. Paratypes. Same data as for holotype (1 male; CMNC). 11 km S. Barahona, 15–17.V.1985, J.E. Wappes (1 female; CWOB). 42 km S. Barahona, 30.VIII.1997, C.W. O'Brien (1 female; CWOB). Province Pedernales, 4 km W. Oviedo, 10m, arid thorn scrub, FIT, 91-344, 28.XI.–4.XII.1991, L. Masner & S.B. Peck (1 male; CMNC). 14 km N. Cabo Rojo, 150m, 19.VIII.1988, thorn scrub, tropical dry forest, M.A. Ivie, K. Phillips, K.A. Johnson (1 female; CMNC). Cabo Rojo, 8.VII.1993, D.S. Sikes and R.P. Rosenfeld, uv light (1 male; WIBF).

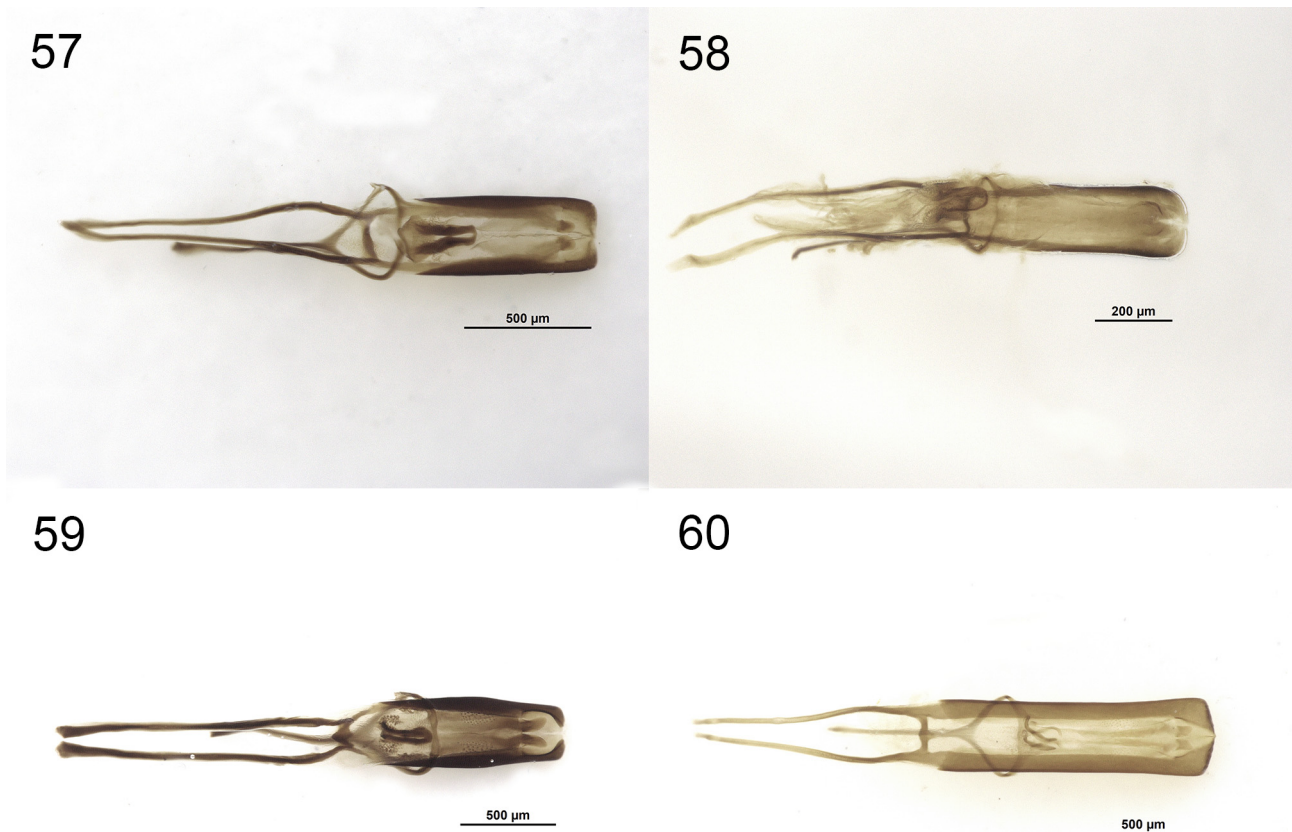
**Derivation of species name:** This species is named after Daniel E. Perez-Gelabert, a Dominican entomologist now at the United States National Museum in Washington, D.C. Dr. Perez-Gelabert has been working for a number of years compiling lists of the arthropods of Hispaniola.

**Natural History:** Adults have been collected in low elevation tropical thorn scrub.

**Comments:** This species is very similar to *S. championi* and was confused with this species by me during early manuscript preparation. The rostrum is longer in both sexes in *S. perezii* and the basal sclerite of the internal sac is different (compare figs. 23 and 59). It appears limited to Barahona and Pedernales provinces in the southern Dominican Republic.



**FIGURES 53–56.** Species of *Sicoderus*. 53. *Sicoderus perezii*, dorsal habitus. 54. *Sicoderus perezii*, lateral habitus. 55. *Sicoderus pseudostriatolateralis*, dorsal habitus. 56. *Sicoderus pseudostriatolateralis*, lateral habitus.



**FIGURES 57–60.** Species of *Sicoderus*. 57. *Sicoderus medranae*, aedeagus, dorsal view. 58. *Sicoderus morio*, aedeagus, dorsal view. 59. *Sicoderus perezii*, aedeagus, dorsal view. 60. *Sicoderus pseudostriatolateralis*, aedeagus, dorsal view.

***Sicoderus propinquus* Vanin**  
(Map 10)

*Sicoderus propinquus* Vanin 1986: 586. Holotype male (BMNH, lost) from Mustique Island, Grenadines, not examined. Anderson 1999: 135.

**Description:** Length 3.5–5.9 mm (both sexes pooled). Integument black, shining. Eyes separated by a distance about width of 3 ommatidia. Rostrum 1.12–1.23x length elytra in male; 1.32–1.38x length elytra in female. Antennal insertion at about apical two-fifths in male, slightly before middle in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures sparse, small, elongate on disc, larger and deeper, forming striolae laterally on flanks; no setae present. Elytra in dorsal view widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; no setae present. Strial punctures evident, small, shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male slightly impressed at middle, with two moderately separated rounded tubercles near posterior margin of depression, each tubercle with small patch of fine setosity at tip; of female, uniformly convex in middle near posterior margin. Ventrite 5 with impression in apical one-half, convex in female. Legs with front femora with ventral margin with small tooth, middle and hind femora each with very small blunt tooth; tarsal claws lacking small basal tooth. Aedeagus not available for study. Female not available for study (specimens in BMNH lost).

**Material examined:** None.

**Comments:** Vanin (1986) described this species from a number of specimens from Mustique Island,

Grenadines, and from Grenada. According to staff at the Natural History Museum in London, all specimens (holotype and nine paratypes) from their collection were lost in return transit following description and study by Vanin. The description of the species presented here is modified from Vanin (1986).

***Sicoderus pseudostriatolateralis* Anderson, n. sp.**

(Figures 55–56, 60. Map 5)

<http://zoobank.org/urn:lsid:zoobank.org:act:D397551C-B834-44C8-8F37-D16D13067C7E>

**Description:** Length male, 3.6 mm; female, 4.0–4.5 mm. Integument black, shining. Eyes moderately separated by a distance about one-half width rostrum at midlength. Rostrum 1.02x length elytra in male; 1.06–1.12x length elytra in female. Antennal insertion at about apical 1/3 in male, at about apical 2/5 in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures moderately dense, regularly spaced, very fine and shallow on disc and laterally on flanks; erect setae absent; posterolateral flange (extended over base of elytra) with dense microstriae. Elytra in dorsal view widest at about midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; scattered erect fine setae present. Strial punctures evident, small, shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male in middle near posterior margin with two closely spaced small patches of setosity; of female, uniformly convex in middle near posterior margin. Ventrite 5 of male flattened medially towards apex, not setose; of female, uniformly convex. Legs with all femora lacking tooth; tarsal claws with small basal tooth. Aedeagus (fig. 60) widest at apex, internal sac with pair of elongate basal sclerites sinistrally strongly L-shaped. Female not dissected.

**Material examined:** 1 male, 8 females. Holotype male (CMNC), labelled DOMINICAN REPUBLIC: Province Pedernales, Parque Nacional Sierra de Baoruco, Las Abejas, 1240m, 18°09.023N, 71°37.387W, 9.VIII.1999, M.A. Ivie. Paratypes. Province Pedernales, ca. 35 km N. Cabo Rojo, 1250m, Las Abejas, 9.IX.1988, beating vegetation, M.A. Ivie, T.K. Phillips & K.A. Johnson (1 female, WIBF). Sierra de Baoruco, Las Abejas, 1150m, 18°09.011'N, 71°37.342'W, 17.VII.2006, L. Chamorro & A.S. Konstantinov (1 female; USNM). HAITI : Department Sud-Oueste, Parc National La Visite, Morne la Visite, S.E. slope, 17.V.1984, M.C. Thomas (1 female; FSCA). Parc National La Visite, 1 km S. Roche Plat, 22.V.1984, M.C. Thomas (1 female; CMNC). Parc National La Visite, nr. Park Headquarters, 1838m, 18.V.1984, M.C. Thomas (1 female; CWOB). Massif de la Selle, Morne d'Enfer, 1850m, 15.V.1984, M.C. Thomas (1 female; FSCA). Morne Guimby, 22 km S.E. Fond Verettes, 6500', 19.VII.1956, at night, B. & B. Valentine (2 females; FSCA).

**Derivation of species name:** This species is named 'pseudostriatolateralis' after its similarity to *S. striatolateralis* as a second species with the distinctive microstriate lateral pronotal flange.

**Natural History:** Adults have been collected beating vegetation from forests between 1150 and 1850 m elevation.

**Comments:** This species is very similar to *S. striatolateralis* but the latter has a blunt tooth on the front femora, few if any elytral setae and different male genitalia.

***Sicoderus ramosi* (Sleeper)**

(Figures 61–62, 69. Map 2)

*Erodiscus ramosi* Sleeper 1954: 350. Holotype male (USNM) from Colonia Ramfis, Dominican Republic, examined. O'Brien and Wibmer 1982: 101.

