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The West Indian Peridinetini (Coleoptera: Curculionidae: Baridinae)

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Abstract

Two genera and nine species of Peridinetini are recognised in the West Indies; four of the species are newly described. *Peridinetus* Schönherr is represented in the Greater Antilles by *P. concentricus* (Olivier), *P. decipiens* Prena **sp. n.**, *P. fuscosignum* Prena **sp. n.**, *P. poeyi* Jacquelin du Val **stat. res.**, *P. roeselii* (Boheman) and *P. sexguttatus* (Fabricius) **comb. n.** and *Palliolatrix* Prena in the Lesser Antilles by *P. insignis* (Chevrolat), *P. lateropicta* Prena **sp. n.** and *P. silacea* Prena **sp. n.** *Ephimerus* Schönherr is synonymised with *Peridinetus* (**syn. n.**). The overlooked synonymy of *Peridinetus signatus* Rosenschöld with *P. concentricus* is reinstated. Habitus images, distribution maps and a key for identification are provided.

Key words: weevils, taxonomy, new species, Piperaceae, West Indies

Introduction

Although baridine weevils are common and diverse on Piperaceae elsewhere in the Neotropics (*e.g.*, Prena 2005), only a few species are associated with these plants in the West Indies. Those, however, were among the first-described species from tropical America. Their charismatic colour patterns lured more than one entomologist into erroneous judgments, and some of these misconceptions were perpetuated in the literature and need to be clarified. All described larger species are currently placed in the Peridinetini, a tribe defined by the presence of a prosternal channel, separate fore coxae and laterally descending scrobes (Lacordaire 1866). This paper reviews the West Indian Peridinetini in the above sense. Not included herein are the smaller (<4 mm) species with the same host-range, which currently are assigned to the Cyrionychini.

Material and methods

Approximately 250 specimens, including types, were examined from the following collections (contact persons in brackets): **AMNH**, American Museum of Natural History, New York, USA (L. Herman, Jr.); **CASC**, California Academy of Sciences, San Francisco, California, USA (long-term repository of CWOB); **CMNC**, Canadian Museum of Nature, Ottawa, Canada (R. Anderson); **CNCI**, Canadian National Collection of Insects, Ottawa, Canada (P. Bouchard, H. Howden); **CWOB**, Charles W. O'Brien personal collection, Green Valley, Arizona, USA; **DEI**, Deutsches Entomologisches Institut, Müncheberg, Germany (L. Behne); **HMUG**, Hunterian Museum, Glasgow, Scotland (G. Hancock); **JPPC**, Jens Prena personal collection, Berlin, Germany; **MCZ**, Museum of Comparative Zoology, Cambridge, Massachusetts, USA (C. Farnum); **MNHUB**, Museum für Naturkunde der Humboldt Universität Berlin, Germany (J. Frisch); **NHRS**, Naturhistoriska riksmuseet, Stockholm, Sweden (B. Viklund); **UPRM**, University of Puerto Rico, Mayaguëz, USA (N. Franz, J. Cardona Duque); **USNM**, National Museum of Natural History, Washington, USA (S. Lingafelter). The species are arranged in alphabetical order in the text. In the lists of synonymy, the names are

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arranged chronologically, each with subsequently used generic combinations subordinate and accompanied by the references where the name was cited. Schönherr and Rosenschöld are referenced with the original spelling of their names rather than the transcribed spelling used in their Latin publications. Measurements were taken with an ocular micrometer in a dissecting microscope. Size ranges of specimens are given as total length (without rostrum) and standard length (anterior margin of pronotum to pygidium). The depression that separates the ancient northern and southern islands of Hispaniola is referred to as "Hoya de Enriquillo" [used in the Dominican Republic] and "Cul-de-Sac Depression" [used in Haiti]. Distribution maps were generated using PanMap and vectors of the EROS data center of the US Geological Survey. Extended focus images were taken with a JVC digital camera KY-F70 and Archimed software (Microvision Instruments). Line drawings were drafted from digital images with Aldus Freehand.

Key to the West Indian Peridinetini

1 Eyes separated by width of rostrum at base; pronotum approximately as long as wide; internal sac with flagellum thread-like and longer than body of aedeagus (Fig. 15) [not examined in *P. insignis*]; Lesser Antilles ..... *Palliolatrix* ... 2
- Eyes separated by less than width of rostrum at base; pronotum wider than long; internal sac with flagellum thick and shorter than body of aedeagus (Fig. 16) [not examined in *P. poeyi*]; Greater Antilles ..... *Peridinetus* ... 4
2 Elytra vittate on basal half, *i.e.*, macula arranged in longitudinal fashion (Figs. 2, 4); Dominica ..... *Palliolatrix lateropicta*
- Elytra fasciate on basal half, *i.e.*, macula arranged in transverse fashion (Figs. 1, 3, 5); occurring elsewhere 3
3 Frons, anterior portion of pronotum and subapical elytral fascia with light-coloured scales; Guadeloupe ..... *Palliolatrix insignis*
- Frons, anteromedian portion of pronotum and elytral apex with basic vestiture of dark scales, colour pattern of orange scales; Saint Vincent ..... *Palliolatrix silacea*
4 Tarsal claws curved, basally separate; rostrum not or indistinctly sexually dimorphic; body stout 5
- Tarsal claws straight, basally subconnate (*i.e.*, approximate but not completely fused); rostrum markedly sexually dimorphic, longer in female; body more elongate 7
5 Scales multicoloured (creamy white, ochre, black), colour pattern complex (Fig. 6, 7); Cuba, Hispaniola and Puerto Rico 6
- Scales creamy white, basic vestiture obsolete, colour pattern of simple, occasionally confluent spots (Fig. 8); Jamaica..... *Peridinetus sexguttatus*
6 Elytral fascia separated from humerus by own width; mesepimeron and metepisternum not completely covered with light-coloured scales; male without fringe of long hairs on ventral margin of hind tibia; Cuba, Hispaniola and Puerto Rico ..... *Peridinetus concentricus*
- Elytral fascia separated from humerus by much less than own width; mesepimeron and metepisternum almost completely covered with light-coloured scales; male with fringe of long hairs on ventral margin of hind tibia; Cuba ..... *Peridinetus poeyi*
7 Elytra with colour pattern distinct, median and subapical fasciae wide (Fig. 9); Cuba ..... *Peridinetus roeselii*
- Elytra with colour pattern ill-defined, median and subapical fasciae narrow or obsolete; Hispaniola 8
8 Elytra with black median macula obsolete, white postmacular fascia narrow (Fig. 10); north of Hoya de Enriquillo/Cul-de-Sac Depression ..... *Peridinetus decipiens*
- Elytra with distinct black median macula and often with whitish postmacular spot (Fig. 11); possibly restricted to south of Hoya de Enriquillo/Cul-de-Sac Depression [one collecting site ambiguous] ..... *Peridinetus fuscosignum*

Palliolatrix Prena

Palliolatrix Prena, 2006: 16. Type species: *Palliolatrix palliolatrix* Prena, 2006, by original designation.