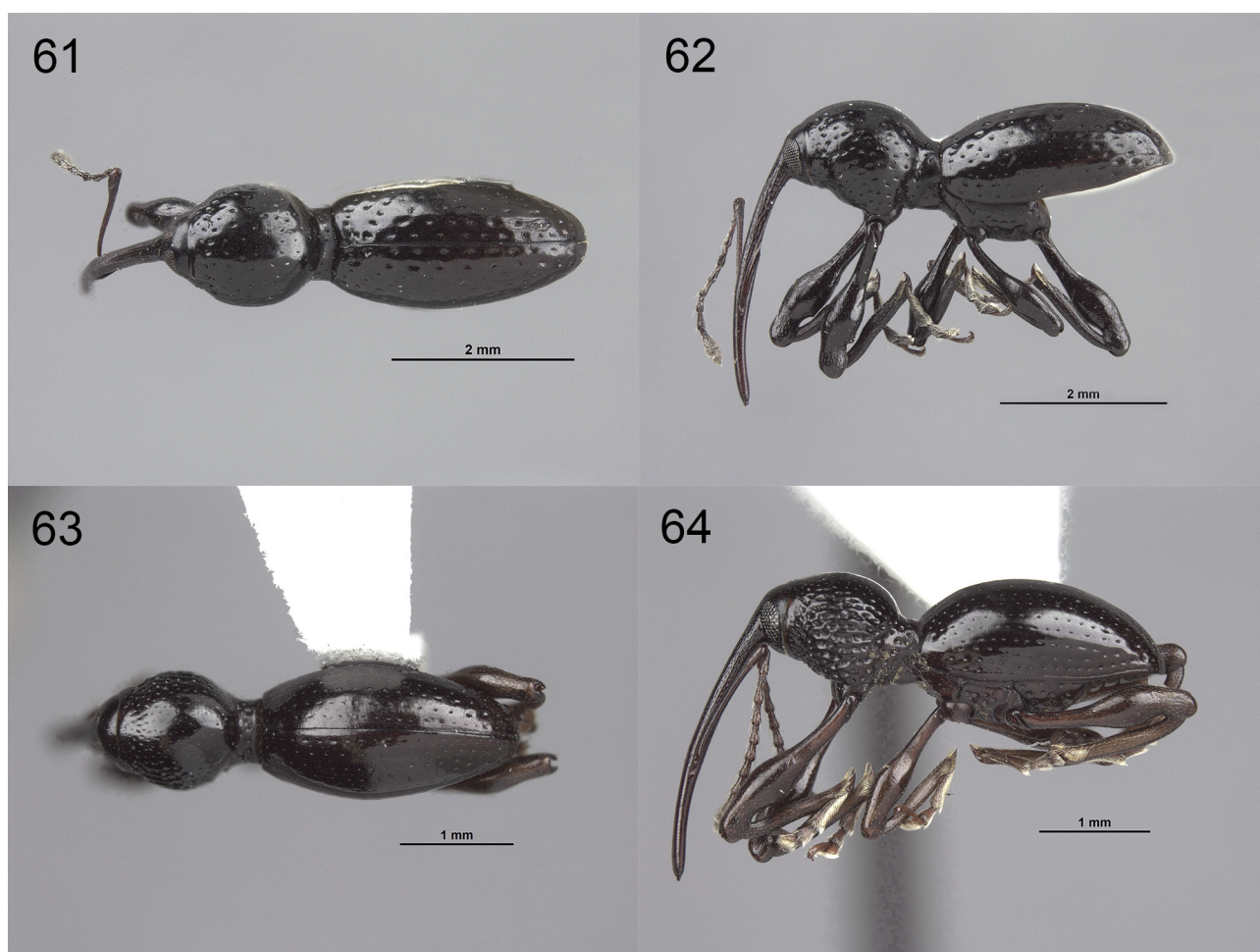
*Sicoderus ramosi*; Vanin 1986: 593. Anderson 1999: 135. Perez-Gelabert 2008: 136.

**Description:** Length male, 4.2 mm. Integument black, shining. Eyes rather widely separated by a distance about one-half width rostrum at midlength. Rostrum 1.00x length elytra in male. Antennal insertion at about apical 2/5 in male. Prothorax constricted anteriorly, globose, widest at about middle; punctures widely spaced, small, shallow on disc, slightly larger and deeper, but not forming striolae laterally on flanks; erect setae absent. Elytra in dorsal view widest at about midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; erect setae absent. Strial punctures evident, small, shallow; striae slightly impressed. Membranous wings absent. Abdominal ventrite 1 of male slightly raised in middle near posterior margin with small transverse

patch of setosity at tip. Ventrite 5 with impression in apical one-half, not setose. Legs with front femora with ventral margin with small, blunt tooth, tooth absent (or nearly) on middle and hind femora; tarsal claws with small basal tooth. Aedeagus (fig. 69) widest at apex, internal sac with pair of elongate basal sclerites straight, convergent and separate anteriorly, each with short basal straight extension. Female not known.

**Material examined:** Colonia Ramfis, 3.IV.1953, J.A. Ramos (1 male holotype; USNM). Colonia Ramfis, Trujillo Valley, 7.VIII.1958, A.F. Archer (1 female; CMNC).

**Comments:** Vanin (1986) recognized this species from four specimens occurring in three somewhat distant localities, one in Haiti and two in the Dominican Republic. I have examined the specimens considered by Vanin (1986) as this species and additional specimens not then available to him, and conclude that specimens from two of the localities represent additional new species, close to *S. ramosi*, but distinct in the form of the basal sclerite complex of the male internal sac. I have only been able to find a single additional specimen of *S. ramosi*, a female, which I associate with the holotype by general morphology and locality.



**FIGURES 61–64.** Species of *Sicoderus*. 61. *Sicoderus ramosi*, dorsal habitus. 62. *Sicoderus ramosi*, lateral habitus. 63. *Sicoderus remotus*, dorsal habitus. 64. *Sicoderus remotus*, lateral habitus.

***Sicoderus remotus* Vanin**

(Figures 63–64, 70. Map 10)

*Sicoderus remotus* Vanin 1986: 584. Holotype male (BMNH) from St. Vincent, examined. Anderson 1999: 135.

**Description:** Length 2.8–4.7 mm (unsexed). Integument black, shining. Eyes separated by a distance about width of 3 ommatidia. Rostrum 1.09–1.19x length elytra in male; 1.21–1.25x length elytra in female. Antennal insertion at about apical two-fifths in male, at about middle in female. Prothorax constricted anteriorly, globose, widest at

about middle; punctures sparse, small, elongate on disc, larger and deeper, forming striolae laterally on flanks; no setae present. Elytra in dorsal view widest at midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; no setae present. Strial punctures evident, small, shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male deeply impressed at middle, with two widely separated, rounded tubercles near posterior margin of depression, each tubercle with small patch of fine setosity at tip; of female, uniformly convex in middle near posterior margin. Ventrite 5 with circular depression in apical one-half, convex in female. Legs with front femora with ventral margin with small tooth, middle and hind femora each with very small blunt tooth; tarsal claws lacking small basal tooth. Aedeagus (fig. 70) widest at apex, internal sac with pair of short basal sclerites dextrally strongly L-shaped. Female not dissected.

**Material examined:** ST. VINCENT: St. Andrew Parish, Vermont Nature Trail, 1.IX.1991, C.W. & L. O'Brien (1 male; CWOB). The type series from St. Vincent, West Indies (holotype, 9 male paratypes, 9 female paratypes; BMNH) was examined.

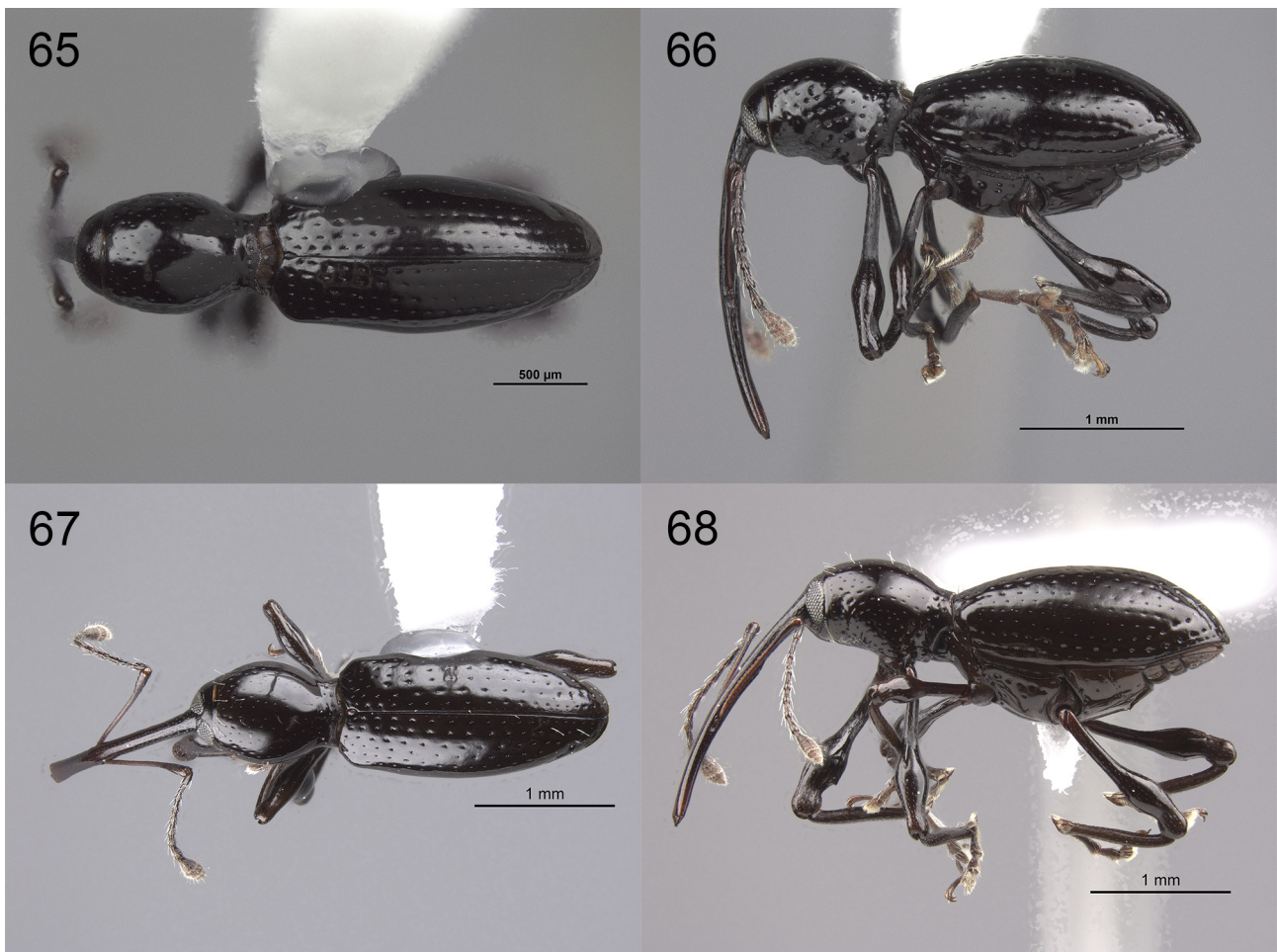
**Comments:** Aside from the single male noted above, the description presented here is modified from Vanin (1986). Vanin (1986) named this species from specimens from a number of unspecified sites on St. Vincent.

***Sicoderus schoenherri* Vanin**

(Figures 65–66, 71. Map 4)

*Sicoderus schoenherri* Vanin 1986: 596. Holotype male (USNM) from 4 km S.E. Rio Limpio, Dominican Republic, examined.