Palliolatrix insignis (Chevrolat)

(Figs. 1, 17)

Peridinetus insignis Chevrolat, 1880: XXVII. Holotype examined, labeled "107", "Typus" (NHRS, Chevrolat

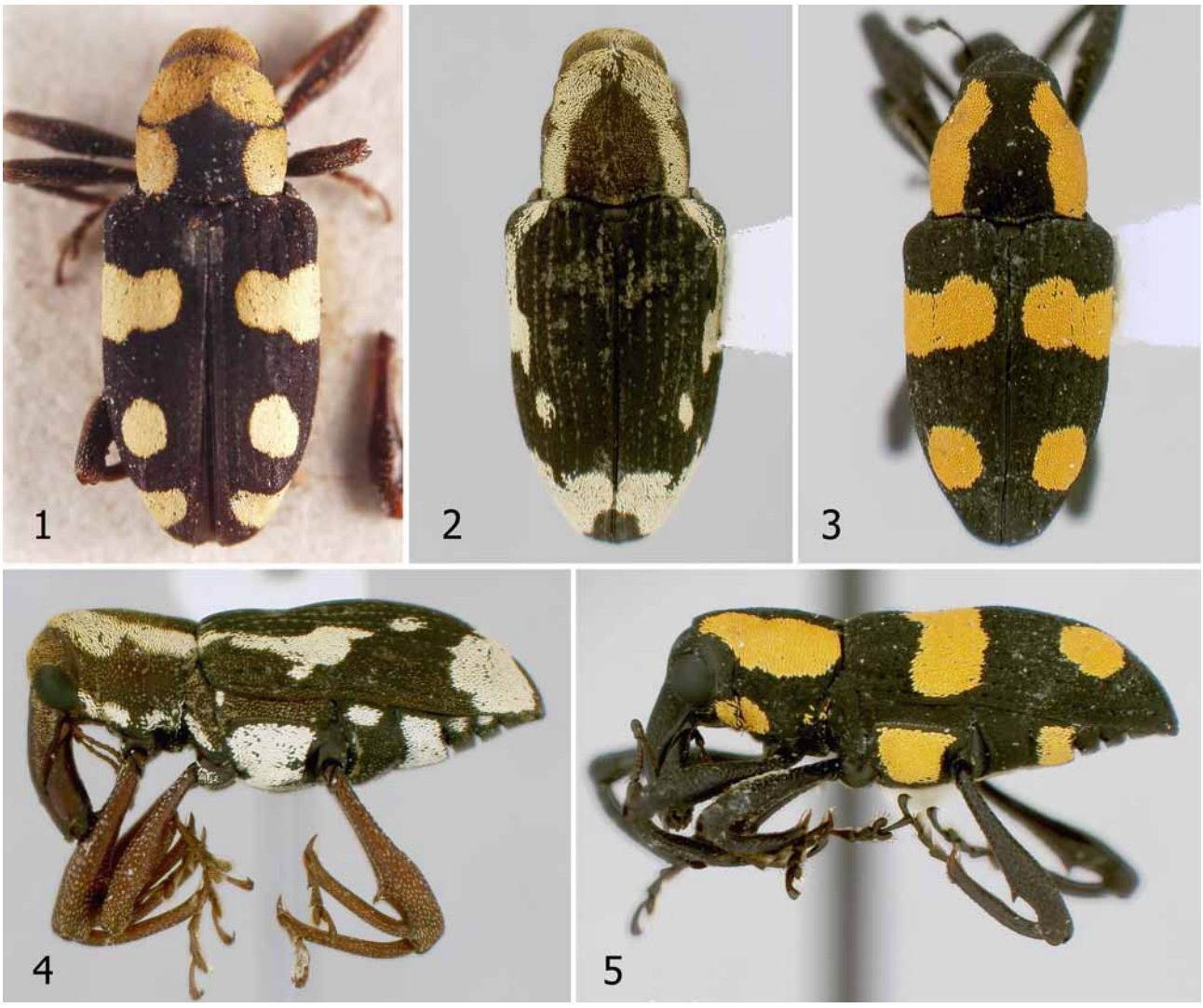
Collection). Chevrolat (1883: 79), Leng & Mutchler (1914: 475), Hustache (1932: 307; 1938: 9), Blackwelder (1947: 887), O'Brien & Wibmer (1982: 178).
Palliolatrix insignis (Chevrolat): Prena (2006: 18).

Diagnosis. *Palliolatrix insignis* resembles *P. silacea* in having the individual components of the elytral colour pattern reaching well onto the disk (Figs. 1, 3). The two species differ in several details of the colour pattern, particularly on the apical portions of the pronotum and elytra. The scales are beige in *P. insignis* and bright orange in *P. silacea*.

Material examined. GUADELOUPE. Holotype, without locality (NHRS 1).

Distribution. The species is known only from Guadeloupe (Fig. 17). Hustache (1932: 308) mentioned 12 specimens collected in Bains-Jaunes and Trois-Rivières.

Plant associations. Unknown.



FIGURES 1–5. Dorsal and lateral habitus of *Palliolatrix* species. **1,** *P. insignis*, Guadeloupe; **2, 4,** *P. lateropicta*, Dominica; **3, 5,** *P. silacea*, St. Vincent.