Anderson 1999: 135. Perez-Gelabert 2008: 136.



**FIGURES 65–68.** Species of *Sicoderus*. 65. *Sicoderus schoenherri*, dorsal habitus. 66. *Sicoderus schoenherri*, lateral habitus. 67. *Sicoderus sleeperi*, dorsal habitus. 68. *Sicoderus sleeperi*, lateral habitus.

**Description:** Length male, 2.8–3.3 mm; female, 2.4–3.8 mm. Integument black, shining. Eyes widely separated by a distance equivalent about two-thirds width of rostrum at midlength. Rostrum 1.03–1.15x length elytra in male; 1.11–1.48x length elytra in female. Antennal insertion at about middle in male, slightly before middle in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures sparse, small and shallow on disc, larger, deeper but separate on flanks, not forming striolae; erect setae absent. Elytra in dorsal view widest at about midlength, lateral margins subparallel anteriorly and posteriorly; humeri present, strongly angulate; erect setae absent. Strial punctures evident, very small, shallow; striae not impressed throughout length. Membranous wings present. Abdominal ventrite 1 of male slightly raised in middle near posterior margin with small transverse patch of setosity at tip; of female, uniformly convex in middle near posterior margin. Ventrite 5 of male concave medially towards apex, impression finely setose; of female, uniformly convex, not setose. Legs with front femora with ventral margin with small, blunt tooth, tooth absent (or nearly) on middle and hind femora; tarsal claws lacking basal tooth. Aedeagus (fig. 71) widest towards apex, internal sac with pair of short basal sclerites subparallel but widened and conjoined anteriorly, each with fine wavy tail-like basal extension. Female not dissected.

**Material examined:** DOMINICAN REPUBLIC: Distrito Nacional, La Malena, Boca Chica, 20.IX.1979, Marcano (1 female; MHND). Boca Chica, 4.VII.1985, W.E. Clark (1 male, 2 female; CWOB). 24 km E Santo Domingo, 30.V.1978, C.W. and L. O'Brien, G.B. Marshall (1 male; CWOB). Province Duarte, 15 km N.E. San Francisco de Macoris, 300m, V.1991, L. Masner, malaise trap (1 male, 2 females; CMNC). Province Hato Mayor, Parque Nacional Los Haitises, W. Sabana de la Mar, bosque humedeo, 2.VII.1992, M.A. & R.O. Ivie (1 male; CMNC). Province La Altagracia, 9 km SW Campo Nuevo, 1.VIII.1979, G.B. Marshall (1 female; CWOB). Province La Vega, 1 km N.W. Manabao, 5–6.VI.1994, M.C. Thomas (2 males; CMNC, FSCA). Manabao, 15.VII.1996, R. Turnbow (1 male; CMNC). Guaraguao, 12–13 .VII.1985, W.E. Clark (1 female; CWOB). Province San Cristobal, San Cristobal, Haina, 17.VII.1981, H. Dominguez (1 female; MHND). Province Santo Domingo, Parque Mirador del Norte, 27.V.2001, M. Takizawa (1 female; MHND). Province San Pedro de Macoris, near Juan Dolio, 4.v.1985, J. E. Wappes (1 male, 3 females; CWOB, FSCA, WIBF). The type series from Dominican Republic, La Estrelleta (now Elías Piña) Province, 4 km S.E. Rio Limpio, ca. 760 m, 24–25 May 1973, Don and Mignon Davis (holotype, 2 paratype females; USNM) was also examined.

**Comments:** The species appears to be widespread in the Dominican Republic.

### ***Sicoderus sleeperi* Vanin**

(Figures 67–68, 72. Map 1)

*Sicoderus sleeperi* Vanin 1986: 598. Holotype male (USNM) from Cayamas, Cuba, examined. Anderson 1999: 135.

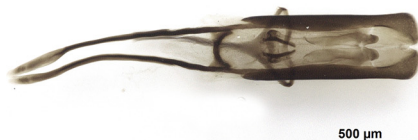
**Description:** Length male, 2.8–4.2 mm; length female 3.0–3.8 mm. Integument black, shining. Eyes separated by a distance of about one-half width rostrum at midlength. Rostrum 0.86–0.95x length elytra in male; 0.85–0.95x length elytra in female. Antennal insertion slightly beyond middle in male, at about middle in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures regularly spaced, small and shallow, widely separated on disc but slightly larger, deeper on flanks but not forming striolae; erect setae absent. Elytra in dorsal view widest at just behind midlength, lateral margins very slightly convergent or subparallel anteriorly and posteriorly; humeri present, angulate; scattered setae present. Strial punctures moderately large, deep; striae not to very slightly impressed throughout length. Membranous wings present. Abdominal ventrite 1 of male slightly raised in middle near posterior margin to small tubercle with small transverse patch of setosity at tip, of female, even rounded. Ventrite 5 of male flattened medially towards apex, of female uniformly convex, not setose. Legs with front femora with inner margin with well-developed small acute tooth, middle and hind femora each with very small, blunt tooth; tarsal claws with small basal tooth. Aedeagus (fig. 72) widest towards apex, internal sac with basal sclerite complex of a single curved elongate sclerite and other amorphous sclerites. Female not dissected.

**Material examined:** CUBA: Province Cienfuegos, Soledad, iv.1936, P.J. Darlington Jr. (1 male, MCZC). Province Pinar del Rio, San Vicenté, 9.VII.1940, J.C. Bradley (1 male; CMNC). Aspiro-Rangel, 16.VI.1959, M.W. Sanderson, C59-28 (1 male; CMNC: 1 male, 1 female; CWOB). Province Guantanamo, El Yunque, 360m, 20.34501, -74.56642, IV.2012 CarBio Team, CU-15 (1 male; CMNC). Province Artemisia, Bacunayagua, V. 1993, J.A. Genaro (2 males; USNM). Province Santiago de Cuba, Florida Blanca, nr. Alto Songo, 23–24.V.1959, M.W.

Sanderson (1 male; CWOB). The type series from Cuba: Cayamas (holotype, 2 paratype males, 4 paratype females; USNM) was also examined.

**Comments:** This is the only known *Sicoderus* species from Cuba in which the humeri are angulate.

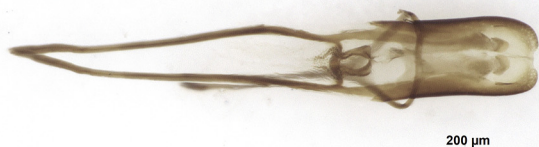
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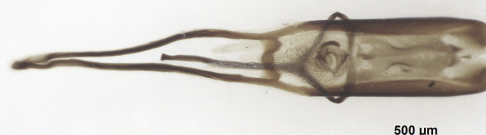
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71



72



**FIGURES 69–72.** Species of *Sicoderus*. 69. *Sicoderus ramosi*, aedeagus, dorsal view. 70. *Sicoderus remotus*, aedeagus, dorsal view. 71. *Sicoderus schoenherri*, aedeagus, dorsal view. 72. *Sicoderus sleeperi*, aedeagus, dorsal view.

***Sicoderus striatolateralis* Anderson, n. sp.**

(Figures 73–74, 81. Map 5)

<http://zoobank.org/urn:lsid:zoobank.org:act:DF0BA5BE-9677-4B79-BEDD-89716AC9865D>

**Description:** Length male, 3.0–4.6 mm; female, 3.4–4.7 mm. Integument black, shining. Eyes moderately separated by a distance about one-half width rostrum at midlength. Rostrum 1.05–1.11x length elytra in male; 1.20–1.27x length elytra in female. Antennal insertion at about apical 1/3 in male, at about apical 2/5 in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures moderately dense, regularly spaced, very fine and shallow on disc and laterally on flanks; erect setae absent; posterolateral flange (extended over base of elytra) with dense microstriae. Elytra in dorsal view widest at about midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; scattered erect fine setae very few to absent. Strial punctures evident, small, shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male in middle near posterior margin with two closely spaced small patches of setosity; of female, uniformly convex in middle near posterior margin. Ventrite 5 of male flattened medially towards apex, not setose; of female, uniformly convex. Legs with front femora only with very small, blunt tooth on inner margin; tarsal claws with small basal tooth. Aedeagus (fig. 81) widest at apex, internal sac with pair of superimposed elongate sclerites sinistrally curved at about basal 1/3 of length. Female not dissected.

**Material examined:** 2 males, 3 females. Holotype male (CMNC), labelled DOMINICAN REPUBLIC: Province Barahona, near Filipinas, Mt. Tutu, 26.VI.–7.VII. 1992, P.E. Skelley, day catch beating. Paratypes. Province Barahona, near Filipinas, Larimar Mine, 26.VI.–7.VII. 1992, R.E. Woodruff & P.E. Skelley, day beating (1 female, FSCA). Sierra de Baoruco, El Cachote, 18°03.295'N, 71°09.778'W, 960m, arboreal moss, unsifted, 8.XII.2014, A.S. Konstantinov (1 male, 2 females; CMNC, USNM).



**Derivation of species name:** This species is named ‘striatolateralis’ after the distinctive microstriate lateral pronotal flange, a feature shared only with *S. pseudostriatolateralis*.

**Natural History:** Adults have been collected beating vegetation and from unsifted, arboreal moss (960 m).

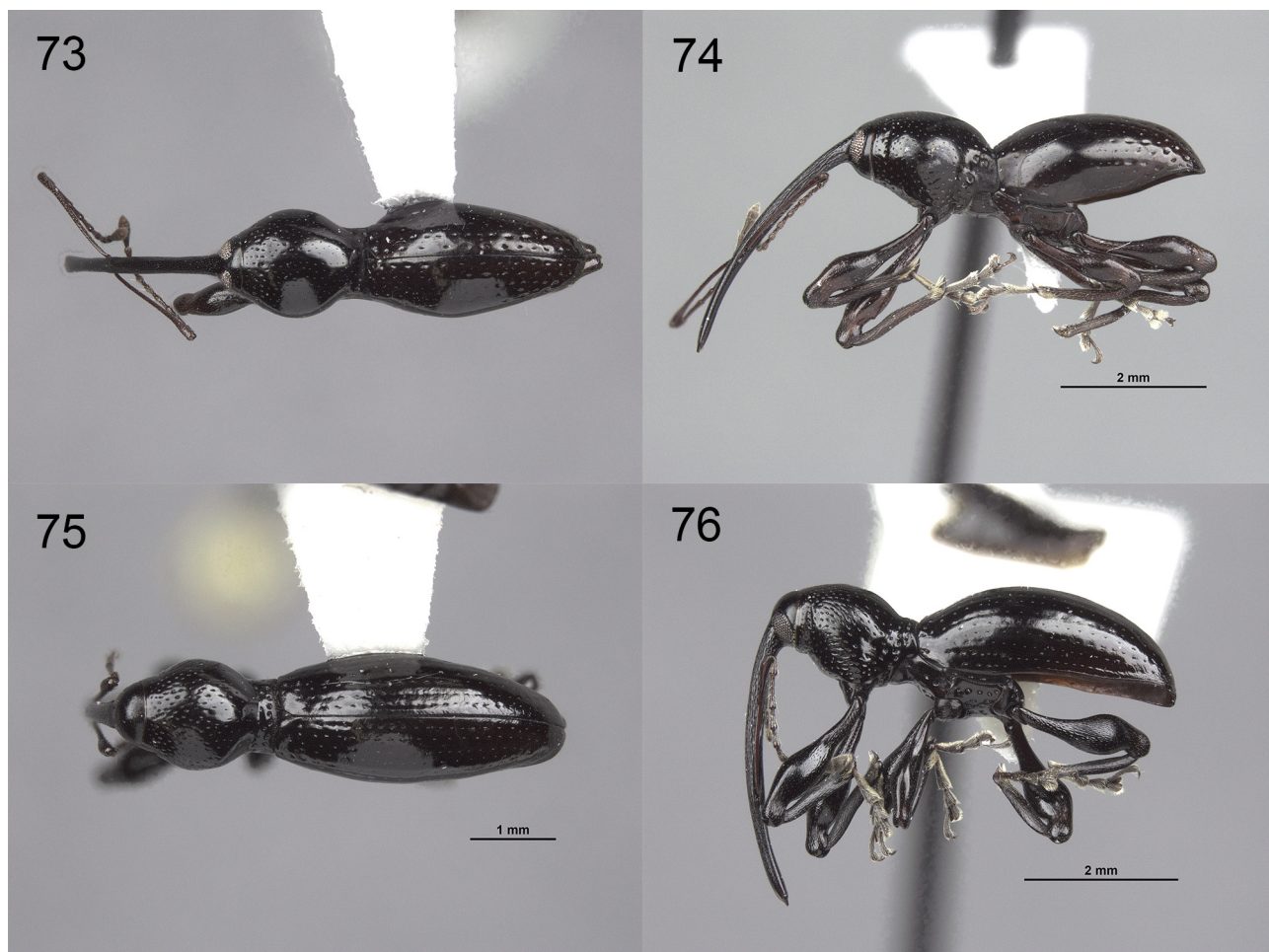
**Comments:** This species is very similar to *S. pseudostriatolateralis* from Pedernales Province and into Haiti. *Sicoderus striatolateralis* has a blunt tooth on the front femora, few if any elytral setae and different male genitalia.

***Sicoderus thomasi* Anderson, n. sp.**

(Figures 75–76, 82. Map 2)

<http://zoobank.org/urn:lsid:zoobank.org:act:5F47596B-74D4-4B08-9452-D95AE899B69B>

**Description:** Length male, 4.9 mm. Integument black, shining. Eyes rather widely separated by a distance about two-thirds width rostrum at midlength. Rostrum 1.00x length elytra in male. Antennal insertion at about apical 2/5 in male. Prothorax constricted anteriorly, globose, widest at about middle; punctures widely spaced, small, shallow on disc, slightly larger and deeper, forming vague striolae laterally on flanks; erect setae absent. Elytra in dorsal view widest at about midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; erect setae absent. Strial punctures evident, small, shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male flat medially, setose patches lacking. Ventrite 5 flattened at middle, not setose. Legs with all femora simple, ventral margin lacking tooth, anterior face of swollen area of hind femur longitudinally striate; tarsal claws with small basal tooth. Aedeagus (fig. 82) widest at base, internal sac with structure not visible (due to excessive KOH clearing; also likely responsible for short temones and overall lack of sclerotization). Female not known.



**FIGURES 73–76.** Species of *Sicoderus*. 73. *Sicoderus striatolateralis*, dorsal habitus. 74. *Sicoderus striatolateralis*, lateral habitus. 75. *Sicoderus thomasi*, dorsal habitus. 76. *Sicoderus thomasi*, lateral habitus.

**Material examined:** 1 male. Holotype male (CWOB), labelled HAITI: Department Sud-Oueste, Parc National La Visite, Morne la Visite, 2100m, 12.V.1984, M.C. Thomas.

**Derivation of species name:** This species is named after Michael C. Thomas (retired), a coleopterist at the Florida State Collection of Arthropods in Gainesville, Florida and who collected this and other Haitian weevils.

**Natural History:** The single known specimen was collected at 2100m elevation.

**Comments:** This distinctive species has an elytra that is more elongate-narrow than in other *Sicoderus* species and has the swollen area of the hind femora longitudinally striate. The holotype specimen had been previously dissected and the aedeagus cleared beyond a point allowing for recognition of internal structure.

### *Sicoderus tinamus* (LeConte)

(Figures 77–78, 83. Map 9)

*Erodiscus tinamus* LeConte 1884: 30. Holotype male (MCZC), Cape Jupiter, Florida, not examined. Blatchley and Leng 1916: 249. Voss 1935: 11. O'Brien and Wibmer 1982: 101.

*Erodiscus tinamus tinamus*; LeConte 1884. Sleeper 1954: 350.

*Erodiscus tinamus cazieri* Sleeper 1954: 349. Holotype not examined. O'Brien and Wibmer 1982: 101. **New Synonymy.**

*Sicoderus tinamus*; Vanin 1986: 591. Anderson 1999: 135.

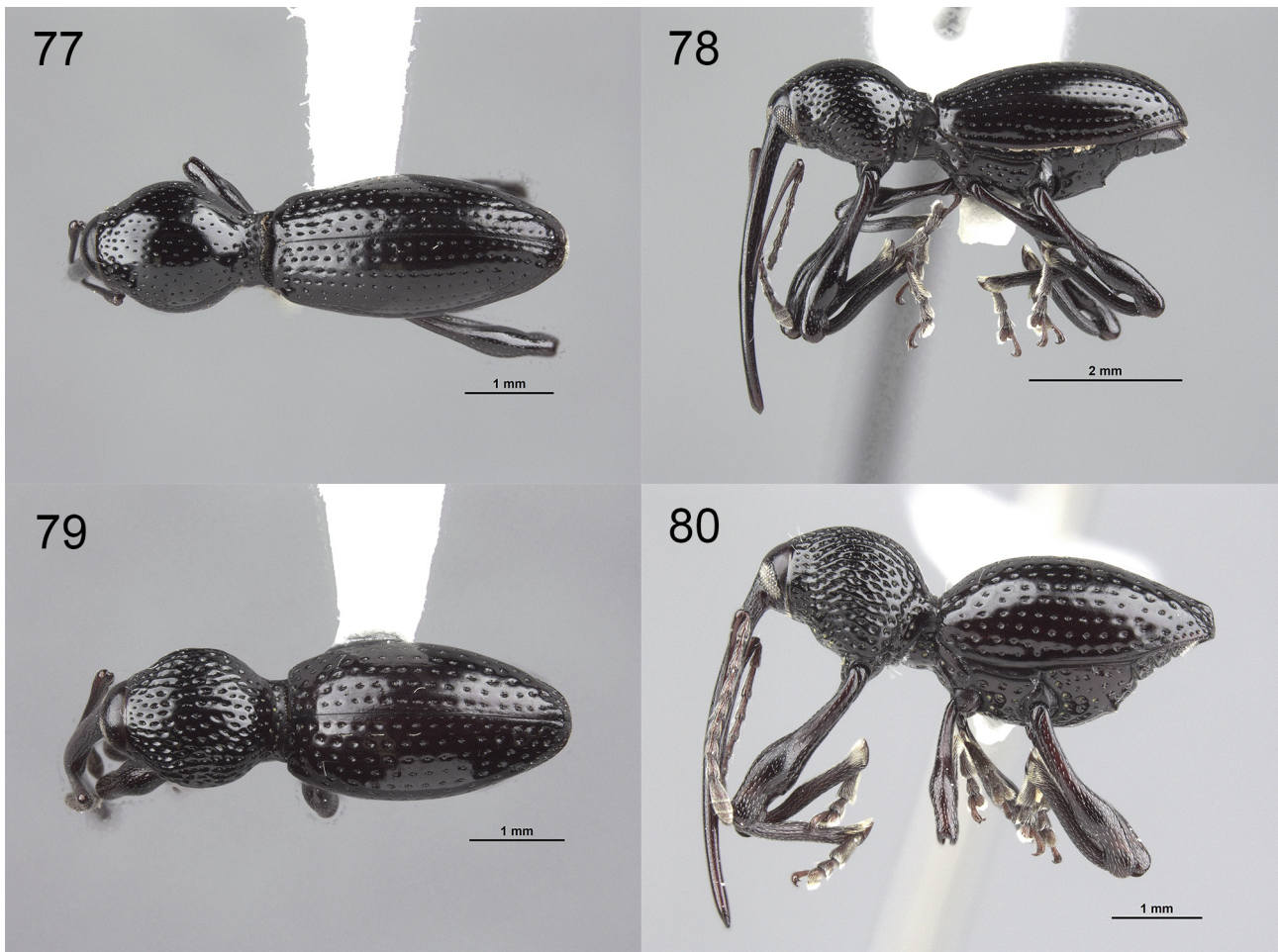
**Description:** Length male, 3.4–6.0 mm, female, 3.6–5.7 mm. Integument black, shining. Eyes narrowly separated by a distance of about 2 ommatidia. Rostrum 1.00–1.06x length elytra in male, 1.04–1.17x length elytra in female. Antennal insertion slightly beyond middle in male, at about middle in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures regularly spaced, moderately large and deep, widely separated on disc but larger, deeper on flanks forming very vague striolae (Florida, Bahamas [most]) or large and deep, closely spaced on disc as well as on flanks, forming distinct striolae (Bahamas, Crooked Island); sparse erect setae present or not. Elytra in dorsal view widest at about midlength, lateral margins slightly convergent anteriorly and posteriorly; humeri present, weakly angulate; setae present. Strial punctures large, deep; striae not impressed throughout length. Membranous wings present. Abdominal ventrite 1 of male slightly raised in middle near posterior margin to small tubercle with small transverse patch of setosity at tip, of female, evenly convex. Ventrite 5 of male with median circular impression, of female evenly convex, not setose in either sex. Legs with all femora with inner margin with well-developed small tooth, somewhat acute on front femora; tarsal claws with small basal tooth. Aedeagus (fig. 83) subparallel-sided, internal sac with pair of elongate basal sclerites subparallel, narrowly conjoined apically. Female not dissected.