***Palliolatrix lateropicta* Prena sp. n.**
(Figs. 2, 4, 12, 15, 17)

Description. Total length 5.5–6.1 mm, standard length 5.4–5.9 mm (n=2). Integument reddish to brown; basic vestiture of small, yellowish to brown scales; moderately dense to imbricate, white to pale yellow scales in

compound pattern on pronotum, elytra, mesepisternum, metasternum and ventrites (Figs. 2, 4). Rostrum 0.75–0.82× as long as pronotum, middle section more curved, portion distal to antennal insertion 0.39–0.43× as long as rostrum. Pronotum 1.04–1.05× longer than wide, sides subparallel in basal half, constricted and tubulate in front, front projected. Elytra 1.52–1.56× longer than wide, humeri 1.43–1.49× wider than pronotum; striae subtle and narrower than strial punctures; interstria 3 not swollen on disk, preapical callus weak. Legs slender, femora clavate and with ventral tooth, tibia with ventral margin nearly straight, tarsal claws subconnate at base. Male with ventrite 5 depressed; apex of aedeagus subtriangular, fused medially, lateral portions membranous (Fig. 12); internal sac with basal sclerite flagelliform (Fig. 15), approximately as long as apodemes.

Material examined. Holotype male (dissected), labeled: "DOMINICA, ca. 2600' [800 m]/ Morne Trois Pitons N. P./ Freshwater Lake Rd, 13-/ 8-1986, C.W. & L. O'Brien", "HOLOTYPE/ *Palliolatrix*/ *lateropicta* Prena" (CASC, long-term loan to CWOB). Paratype 1, female, same data as holotype except 21.viii.1986 (CWOB).

Distribution. The species is known from two specimens collected in the Commonwealth of Dominica (Fig. 17).

Plant associations. Unknown.

Specific epithet. The name is a compound perfect passive participle derived from the Latin noun *latus*, side or flank, and Latin verb *pingere*, to paint.

Palliolatrix silacea Prena sp. n.

(Figs. 3, 5, 13, 17)

Description. Total length 4.6 mm, standard length 4.4 mm (n=1). Integument black, antenna and tibial spine reddish brown; basic vestiture of inconspicuous, black scales; imbricate, orange scales in well-defined patches on pronotum, elytra, metasternum and ventrite 2 (Figs. 3, 5). Rostrum 0.80× as long as pronotum, middle section more curved, basal half slightly tumid dorsomedially, portion distal to antennal insertion 0.43× as long as rostrum. Pronotum 0.96× as long as wide, sides weakly rounded, front projected. Elytra 1.56× longer than wide, humeri 1.33× wider than pronotum; striae subtle, strial punctures mostly inconspicuous; interstria 3 not swollen on disk, preapical callus weak. Legs slender, femora clavate and with ventral tooth, tibia with ventral margin slightly bisinuate, tarsal claws subconnate at base. Male with ventrite 5 depressed; apex of aedeagus round, fused medially, lateral portions membranous (Fig. 13); internal sac with basal sclerite flagelliform, approximately as long as apodemes.

Material examined. Holotype male (dissected), labeled: "ST. VINCENT, St./ Andrew P[arish], Vermont/ Nat[ure] Tr[ail], IX-1-1991/ C.W & L.B. O'Brien", "HOLOTYPE/ *Palliolatrix*/ *silacea* Prena" (CASC, long-term loan to CWOB).

Distribution. The species is known only from one specimen, collected in Saint Vincent & the Grenadines (Fig. 17).

Plant associations. Unknown.

Specific epithet. The name is a regular Latin adjective meaning ochreous.

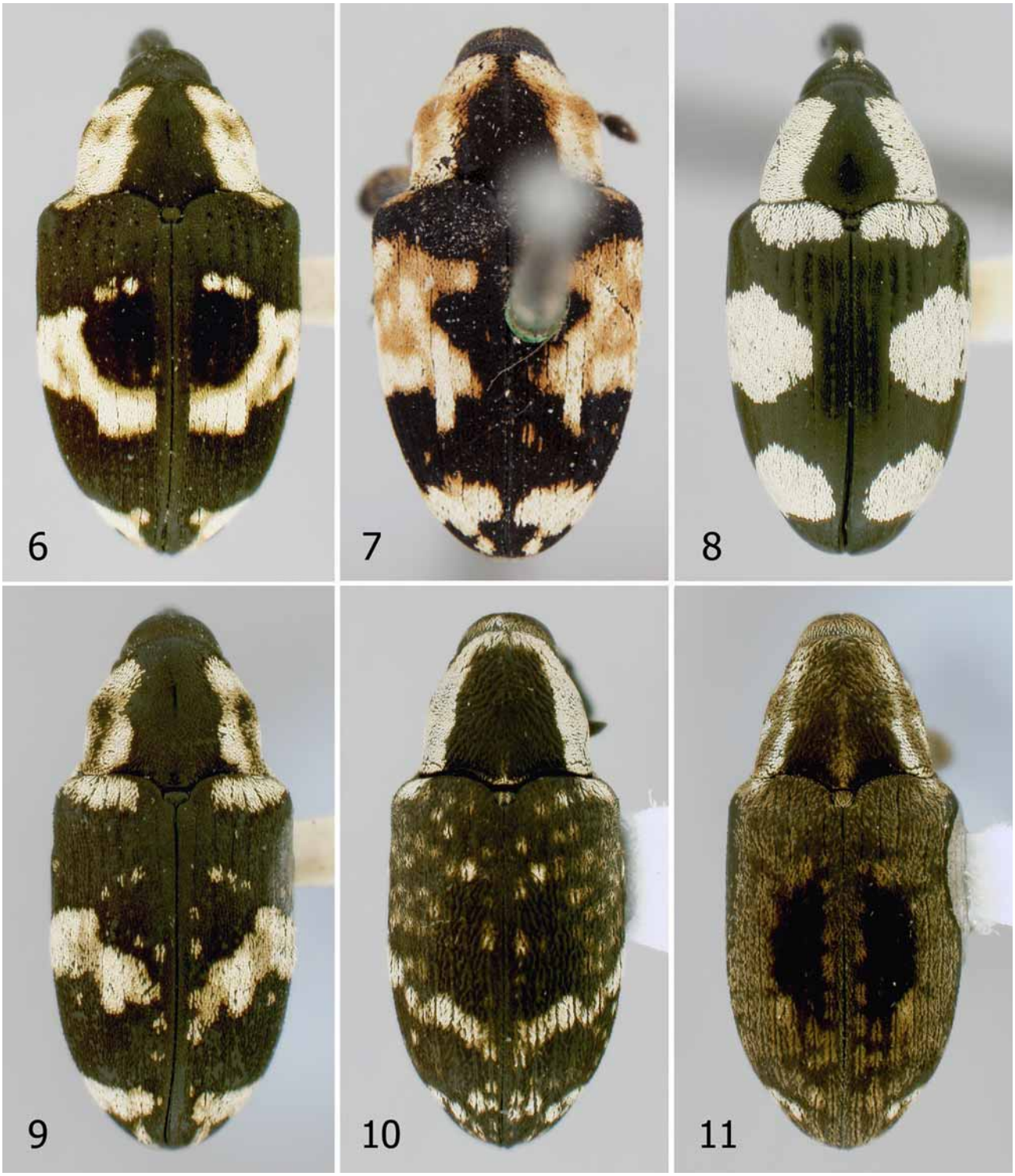
Peridinetus Schönherr

Peridinetus Schönherr, 1837: 467. Type species: *Curculio irroratus* Fabricius, 1787, by original designation.