**Material examined:** BAHAMAS: Abaco, Man-O-War Cay, 15–30.viii.1971, H. & A. Howden (2 males, 3 females; CMNC). Andros Island, Fresh Creek, Androsia Factory, 26.iv.1994, R. Anderson, beating dry coppice (2 females; CMNC). Maidenhair Coppice, 2.1 mi S, 0.7 mi E Staniard Creek, 5.v.1994, R. Anderson, beating interior coppice (2 males, 3 females; CMNC). London Ridge, 2.7 mi N, 0.8 mi E. Forfar Field Station, 28.iv.–1.v.1994, R. Anderson, beating high interior coppice (7 males, 4 females; CMNC). North Blanket Sound, Forfar Field Station, 1.v.1994, R. Anderson, beating coastal coppice (1 male, 1 female; CMNC). Pigeon Cay, 1–6.v.1994, R. Anderson, beating coastal coppice (1 male, 1 female; CMNC). Uncle Charlie's Blue Hole, 3–7.vi.2001, M.C. Thomas, beating (1 male, 1 female; CWOB). Captain Bill's Blue Hole, 27.vii.2006, R.H. Turnbow, beating (1 female; CWOB). Eleuthera Island, New Postsmouth, 28.iii.1953, G. Rabb (1 female; USNM). New Providence Island, 22.ix.1975, C.W. & L.B. O'Brien, beating Coccoloba (1 male; CMNC). South Bimini Island, 18.VI.1950, Cazier & Rindge (1 male [paratype *Erodiscus tinamus cazieri*]; FSCA). Crooked Island, Portland Harbour, 29–30.III.1965, B.D. Valentine & R.W. Hamilton (12 males, 10 females; CMNC, FSCA). UNITED STATES OF AMERICA: Florida, Dade County, Miami, Camp Mahachee, 17.x.1990, R. Anderson, beating (1 female; CMNC). Everglades National Park, Royal Palm Hammock, 28.vii.–15.xi.1985, S. & J. Peck, malaise-FIT (1 male; CMNC). Old Cutler Hammock, 10.xii.1986, S. Peck & J. Klimaszewski, litter (1 male; CMNC). Charles Deering Estate Park, 15–16.x.1990, R. Anderson, beating (1 male; CMNC). Matheson Hammock, 20.vi.1965, C.W. O'Brien, beating (1 male; CMNC). Paradise Key, 7.iv.1951, H. & A. Howden, on *Psychotria* (2 males; CMNC). Monroe County, Fat Deer Key, various dates, S. & J. Peck, malaise-FIT (1 male, 2 females; CMNC). Big Pine Key, Watsons Hammock, various dates, S. & J. Peck, malaise-FIT (1 male, 1 female; CMNC). Big Pine Key, Cactus Hammock, various dates, S. & J. Peck, malaise-FIT (1 male, 2 females; CMNC). No Name Key, various dates, S. & J. Peck, malaise-

FIT (5 males, 7 females; CMNC). Big Pine Key, Long Beach, 20.x.1990, R. Anderson, beach washup (2 females; CMNC). Long Key State Recreation Area, 23.x.1990, R. Anderson, sweeping (1 male; CMNC). Vaca Key, Marathon, various dates, S. & J. Peck, malaise-FIT (2 females; CMNC). North Key Largo, various dates, S. & J. Peck, malaise-FIT (2 males, 1 female; CMNC). Big Torch Key, 19.xi.1985–26.ii.1986, S. & J. Peck, malaise-FIT (1 female; CMNC). Vaca Key, Marathon, Crane Point Hammock, 17.v.1990, R. Anderson, beating (1 male; CMNC).

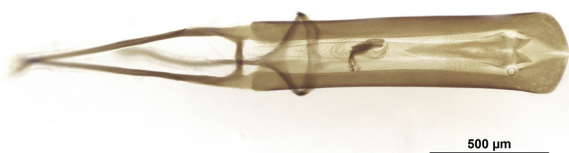
**Comments:** Despite not finding any consistent differences between specimens from the type series of *S. tinamus cazieri* (Sleeper) from the Bahamas and *S. tinamus tinamus* from Florida in punctation and body color, and the two having a similar internal sac of the aedeagus, Vanin (1986) left the two as separate subspecies. Based on Vanin's comments about lack of consistent differences, and my own examination of numerous specimens from the Bahamas (including a paratype of *Erodiscus tinamus cazieri*) and elsewhere, I do not recognize the subspecies as distinct and place *S. tinamus cazieri* as a new junior subjective synonym of *S. tinamus*.

Specimens from Portland Harbour, Crooked Island, Bahamas have pronotal punctures that are large, deep and subcontiguous dorsally and laterally forming distinct striolae whereas in other *S. tinamus* the pronotal punctures are much smaller and finer dorsally, not forming dorsal striolae. Otherwise, I cannot find any significant differences in other external structural features or in male genital structure between the two forms and here consider them conspecific.



**FIGURES 77–80.** Species of *Sicoderus*. 77. *Sicoderus tinamus*, dorsal habitus. 78. *Sicoderus tinamus*, lateral habitus. 79. *Sicoderus truncatipennis*, dorsal habitus. 80. *Sicoderus truncatipennis*, lateral habitus.

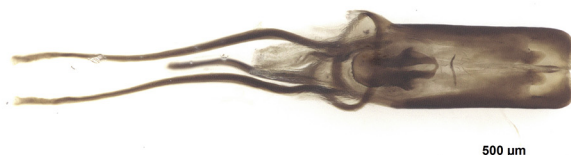
81



82



83



84



**FIGURES 81–84.** Species of *Sicoderus*. 81. *Sicoderus striatolateralis*, aedeagus, dorsal view. 82. *Sicoderus thomasi*, aedeagus, dorsal view. 83. *Sicoderus tinamus*, aedeagus, dorsal view. 84. *Sicoderus truncatipennis*, aedeagus, dorsal view.

***Sicoderus truncatipennis* Vanin**

(Figures 79–80, 84. Map 6)

*Sicoderus truncatipennis* Vanin 1986: 594. Anderson 1999: 134. Perez-Gelabert 2008: 136. Holotype male (BMNH) from Port au Prince, Haiti, examined.

**Description:** Length male, 3.4–4.7 mm. Integument black, shining. Eyes narrowly separated by a distance of about 2 ommatidia. Rostrum 1.06–1.19x length elytra in male; 1.29–1.39x length elytra in female. Antennal insertion slightly beyond middle in male, slightly before middle in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures regularly closely spaced, moderately large and deep on disc and flanks forming striolae dorsally and laterally; sparse erect setae present or not. Elytra in dorsal view widest at about midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced; erect setae present. Strial punctures large, deep; striae slightly impressed throughout length. Membranous wings absent. Abdominal ventrite 1 of male slightly raised in middle near posterior margin to small transverse tubercle with small transverse patch of setosity at tip. Ventrite 5 of male with median circular impression with dense, fine setae laterally around impression. Legs with all femora with inner margin with small tooth, somewhat larger on front femora, smaller and more blunt on middle and hind femora; tarsal claws with small basal tooth. Aedeagus (fig. 84) subparallel-sided, internal sac with pair of elongate basal sclerites convergent apically, each with strong anterolateral projection at about midlength. Female not dissected.

**Material examined:** DOMINICAN REPUBLIC: Province Independencia, ESE Jimani, La Florida, 18°24'N

71°44'W, 20 m, moist site, 14.IV.1993, M.A. Ivie, D.S. Sikes, W. Lanier (2 males; CMNC). HAITI: mountains near Port au Prince, up to 2000', 2.x.1934, P.J. Darlington Jr. (1 male, MCZC). The type series from Port au Prince, Haiti (holotype, 3 female paratypes; BMNH) was examined.

**Comments:** This species is unique among West Indian *Sicoderus* in the truncate apex of the elytra in lateral view. Described from Haiti, these are the first specimens recorded from the Dominican Republic. The description of the character states of females presented here is taken from Vanin (1986). Vanin (1986) described this species from a series of five specimens collected from Haiti: Port au Prince, 20–22.III.1908, Dr. M. Cameron (BMNH).

### ***Sicoderus turnbowi* Anderson, n. sp.**

(Figures 85–86, 91. Map 6)

<http://zoobank.org/urn:lsid:zoobank.org:act:D8B66897-61DB-4A32-9DC6-A0848F8B7D3A>

**Description:** Length male, 3.3–4.3 mm; female, 2.8–4.4 mm. Integument black, shining. Eyes rather narrowly separated by a distance about one-fourth width rostrum at midlength. Rostrum 0.94–1.00x length elytra in male; 0.93–1.00x length elytra in female. Antennal insertion at about apical 1/3 in male, at about midlength in female. Prothorax constricted anteriorly, globose, widest at about middle; punctures widely spaced, small, shallow on disc, larger and deeper, forming vague striolae laterally on flanks; scattered erect setae present, especially along anterior margin. Elytra in dorsal view widest at about midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; a few long, fine setae present. Strial punctures evident, small, shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male with conical tubercle at middle near posterior margin with a small patch of setosity at tip; of female, uniformly convex in middle near posterior margin. Ventrite 5 flattened at middle in male, uniformly convex in female, not setose in either sex. Legs with front femora with small, blunt tooth on inner margin, middle and hind femora simple, lacking tooth; tarsal claws with small basal tooth. Aedeagus (fig. 91) subparallel-sided but slightly widened at apex, internal sac with pair of elongate basal sclerites straight, strongly convergent and separate, each lacking basal extension but with base wider than apex. Female not dissected.

**Material examined:** 6 males, 8 females. Holotype male (CMNC), labelled DOMINICAN REPUBLIC: Province Barahona, Upper Paraiso Valley, 600–800m, 29.III.1978, L. Masner. Paratypes. Province Barahona, nr. Filipinas, Larimar Mine, 20–26.VI.1992, R.E. Woodruff & P.E. Skelley, at night (1 male, 2 females; CMNC, FSCA). Filipinas, 18 07.339'N, 71 07.152'W. 625m, Blacklight/night beating, 7 July 2004, S.W. Lingafelter (1 female, USNM). 4.5 km. S. Barahona, 9.VII.1996, R. Turnbow (1 female; CMNC). 7 km N.W. Paraiso, 200m, rainforest, 27.XI.–4.XII.1991, FIT, Masner & Peck, 91–341 (1 male; CMNC). Mountains south of Barahona, 500m, 13.VII.1993, D. Sikes & R. Rosenfeld (1 male; WIBF). Province Pedernales, 24 km N. Cabo Rojo, 610m, 21.VIII.1988, wet forest at light and night beating, M. Ivie, K. Phillips, K. Johnson (1 male, 2 females; CMNC, WIBF). 24 km N. Cabo Rojo, 535m, 1.VII.1996, M.C. Thomas (1 female; CWOB). 24 km N. Cabo Rojo, 3.XII.1991, L. Masner, sweep (1 male, 1 female; CMNC).

**Derivation of species name:** This species is named after Robert H. Turnbow, Jr., of Fort Rucker, Alabama in recognition of his collections of numerous species of weevils in the West Indies and elsewhere.

**Natural History:** Specimens were collected in flight intercept traps and beating at elevations ranging from 200–800m.

**Comments:** The holotype of this species was included by Vanin (1986) as *Sicoderus ramosi*, a very closely related and similar species. Along with *S. ramosi*, this species is also very similar to *S. guanyangi* and *S. bautistai*, but can be distinguished by the shape of the basal sclerite in the male aedeagus (compare figs. 69 and 91), the presence of a small, blunt front femoral tooth and the conical tubercle of abdominal ventrite 1 of males.