Ephimerus Schönherr, 1843: 331. Type species: *Ephimerus sexguttatus* Boheman, 1843 (= *Curculio sexguttatus* Fabricius, 1775), by original designation. **New synonymy** [see discussion of *P. sexguttatus*].

Phelambates Jekel, 1883: 84. Type species: *Peridinetus sanguinolentus* Chevrolat, 1883, by monotypy. Hustache (1938: 10) [syn., citing Jekel (1883) and placing type species in *Peridinetus* without explanation]; Wibmer & O'Brien (1986: 279).

Conophoria Casey, 1922: 9. Type species: *Peridinetus distinctus* Pascoe, 1880, by original designation. Hustache (1938: 8) [syn., sunk to subgenus of *Peridinetus* without noting change of status].



FIGURES 6–11. Dorsal habitus of *Peridinetus* species. **6,** *P. concentricus*, Cuba; **7,** *P. poeyi*, Cuba; **8,** *P. sexguttatus*, Jamaica; **9,** *P. roeselii*, Cuba; **10,** *P. decipiens*, Dominican Republic; **11,** *P. fuscosignum*, Dominican Republic.

***Peridinetus concentricus* (Olivier)**
(Figs. 6, 18)

Rhynchaenus concentricus Olivier, 1807: 207.
Conotrachelus concentricus (Olivier): Dejean (1835: 296; 1836: 321), Schönherr (1837: 457; 1845: 56), Gemminger &

Harold (1871: 2541), Hustache (1936: 22), Blackwelder (1947: 849), O'Brien & Wibmer (1982: 128), Perez-Gelabert (2008: 137).

Peridinetus concentricus (Olivier): Chevrolat (1876: CCXXIX; 1883: 81), Leng & Mutchler (1914: 475), Wolcott (1924: 131; 1936: 306; 1951: 409), Blackwelder (1947: 886), O'Brien & Wibmer (1982: 178), Garrison & Willig (1996: 232), Perez-Gelabert (2008: 132).

Peridinetus signatus Rosenschöld, 1837: 472. Schönherr (1845: 57), Jacquelin du Val (1857a: 94; 1857b: 227), Lacordaire (1866: 210), Taschenberg (1869: 226), Gemminger & Harold (1871: 2617), Chevrolat (1883: 81), Stahl (1883: 177), Gundlach (1891: 322), Gundlach (1893: 323) [syn., precedence reversed], Leng & Mutchler (1914: 475), Wolcott (1924:131 1951: 409) [syn.], Hustache (1938: 10), Blackwelder (1947: 887), O'Brien & Wibmer (1982: 178), Garrison & Willig (1996: 232), Marcano & Abud (1995: [1]), Virkki & O'Brien (1997: 194), Alvarez Puente & Grillo Ravelo (2003: 93), Lozada Piña et al. (2004: 106), Peck (2005: 221), Perez-Gelabert (2008: 132). **Re-established synonymy**.

Hypera annulus; Dejean (1835: 296, 1836: 321), *nomen nudum*.

Diagnosis. *Peridinetus concentricus* is widespread in the Greater Antilles and has been confused frequently with *P. roeselii*, a slender species with a sexually dimorphic rostrum and subconnate claws. *Peridinetus poeyi*, a poorly known Cuban species, has a slightly different colour pattern (Fig. 8).

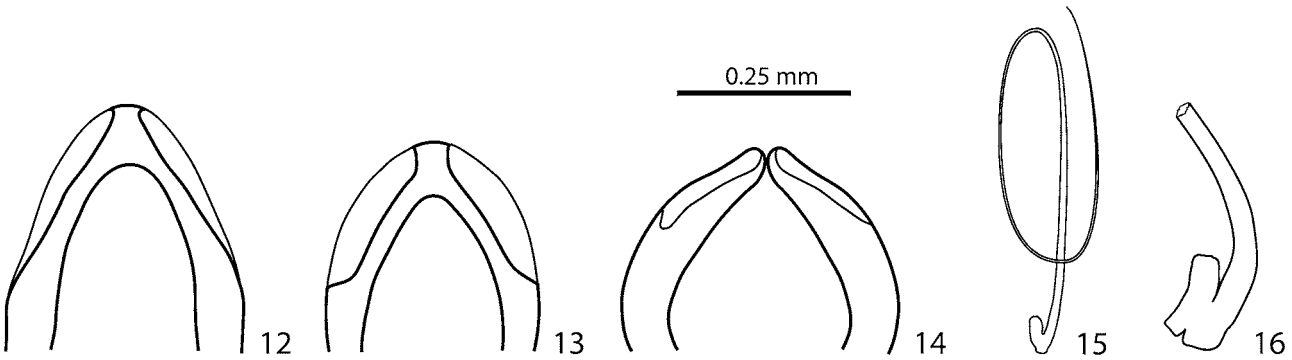
Material examined. Holotype of *R. concentricus*, labeled "41", oval disk with "48", "Typus", "P. concentricus/ Ol Ent V, 83, 12/ 207-196 pl 23/ 318 S...", in Chevrolat's hand "type/ Peridinetus/ concentricus Ol v, 83/ Chev. an. Belg... / Sto. Domingo ex mus. Olivieri" (NHRS, Chevrolat Collection). Holotype of *P. signatus* (NHRS, Schönherr Collection). Other material: CUBA. Cienfuegos: San Blas (CWOB 1). Guantanamo: Mountains N of Imias (CWOB 1, MCZ 1). La Habana: Baracoa (USNM 1); Hanabanilla (USNM 2). Pinar del Río: San Diego de los Baños (USNM 1). Sancti Spiritus: Topes de Collantes (CMNC 1, JPPC 3). Santiago: Gran Piedra, 1100 m (CMNC 1). DOMINICAN REPUBLIC. Distrito Nacional: Santo Domingo (CMNC 2, NHRS 1). Duarte: San Francisco (USNM 1). El Seibo: Miches (CWOB 1). Hato Mayor: P.N. Los Haitises, Sabana de la Mar (CMNC 1). La Vega: Cazabita [Casabito] (CWOB 1). Ocoa: 10 km N Ocoa (USNM 1). Salcedo: 5 km SE Rancho Arriba, 400 m (CMNC 1). San Cristobal: Colonia, 15 km SW San Cristobal, 1000 m (CMNC 1); Colonia Ramfis (CWOB 4). Without site (MNHUB 5). HAITI. Cap Haitien (UPRM 1). PUERTO RICO. Caribbean Nat. For. (USNM 1); Carite For. Res. (CWOB 7); El Rosario (UPRM 1); El Yunque (CMNC 4, CWOB 7, UPRM 2); Guilarte For. Res., Hwy 131&158 (CWOB 1); Hwy 191 & 966 (CWOB 1); Luquillo Exp. For. (CWOB 1); Jayuya (CMNC 1); Maricao (UPRM 1, USNM 3); Mayaguëz (CWOB 6, UPRM 2); Ponce (UPRM 1, USNM 1); Río Abajo For. Res., Hwy 621 (CMNC 2, CWOB 14, JPPC 4); Río Camuy Cave, Spiral Sink (CMNC 1); Río Piedras (USNM 1); Road 505, km 13–14 (USNM 1); San Sebastian (UPRM 1); Toro Negro (CWOB 1, UPRM 1); Utuado (MCZ 1, UPRM 1, USNM 3); Villalba (UPRM 1); Yauco (USNM 1); without site (NHRS 2, MNHUB 6). Total 111 specimens.