### ***Sicoderus vanini* Anderson**

(Figures 87–88. Map 8)

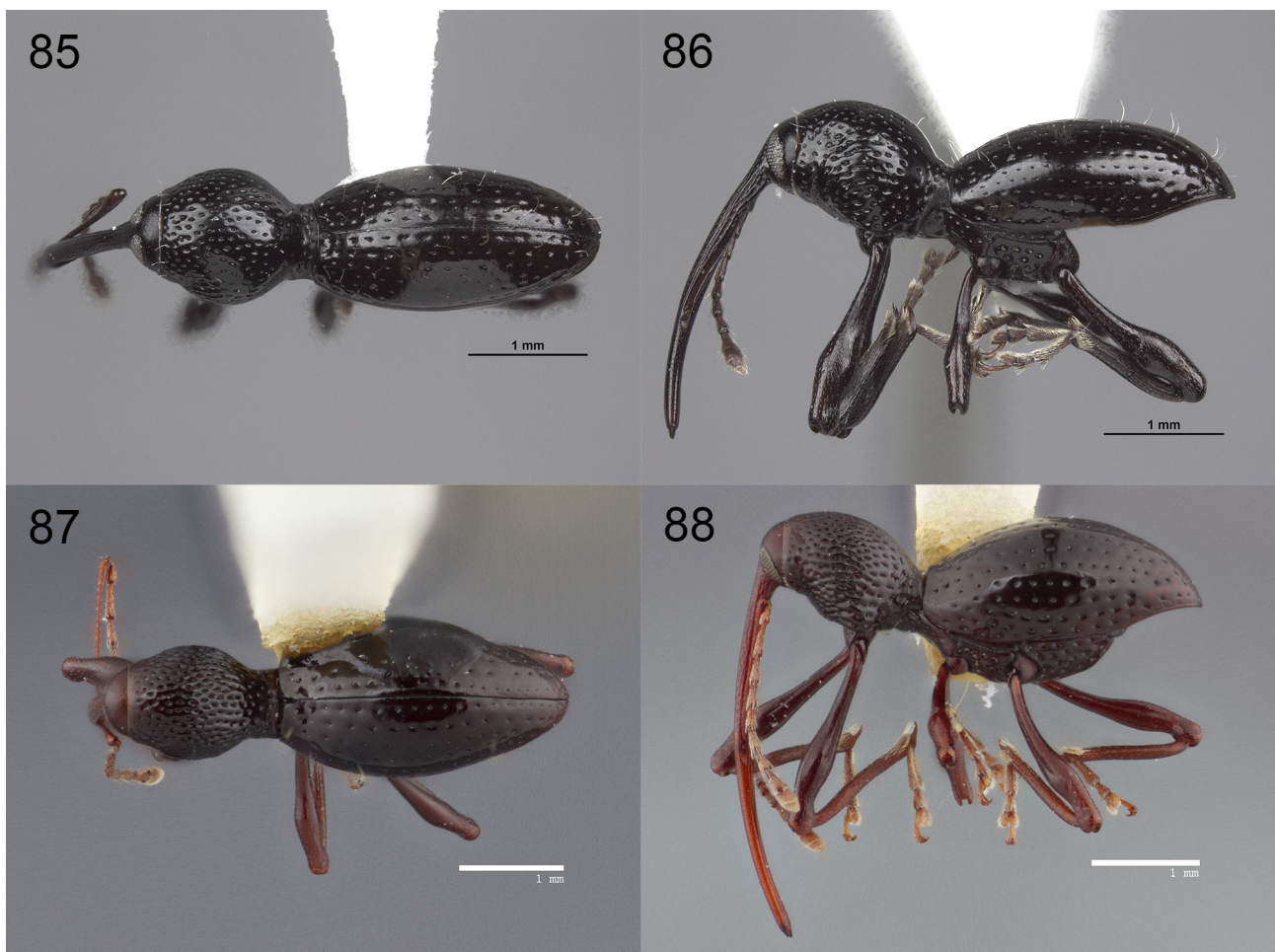
*Sicoderus vanini* Anderson 1999: 133. Holotype female (CWOB) from Tortola, British Virgin Islands, examined in 1999.

**Description:** Length female, 5.0–6.6 mm. Integument reddish-brown, shining. Eyes narrowly separated by a

distance of about 2–3 ommatidia. Rostrum 1.21–1.48x length elytra in female. Antennal insertion just before middle in female. Prothorax constricted anteriorly, globose, widest at about midlength; punctures dense, large and deep, subcoalescent, forming striolae on disk, slightly shallower and smaller in anterior one-fifth and towards posterior margin, slightly deeper and larger on flanks where striolae more distinct; erect setae lacking. Elytra in dorsal view widest at about midlength, lateral margins slightly convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; lacking erect setae (perhaps abraded or broken). Strial punctures evident, shallow, moderately fine; striae not impressed throughout length. Membranous wings lacking. Abdominal ventrite 1 of female markedly convex. Ventrite 5 of female uniformly slightly convex. Legs with all femora lacking tooth; tarsal claws with small basal tooth. Male not known.

**Material examined:** None; description modified from Anderson (1999).

**Comments:** This species was described by Anderson (1999) from two females collected on the British Virgin Islands.



**FIGURES 85–88.** Species of *Sicoderus*. 85. *Sicoderus turnbowi*, dorsal habitus. 86. *Sicoderus turnbowi*, lateral habitus. 87. *Sicoderus vanini*, dorsal habitus. 88. *Sicoderus vanini*, lateral habitus.

***Sicoderus woodruffi* Anderson, n. sp.**

(Figures 89–90, 92. Map 10)

<http://zoobank.org/urn:lsid:zoobank.org:act:AD6FA584-721A-4D5B-BF4C-2E633E910FB7>

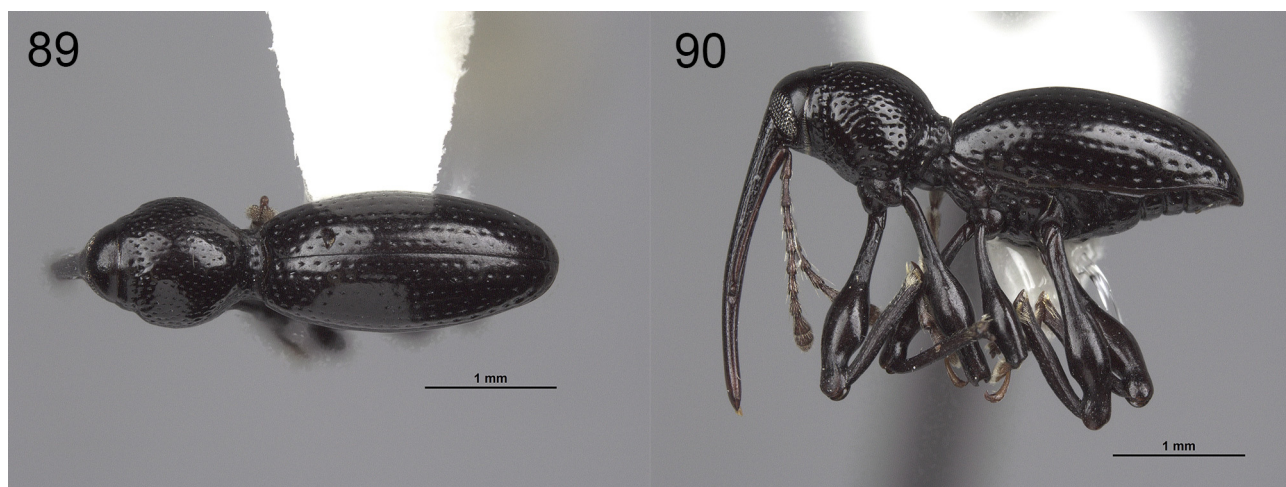
**Description:** Length male, 3.4 mm. Integument black, shining. Eyes separated by a distance about one-half width rostrum at midlength. Rostrum 0.85x length elytra in male. Antennal insertion at about apical 2/5 in male. Prothorax constricted anteriorly, globose, widest at about middle; punctures closely spaced, moderate, shallow on disc, larger and deeper, forming weak striolae laterally on flanks; no setae present. Elytra in dorsal view widest at

midlength, lateral margins convergent both anteriorly and posteriorly; humeri fully reduced, not at all angulate; no setae present. Strial punctures evident, small, shallow; striae not impressed. Membranous wings absent. Abdominal ventrite 1 of male at about midlength with two small, raised patches of fine setosity. Ventrite 5 impressed medially in apical two-thirds. Legs with all femora with ventral margin of each with very small blunt tooth; tarsal claws lacking small basal tooth. Aedeagus (fig. 92) widest in basal one-half, apical one-half distinctly narrowed, internal sac with pair of elongate basal sclerites sinistrally strongly L-shaped. Female not known.

**Material examined:** 1 male. Holotype male (CWOB), labelled GRENADA: Grand Etang National Park, Mt. Qua Qua Trail, 10.IX.1991, C.W. & L. O'Brien.

**Derivation of species name:** This species is named after Robert Woodruff (retired) of Gainesville, Florida in recognition of his extensive collecting efforts on Grenada and other West Indian islands.

**Comments:** This species is distinctive in having the setose patches on abdominal ventrite 1 located at about the midlength of the ventrite and not at the posterior margin, a feature shared only with *S. delauneyi* from Guadeloupe.



FIGURES 89–90. Species of *Sicoderus*. 89. *Sicoderus woodruffi*, dorsal habitus. 90. *Sicoderus woodruffi*, lateral habitus.