Distribution. The species occurs on the Greater Antillean islands except Jamaica.

Plant associations. Piperaceae: *Piper aduncum*, *P. amalago*, *P. medium*, *P. nigrum*, *P. peltatum* (Wolcott 1924, 1936, 1951; Marcano & Abud 1995; Alvarez Puente & Grillo Ravelo 2003). Records from *Blechum pyramidatum* (Acanthaceae), *Chamissoa altissima* (Amaranthaceae), *Clidemia hirta* (Melostomataceae), *Guarea guara* (Meliaceae), *Hedychium coronarium* (Zingiberaceae), *Heterotrichum octonum* (Melostomataceae), *Odontonema cuspidatum* (Acanthaceae), *Pavonia fruticosa* (Malvaceae), *Spathodea campanulata* (Bignoniaceae), *Syngonium podophyllum* (Araceae), *Syzygium jambos* (Myrtaceae), *Thelypteris tetragona* (Thelypteridaceae), *Triunfetta rhomboidea* (Tiliaceae) [all Alvarez Puente & Grillo Ravelo 2003] are probably accidental associations, as *Piper* and *Peperomia* species are confirmed hosts for 19 *Peridinetus* species (Prena, in prep.).

Discussion. Chevrolat (1876) transferred *Rhynchaenus concentricus* Olivier to *Peridinetus* and remarked that Schönherr and Lacordaire apparently overlooked this species. However, Schönherr (1837: 457; 1845: 56) had listed it under *Conotrachelus* (thereby following Dejean 1835, 1836) and the resulting dual identity has been maintained in catalogues ever since. The synonymy of *P. concentricus* and *P. signatus* was first

recognised by Gundlach (1893: 323), though with reversed precedence. Wolcott (1924: 131) followed priority but lumped *P. concentricus* with *P. poeyi*. Later, Wolcott (1951: 409) changed priority again and confused *P. concentricus* with *P. maculatus*, a synonym of *P. roeselii*.



FIGURES 12–16. Male genital structures of *Palliolatrix* and *Peridinetus*. **12–14,** apex of aedeagus, dorsal view: **12,** *Palliolatrix lateropicta*; **13,** *Palliolatrix silacea*; **14,** *Peridinetus fuscosignum*. **15–16,** basal sclerite of internal sac: **15,** *Palliolatrix lateropicta*; **16,** *Peridinetus fuscosignum*.

***Peridinetus decipiens* Prena, new species**
(Figs. 10, 19)

Description. Total length 5.1–6.4 mm, standard length 5.3–6.2 mm (n=7). Integument dark brown; basic vestiture of medium-sized, mostly brown scales and varying extents of paler, often locally clustered scales; colour pattern formed by pale scales in dorsolateral pronotal vitta and in narrow, variously disintegrated fascia around subapical elytral callus (Fig. 10), elytral disk with or without obsolete macula of dark scales. Rostrum of male 1.06–1.07×, of female 1.06–1.07× longer than pronotum, subcylindrical, punctation coarser than in most congeners, anteantennal portion in male 0.39–0.41×, in female 0.41–0.44× as long as rostrum. Pronotum finely punctate, glabrous, 0.84–0.89× as long as wide, subconical, sides weakly rounded, frontal margin distinctly projected. Elytra 1.56–1.67× longer than wide, humeri 1.27–1.36× wider than pronotum; striae fine, indistinctly punctate; interstriae without median ridges; subapical callus weak. Legs moderately slender, femora clavate and with acute ventral tooth, tibia straight to slightly bisinuate, ventral margin not projected or otherwise modified, tarsal claws subconnate at base. Male with ventrite 5 depressed; aedeagus similar to that of *P. fuscosignum* (Figs. 14, 16).

Material examined. Holotype male (dissected), labeled: "DOMINICAN REPUBLIC/ La Vega Prov., 10 km./ W Jima, 27 May 1992/ R. Turnbow", "HOLOTYPE/ *Peridinetus*/ *decipiens* Prena" (CMNC). Paratypes 6 (2 males, 4 females): DOMINICAN REPUBLIC. Distrito Nacional: St. Domingo, 14.vii.1974, J. & S. Klapperich (CWOB 1♀). Monsenor Nouel: 22 km NW Bonao, 3.ix.1997, C.W. O'Brien (CWOB 1♀). La Vega: 10 km W Jima, 24.v.1992, R. Turnbow (CMNC 1♀), ditto, 27.v.1992 (JPPC 1♂); Pico Duarte, N19.08.22 W70.27.73, to Los Tablones, 1200 m, 29.vi.2004, A. Konstantinov (USNM 1♂); La Cienega [Cienaga], near 1st refuge [up Pico Duarte], 14.i.1989, S. A. Marshall (CMNC 1♀).