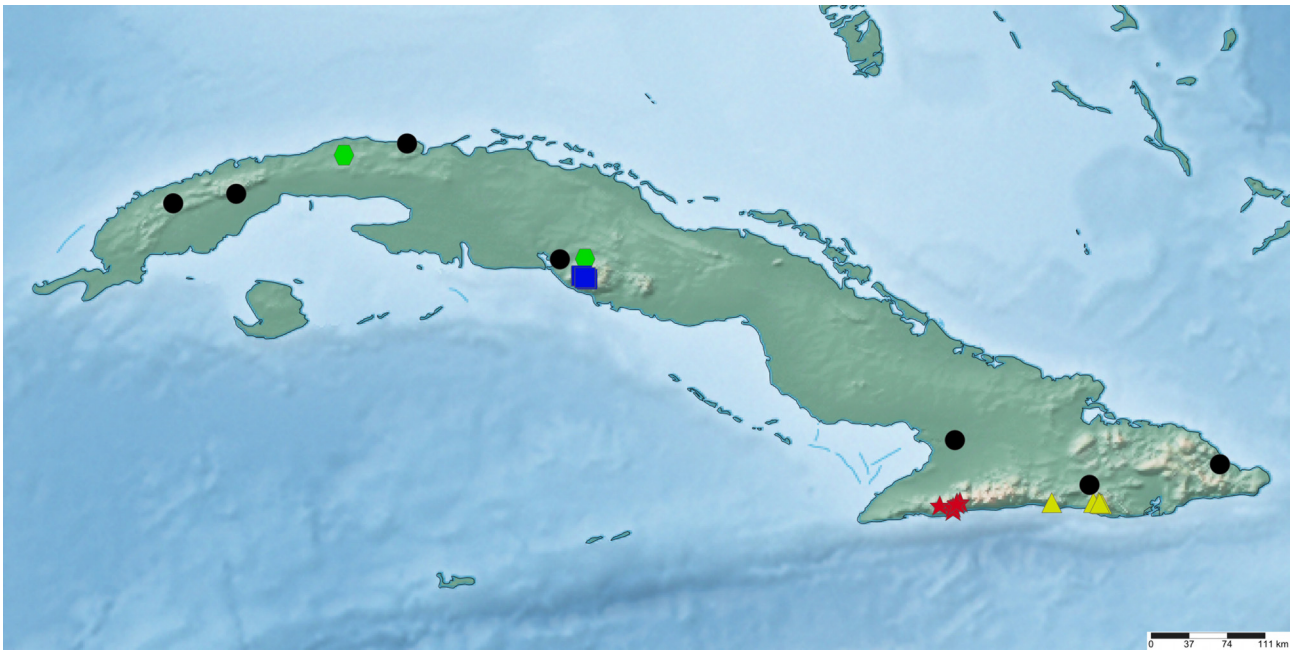


FIGURES 91–93. Species of *Sicoderus*. 91. *Sicoderus turnbowi*, aedeagus, dorsal view. 92. *Sicoderus woodruffi*, aedeagus, dorsal view.

### Phylogeny and Species Group Placements

In his revision of the tribe Vanin (1986) recognized 16 species groups within *Sicoderus*, two of which occurred in the West Indies; the *S. tinamus* group and the *S. delauneyi* group. The new species described herein present some

problems with regard to this species group classification. Vanin (1986) placed those species of *Sicoderus* with elytral stria 10 interrupted above the metacoxa, as well as the elongated elytra and the very large endophallic sclerites, as members of the Amazonian *S. ibis* group. Herein, four of the Cuban species, namely *S. morio*, *S. bipunctiventris*, *S. caladeler* and *S. beatyi*, all have elytral stria 10 clearly interrupted above the metacoxa but lack the other two characters, thus the character of elytral stria 10 clearly interrupted above the metacoxa is convergent in these two groups. Vanin (1986) also used the absence of erect elytral setae as a defining character of the Lesser Antillean *S. delauneyi* group; however, a number of the new species from the Greater Antilles described herein lack elytral setae and would appear to be best placed as in the *S. delauneyi* group thus expanding the distribution of that group into the Greater Antilles.

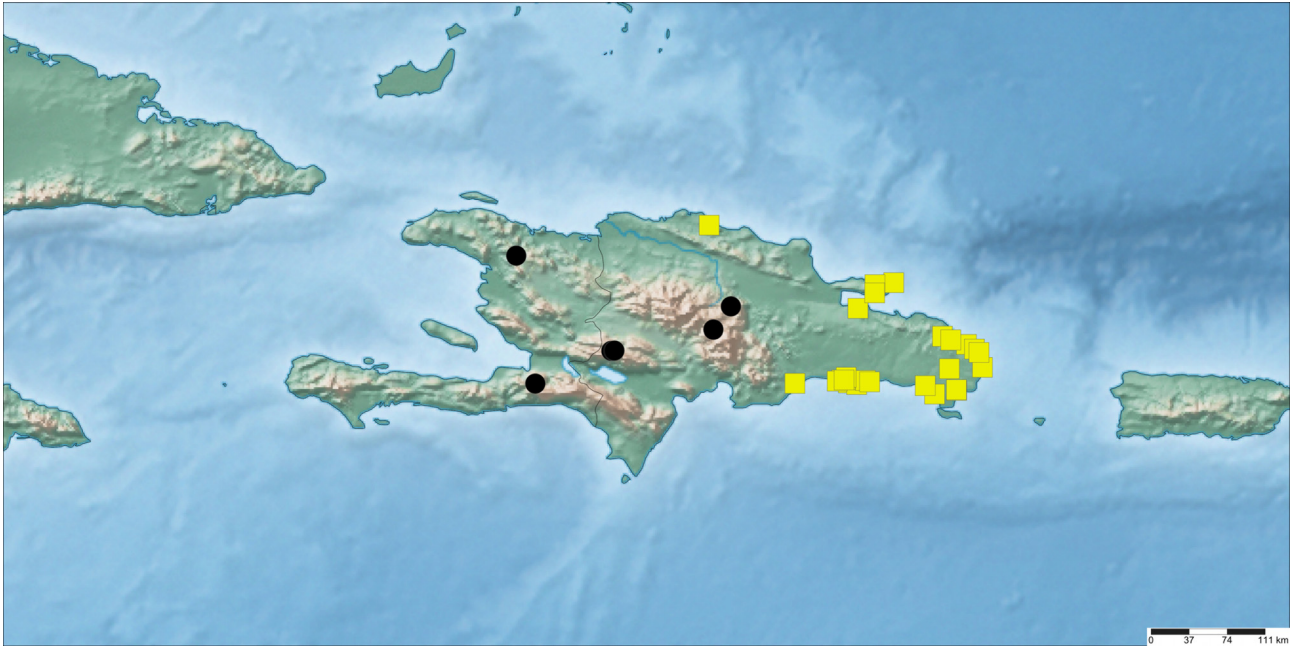


**MAP 1.** Distribution of species of *Sicoderus* in Cuba. Black circles, *S. sleeperi*. Red stars, *S. beatyi*. Yellow triangles, *S. caladeler*. Blue squares, *S. bipunctiventris*. Green hexagons, *S. morio*.

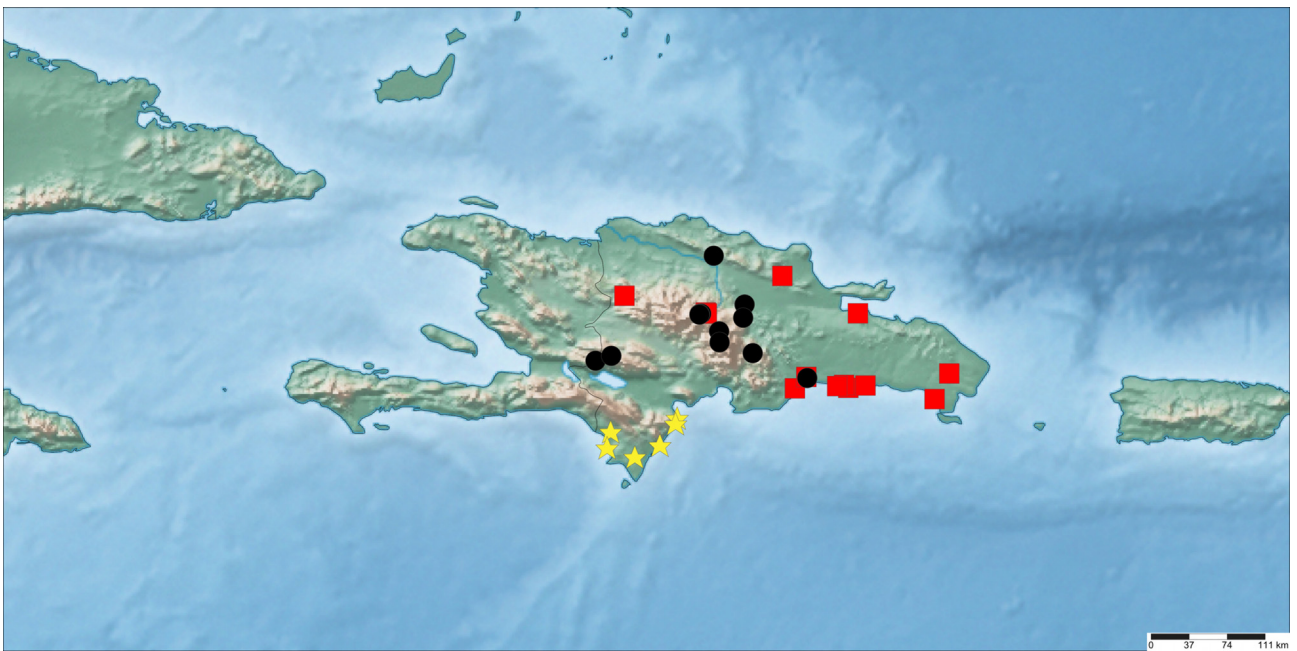


**MAP 2.** Distribution of species of *Sicoderus* in Hispaniola. Black circle, *S. aeneus*. Red star, *S. alternatus*. Yellow square, *S. detonnancouri*. Blue triangle, *S. humeralis*. Green hexagon, *S. thomasi*. White inverted triangle, *S. ramosi*.

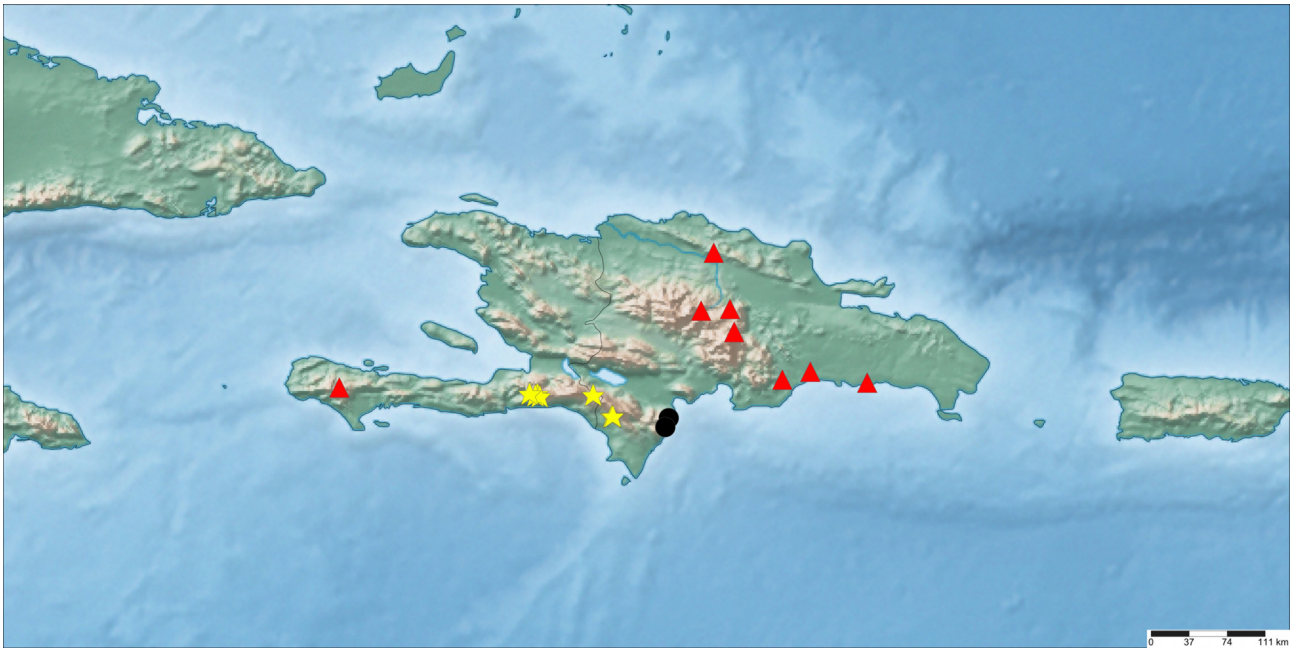




**MAP 3.** Distribution of species of *Sicoderus* in Hispaniola. Black circles, *S. bautistai*. Yellow squares, *S. championi*.