Distribution. The species occurs in Hispaniola, north of Hoya de Enriquillo/Cul-de-Sac Depression.

Plant associations. Unknown.

Specific epithet. The name is a present active participle of the Latin verb *decipere*, to deceive.

Discussion. *Peridinetus decipiens* is one of three species with flat, basally subconnate tarsal claws. It can be distinguished from the other Hispaniolan species, *P. fuscosignum*, by the narrow, subapical elytral fascia and possibly allopatry. The Cuban *P. roeselii* has a wider fascia and at least some ochreous scales.

***Peridinetus fuscosignum* Prena, new species**
(Figs. 11, 14, 16, 19)

Description. Total length 4.9–6.3 mm, standard length 4.7–6.2 mm (n=7). Integument dark brown; basic vestiture of medium-sized, mostly brown scales and varying amounts of pale, usually rather indistinctly clustered scales; colour pattern formed by dark macula on elytral disk and white to pale brown scales in dorsolateral pronotal vitta and in abbreviated fascia on interstriae 3–4 distally of elytral macula (Fig. 11). Rostrum of male 1.00–1.07×, of female 1.09–1.17× longer than pronotum, subcylindrical, punctation coarser than in most congeners, anteantennal portion in male 0.38×, in female 0.43–0.44× as long as rostrum. Pronotum finely punctate, glabrous, 0.83–0.86× as long as wide, subconical, sides weakly rounded, frontal margin distinctly projected. Elytra 1.49–1.64× longer than wide, humeri 1.24–1.34× wider than pronotum; striae fine-cut, indistinctly punctate; interstriae without median ridges; subapical callus weak. Legs moderately slender, femora clavate and with acute ventral tooth, tibia straight to slightly bisinuate, ventral margin not projected or otherwise modified, tarsal claws subconnate at base. Male with ventrite 5 depressed; apex of aedeagus round, incompletely fused medially (Fig. 14), lateral portion less sclerotised but not membranous; internal sac with basal sclerite tubiform, shorter than body of aedeagus (Fig. 16).

Material examined. Holotype male, labeled: "♂", "DOMINICAN REPUBLIC/ Pedernales, 25 km. N Cabo/ Rojo, 700 m., 10 July 1996/ R. Turnbow", "HOLOTYPE/ *Peridinetus*/ *fuscosignum* Prena" (CMNC). Paratypes 7 (3 males, 4 females): DOMINICAN REPUBLIC. Pedernales: 25 km N Cabo Rojo, 10.vii.1996, R. Turnbow (JPPC 1♀). HAITI. Port au Pr[ince], Ehrbrg., Hist.-Coll. Nr. 33500 (ZMHB 1♂); Port-au-Prince, ii.1925, G. N. Wolcott (AMNH 1♂, 1♀; USNM 1♀); Corail, 15.ix.1925, W. A. Hoffman (USNM 1♂, 1♀).

Distribution. The species occurs in Hispaniola, possibly restricted to south of Hoya de Enriquillo/Cul-de-Sac Depression (see discussion).

Plant associations. Unknown.

Specific epithet. The name is a compound noun in apposition composed of the Latin words *fuscus*, for dark, and *signum*, a sign or mark.

Discussion. *Peridinetus fuscosignum* is one of three species with flat, basally subconnate tarsal claws. It can be distinguished from the other Hispaniolan species, *P. decipiens*, by the reduced post-macular fascia and possibly allopatry. The collecting site Corail is ambiguous. Root (1927) interpreted the locality as being on the northern shore, near Cap Haitien. However, several localities with the same name occur west and south of Port-au-Prince, where W. A. Hoffman collected.

***Peridinetus poeyi* Jacquelin du Val, resurrected name**
(Figs. 7, 18)

Peridinetus poeyi Jacquelin du Val, 1857a: 94 [considered to be published before Jacquelin du Val 1857b; see Evenhuis (1989: 828)]. Jacquelin du Val (1857b: 225), Gemminger & Harold (1871: 2617) [synonymy with *P. roeselii*, with reversed precedence], Chevrolat (1883: 82), Gundlach (1891: 322), Leng & Mutchler (1914: 475), Wolcott (1924: 132; 1936: 307) [misidentification].
Peridinetus poyei; Lacordaire (1866: 210), *lapsus*.

Diagnosis. *Peridinetus poeyi* is one of three West Indian species with basally separate tarsal claws and can be confused with *P. concentricus*. It differs from the latter species by the wide elytral fascia, the densely scaled mesepimeron and metepisternum and the fringe of hairs on the hind tibia of the male.

Material examined. CUBA. La Habana: Habana, Poey (NHRS 3). Sancti Spiritus: Topes de Collantes, P. Vaurie (AMNH 4). "SOUTH AMERICA" (USNM 1).

Distribution. The only documented collecting sites are Havana and Topes de Collantes in Cuba. One historical specimen in the USNM (probably from the Gorham Collection) bears a label in modern handwriting

that suggests South America as the origin. This may be equivalent to the term *America meridionalis*, which has been used historically to refer to tropical America in the widest sense.

Plant associations. *Piper peltatum* [as Caisimón] (Gundlach 1891) [possibly misidentification of weevil].

Discussion. Jacquelin du Val states in the description that he obtained this species from Chevrolat under the manuscript name *Heilipus poeyi*. I have not seen the type but have studied the three specimens that stand under this name in the Chevrolat Collection. One specimen has a small green label "Havane/ D Poey" and the associated tray label refers to the species' name and the publication. *Peridinetus poeyi* is neither a synonym of *P. roeselii* (Boheman), as proposed by Gemminger & Harold (1871: 2617), nor of *P. concentricus* (Olivier), as proposed by Wolcott (1924).

***Peridinetus roeselii* (Boheman)**

(Figs. 9, 19)

Heilipus roeselii Boheman, 1836: 206. Dejean (1836: 299), Schönherr (1843: 89).
Peridinetus roeseli [sic] (Boheman): Schönherr (1845: 57) [as *Heilipus roeseli* in synonymy with *P. maculatus* Sturm, generic assignment implied from context], Chevrolat (1883: 82), Leng & Mutchler (1914: 475), Zherikhin & Gratshev (1995: 720).
Peridinetus roeselii (Boheman): O'Brien & Wibmer (1982: 178; 1984: 287), Peck (2005: 221).
Heilipus roiselu [sic] (Boheman): Gundlach (1891: 321), lapsus.
Ambates roeseli [sic] (Boheman): Kuschel (1955: 271).
Peridinetus maculatus Rosenschöld, 1837: 471. Schönherr (1845: 57) [syn., precedence reversed], Jacquelin du Val (1857a: 93; 1857b: 225), Lacordaire (1866: 210), Taschenberg (1869: 226), Gemminger & Harold (1871: 2617), Gundlach (1891: 321; 1893: 323), Leng & Mutchler (1914: 475), Hustache (1938: 9), Blackwelder (1947: 887), Rodríguez Velázquez & Mestre Novoa (2002: 7), Lozada Piña et al. (2004: 106).
Peridinetus roeseli [sic] var. *maculates* Rosenschöld: Chevrolat (1883: 82).
Cryptorhynchus maculatus; Sturm (1826: 128, 1843: 222), *nomen nudum*.
Cryptorhynchus albonotatus; Dejean (1835: 275, 1836: 299), *nomen nudum*.
Heilipus roeselii; Dejean (1835: 275, credited to Schönherr), *nomen nudum*.

Diagnosis. Of the three species with subconnate claws, only *P. roeselii* occurs in Cuba. The elytral vestiture consists of three fasciae, at the base, middle and apex, with the median fascia composite and occasionally surrounding an obsolete, dark macula (Fig. 9). The other two species, *P. decipiens* and *P. fuscosignum*, are restricted to Hispaniola and have a different colour pattern.

Material examined. Holotype of *H. roeselii*, labeled "Typus", "Roeseli/ Sch Cuba", white disk "69", "351/ 82", "Riksmuseum/ Stockholm"; 2 other specimens mentioned by Chevrolat (1883: 82] probably no types (NHRS, Chevrolat Collection). 3 syntypes of *P. maculatus*, labeled as holotype, allotype and paratype (NHRS, Schönherr Collection). CUBA. Cienfuegos: Soledad (CWOB 2). Granma: upper Yara valley (USNM 1). La Habana: Baracoa (USNM 3). Pinar del Río: San Blas (USNM 1). Sancti Spiritus: Mina Carlota, Trinidad Mts. (CWOB 1, USNM 3); Topes de Collantes (JPPC 1); Pico Potrerillo (CWOB 10). Site unspecified (CWOB 1, DEI 1, NHRS 4, USNM 3, MNHUB 8). Total 39 specimens.

Distribution. *Peridinetus roeselii* is endemic to Cuba. The type locality, given as "Brasilia" and questioned by Schönherr (1843: 89), is erroneous. The records from Puerto Rico (Wolcott 1924, 1936, 1951; O'Brien & Wibmer 1982) refer to *P. concentricus*.

Plant associations. *Piper peltatum* [as Caisimón] (Gundlach 1891).

Discussion. This species was described erroneously in duplicate by Schönherr's co-workers, as *Heilipus roeselii* by Boheman (1836) and as *Peridinetus maculatus* by Rosenschöld (1837). Schönherr (1845) synonymised these names under *P. maculatus* and credited the authorship to Sturm (1843), who had proposed this epithet *in litteris* as early as 1826 (Sturm 1826). The superficial similarity with other West Indian *Peridinetus* species caused further confusion regarding its name and distribution. Gundlach (1893) mentioned *P. maculatus* (with *Heilipus roeselii* as a synonym) in his faunal list of Puerto Rico, but noted that the species

occurs only in Cuba. Wolcott (1924, 1936) considered *P. poeyi* as a synonym of *P. concentricus* and mentioned Puerto Rican specimens deposited in the AMNH, but later he suggested that *P. concentricus* and *P. maculatus* are synonyms of *P. signatus*, no longer referring to *P. poeyi* (Wolcott 1951). Wolcott was correct in that all his Puerto Rican specimens are one and the same species, *i.e.*, *P. concentricus*, but erroneously included therein two other species from Cuba. O'Brien & Wibmer (1982) were the first to give *P. roeselii* precedence over *P. maculatus* but repeated Wolcott's erroneous record from Puerto Rico.

***Peridinetus sexguttatus* (Fabricius), comb. n.**
(Figs. 8, 18)

Curculio ovalis auct. (not Linnaeus, 1760; not Marsham, 1802). Drury (1773: in index), Westwood in Drury (1837: [64]).
Baridius ovalis: Westwood in Drury (1837: [64]) [unavailable, see discussion below].
Curculio sexguttatus Fabricius, 1775: 138. Fabricius (1781: 176; 1787: 106; 1793: 430), Gmelin (1790: 1763), Olivier (1791: 509), Herbst (1795: 466).
Rhynchaenus sexguttatus (Fabricius): Fabricius (1801: 470), Olivier (1807: 205).
Ephimerus sexguttatus (Fabricius, not Boheman, 1843): O'Brien & Wibmer (1984: 297).
Ephimerus sexguttatus Boheman, 1843: 332 (not Fabricius, 1775). Lacordaire (1863: 621), Gemminger & Harold (1871: 2441), Leng & Mutchler (1914: 471), Gowdey (1926: 26), Klima (1934: 143), Blackwelder (1947: 826), O'Brien & Wibmer (1982: 178).