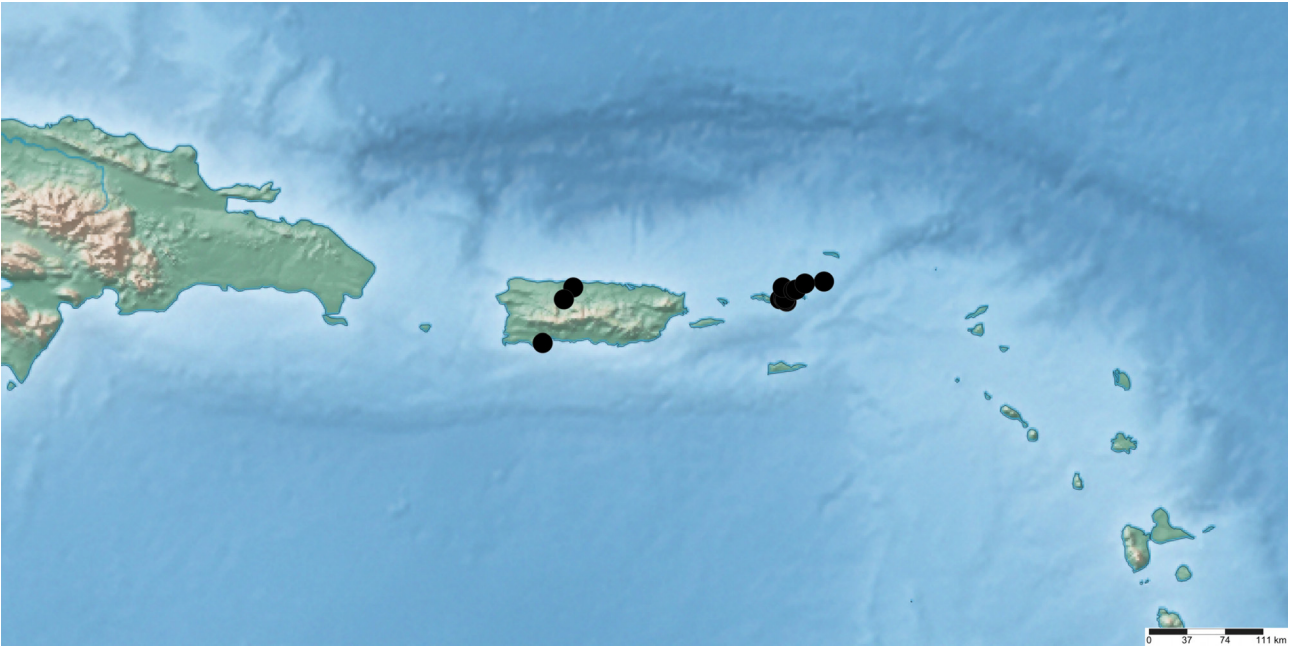
**MAP 4.** Distribution of species of *Sicoderus* in Hispaniola. Black circles, *S. guanyangi*. Red squares, *S. schoenherri*. Yellow stars, *S. perezii*.



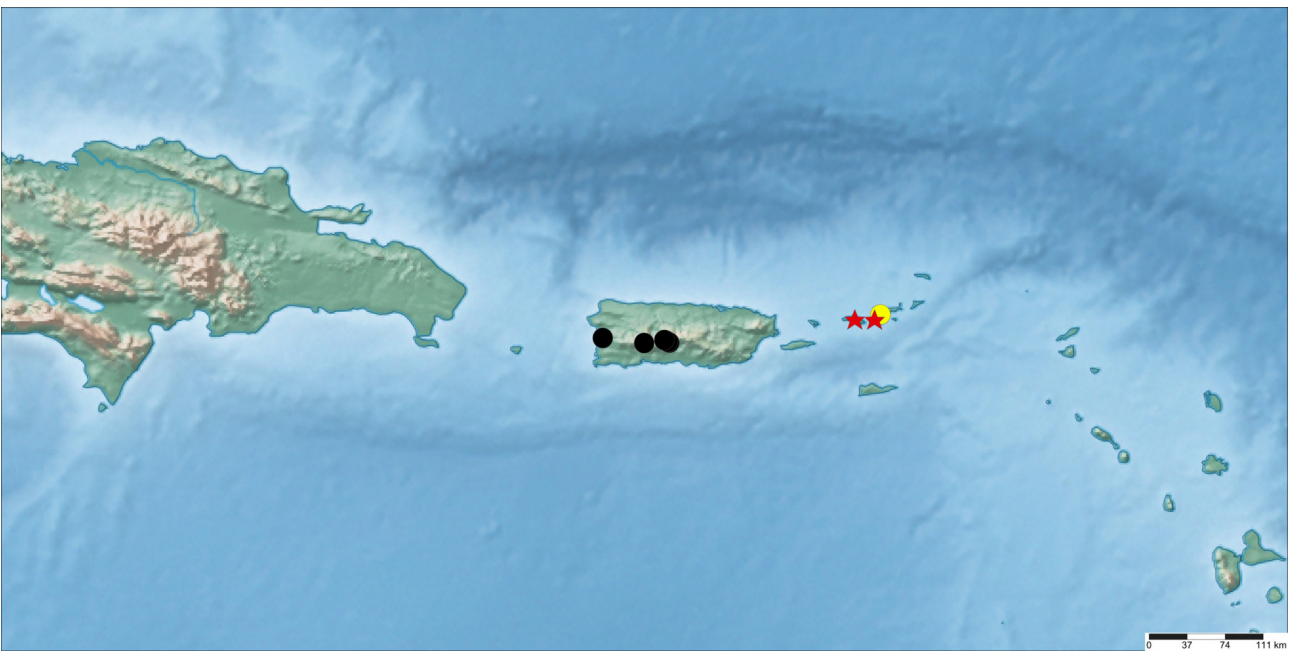
**MAP 5.** Distribution of species of *Sicoderus* in Hispaniola. Black circles, *S. striatolateralis*. Red triangles, *S. medranae*. Yellow stars, *S. pseudostriatolateralis*.



**MAP 6.** Distribution of species of *Sicoderus* in Hispaniola. Black circles, *S. truncatipennis*. Yellow stars, *S. turnbowi*.



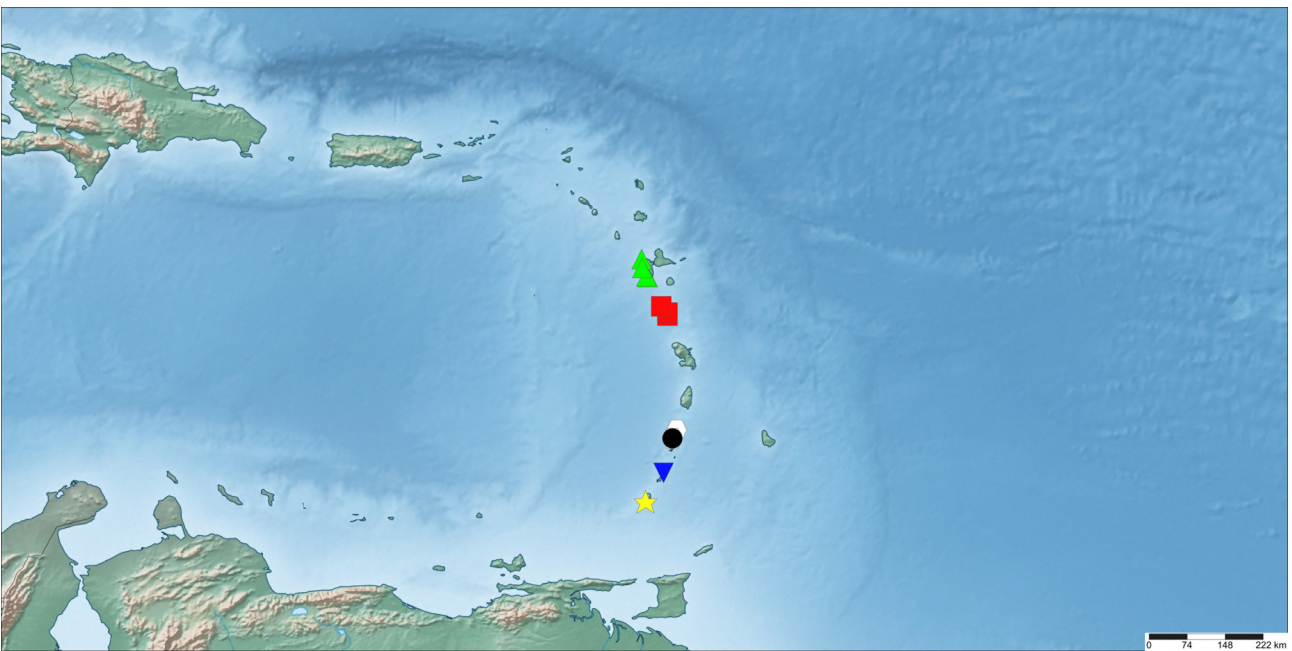
**MAP 7.** Distribution of species of *Sicoderus* in Puerto Rico and the Virgin Islands. Black circles, *S. ivieorum*.



**MAP 8.** Distribution of species of *Sicoderus* in Puerto Rico and the Virgin Islands. Black circles, *S. franzi*. Red stars, *S. hirsutiventris*. Yellow circle, *S. vanini*.



**MAP 9.** Distribution of species of *Sicoderus* in Florida and the Bahamas. Red circles, *S. tinamus*.



**MAP 10.** Distribution of species of *Sicoderus* in the Lesser Antilles. Red circle, *S. remotus*. Yellow star, *S. woodruffi*. Red squares, *S. lucidus*. Green triangles, *S. delauneyi*. Blue inverted triangle, *S. propinquus*. White hexagon, *S. contiguus*.

### Future work

It was surprising to me that such a large number of new species of *Sicoderus* were found in the West Indies, particularly in the Dominican Republic. However, given the number of these new species known from 2 or fewer specimens (6 out of 18) it should be expected that even more species will be found. None of the species named so far are widespread throughout the West Indies and with a few exceptions are each known from only one island. No species are known from Martinique, St. Lucia, Monserrat or Jamaica suggesting these islands as possibilities for future exploration for *Sicoderus*. Examination of as many specimens as possible of a group is necessary for complete documentation of biodiversity.

## Acknowledgements

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