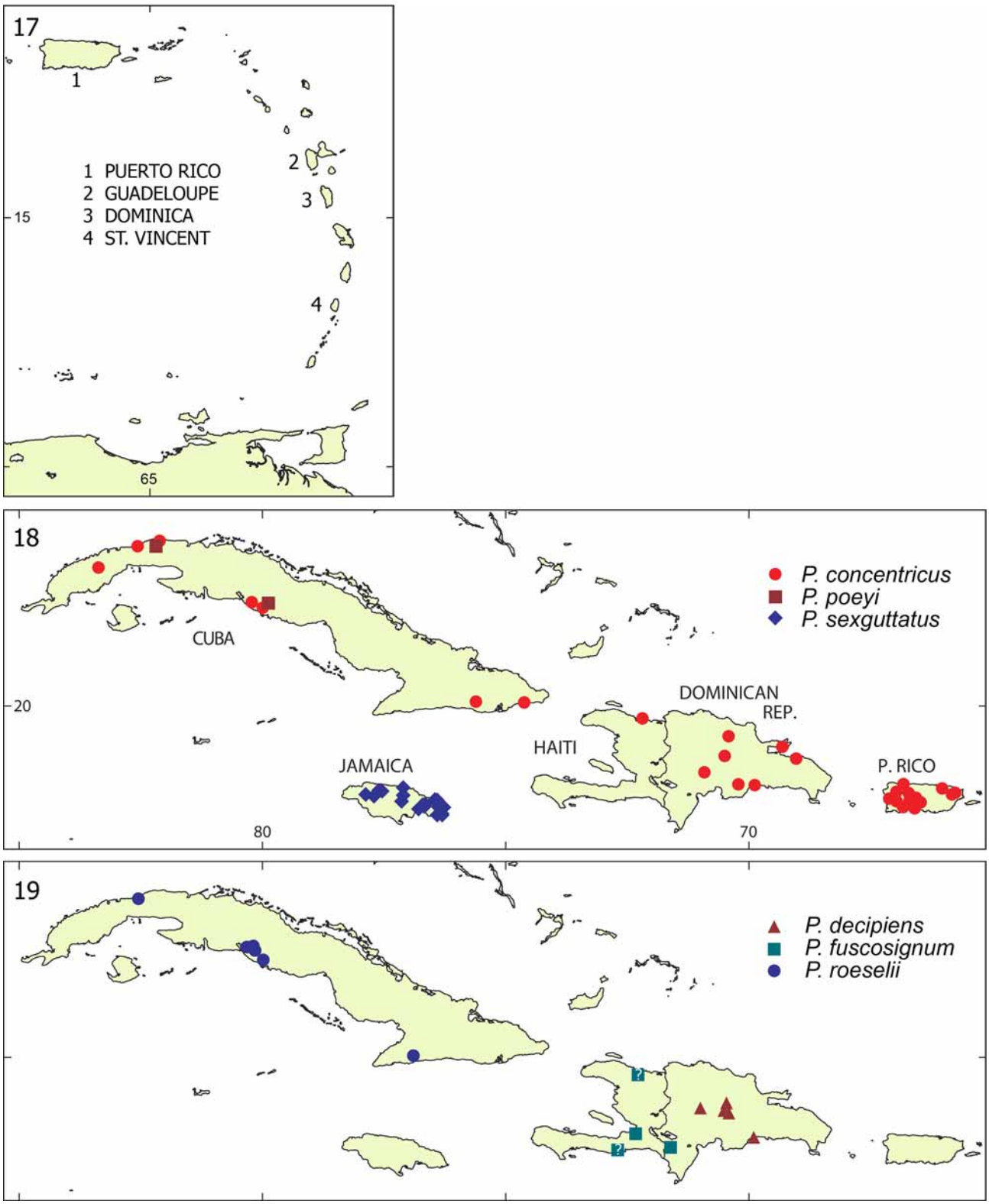
Diagnosis. *Peridinetus sexguttatus* can be recognised by its whitish, fasciate vestiture (Fig. 8) and is the only *Peridinetus* species that occurs in Jamaica.

Material examined. Digital images of 2 syntypes of *C. sexguttatus* Fabricius (HMUG, Hunter Collection). JAMAICA. Portland: Ecclesdown (CMNC 1); Manchioneal (USNM 2); Millbank (CWOB 4); Port Antonio (CNCI 3, CWOB 3, USNM 3); Sommerset Falls (CWOB 4). Saint Andrew: Clydesdale (CWOB 1); Content Gap (CMNC 2, CWOB 3); Kingston (CMNC 2); Hardwar Gap (CMNC 1, CNCI 2, CWOB 1, JPPC 1); Hermitage Dam (USNM 2); Holywell Forest Camp (USNM 2); Saint Peter's (CMNC 1, CWOB 1); Whitefield Hill, Blue Mts. (CWOB 1). Saint Ann: Fern Gully (CMNC 2, CWOB 1); Moneague (CNCI 1, CWOB 1); Ocho Rios (USNM 5). Saint Catherine: Worthy Park (CWOB 1). Saint James: Catadupa (USNM 2). Saint Thomas: Bowden Peninsula (CNCI 10); Bath (CMNC 1, CNCI 6); Morant Point (UPRM 1); Portland Gap (CNCI 1); Penlyne Castle (CMNC 1); without site (UPRM 1). Trelawny: Barbecue Bottom (CWOB 2); Windsor (CMNC 1); Come Night Cave, nr. Quick Step (USNM 4). Total 81 specimens.

Distribution. The species is endemic to Jamaica (Fig. 18)

Plant associations. Unknown.

Discussion. Drury (1773: 60) described and illustrated this species without a Linnaean name and referred it to *Curculio ovalis* Linnaeus, 1767: 612 (actually 1760: 180) in the index. Westwood (in Drury 1837) recognised the misidentification but maintained the epithet when he referred the species tentatively to *Baridius*. Because Westwood's name is the combination of a misidentification, it is nomenclaturally unavailable. However, the species had meanwhile been redescribed by Fabricius (1775) as *C. sexguttatus*. Boheman (1843) described the species for a second time, as *Ephimerus sexguttatus* (type supposedly in Uppsala, not studied). Schönherr's (1843) comparison with the Brazilian *Anchylorhynchus variabilis*, a species placed in the Erirhininae at that time but currently in Derelomini (O'Brien & Wibmer 1984), separated the species from the Peridinetini; it remained in Erirhininae or *incertae sedis* for the next 140 years (Lacordaire 1866, Gemminger & Harold 1871, Leng & Mutchler 1914, Gowdey 1926, Klima 1934, Blackwelder 1947), until O'Brien & Wibmer (1982: 8) transferred *Ephimerus* to the Baridinae: Peridinetini. The only included species, *E. sexguttatus*, is very closely related to *P. concentricus* and *P. poeyi*, and these three differ from other *Peridinetus* species by having basally separate tarsal claws, considered as the plesiomorphic state. Because the tarsal claws of *Piper*-associated Baridinae were modified independently several times in the larger species, *e.g.*, *Embates* (Prena 2005), and other synapomorphies have not been recognised in *Peridinetus* species with modified claws, *Ephimerus* is here synonymised with *Peridinetus*.



FIGURES 17–19. Maps of the Lesser and Greater Antilles showing the distribution of *Palliolatrix* and *Peridinetus* species. **17,** *Palliolatrix insignis* (2), *P. lateropicta* (3) and *P. silacea* (4); **18,** *Peridinetus concentricus*, *P. poeyi* and *P. sexguttatus*; **19,** *Peridinetus decipiens*, *P. fuscosignum* and *P. roeselii*.

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