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Parandrinae from Cuba (Coleoptera, Cerambycidae)

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ABSTRACT

Three species of Parandrinae are recognized from Cuba, all belong to Birandra (Yvesandra) *Santos-Silva & Shute, 2009:* B. (Y.) cubaecola *(Chevrolat, 1862);* B. (Y.) cribrata *(Thomson, 1861); and* B. (Y.) latreillei *Santos-Silva & Shute, 2009. The latter, confused with the former by Zayas (1957, 1975) is confirmed as a common species on the island.* Birandra (Y.) cubaecola *is excluded from the fauna of Puerto Rico;* B. (Y.) cribrata *is also excluded from Puerto Rico as well as Hispaniola.*

Keywords: *Birandra;* Parandrini; Revision; Taxonomy; *Yvesandra.*

INTRODUCTION

Latreille (1802) described *Parandra* based on a single species: *Attelabus glaber* (DeGeer, 1774). Later, Latreille (1804) used the name *Parandra laevis* for *A. glaber,* but figured a different species. Schönherr (1817) considered *P. laevis* as a species distinct from *A. glaber.* This order was maintained until Santos-Silva & Shute (2009) renamed *P. laevis sensu auctorum* for *Birandra (Yvesandra) latreillei.* Thus in this work, our use of *B. (Y.) latreillei,* was cited by earlier authors as *Parandra laevis.* However, in this introduction, we will use the originally recorded name by each respective author. *Parandra cubaecola* Chevrolat, 1862, and *P. cribrata* Thomson, 1861, also were assigned to *Birandra (Yvesandra)* by Santos-Silva & Shute (2009).

Thomson (1861) described *Parandra cribrata,* which is the first species new from Cuba. In the same work, he mistakenly synonymyzed *P. laevis* with *P. brunnea* (Fabricius, 1798) (currently, *Neandra brunnea*). This mistake was likely based on LePeletier & Audinet-Serville (1825): "*Parandra brunnea.* Scho. (*Tenebrio brunneus.* Fab.) de l'Amérique septentrionale paroît n'être qu'une variété de cette espèce [*P. laveis*]". One year later, Chevrolat (1862) described a second species: *Parandra cubaecola.*

Thomson (1862) recognized his error and revalidated *Parandra laevis,* being the first to record *Parandra laevis* from Cuba. However, this record was, undoubtedly, also incorrect. This is evident as Thomson (1862) did not cite the country of the type locality for this species (Santo Domingo in Dominican Republic), as correctly pointed out by Chevrolat (1862). Thomson (1862) is generally cited as "Thomson (1861b)", for example in Monné (2006). Nevertheless, this work could not have been published in 1861, as Thomson wrote on page 96: "20. P. Cubaecola, Chevrt., Ann. Soc. ent., 1862, p. 275, Cuba". The colophon on

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page 92 is dated 1861: "IMPRIMERIE DE M^me^ V^e^ BOUCHARD-HUZARD, RUE DE L'ÉPERON, 5. – PARIS, 1861". However, the colophon on page 96 is dated 1867: "IMPRIMERIE DE M^me^ V^e^ BOUCHARD-HUZARD, RUE DE L'ÉPERON, 5. – PARIS, 1867". We believe that this last date is a printer's error, because it is difficult to believe that these few pages (93-96) were printed six years after the others. Further evidence substantiating this error can be noted in Bonvouloir (1867), who wrote a paper published on pages 93-95: "Monographie du genre Mormolyce. – 1862". In addition, Rousseau (1906) recorded this monograph and the two new species described in it by Thomson, as published in 1862. Thus, it was Chevrolat (1862) who corrected the synonymy established by Thomson (1861), between *P. laevis* and *P. brunnea*, and not Thomson (1861b), or even Thomson (1862), as usually recorded. Thomson (1864) cited the correct country of *P. laevis:* "St Domingue", but Thomson (1867) again recorded only Cuba as the distribution of the species.

Waterhouse (1878), recorded *P. laevis* from Jamaica; Gundlach (1894) recorded *P. cubaecola* from Puerto Rico; and Gahan (1895) listed *P. laevis* from Haiti, *P. cubaecola* from Cuba and Puerto Rico, and *P. cribrata* from Cuba.

Lameere (1902) synonymyzed *P. cubaecola* with *P. cribrata:* "il se peut que je me trompe, mais les differences alléguées par Chevrolat pour séparer son espèce de celle de Thomson me sembleut des différences purement individuelies, ou méme des différences illusoires provenant de ce que Chevrolat n'a pas lien compris les expressions peu claires de la description de Thomson" [It is possible that I am wrong, but the differences alleged by Chevrolat to separate his species from that of Thomson seem only individual differences, or even illusory differences owing to the fact that Chevrolat did not understand the unclear expressions of the Thomson's description]. In the same work he listed *P. cribrata* from Puerto Rico.

Lameere (1912) revalidated *P. cubaecola:* "J'ai eu tort de supposer que cette espèce [*P. cubaecola*] était synonyme de *Parandra cribrata* Thoms., laquelle est de Porto-Rico, d'Haiti et également de Cuba" [I was wrong to assume that this species was synonymous of *Parandra cribrata* Thoms., which is from Puerto Rico, Haiti and also from Cuba]. Lameere (1913) recorded *P. laevis* from Haiti, *P. cribrata* from Puerto Rico, Haiti and Cuba, and *P. cubaecola* only from Cuba. However, Leng & Mutchler (1914), maintain the mistake on the identity of *P. cribrata* (confused with *P. cribrata* by Gundlach (1894), see below), listed *P. laevis* from Haiti, *P. cribrata* from Puerto Rico, Haiti and Cuba, and *P. cubaecola* from Puerto Rico and Cuba.

Wolcott (1924, 1936, 1948), ignoring Lameere (1913, 1919), wrote: "*Parandra cribrata* Thomson and *Parandra cubaecola* Chevrolat, both re-reported from Puerto Rico by Leng & Mutchler, are possibly the least typical of the Cerambycidae. Only the first is represented by recent collections..."

Zayas (1957) recorded only two species from Cuba, *P. cribrata* and *P. cubaecola,* and commented that the former also occurs in Puerto Rico and "Española" (Hispaniola Island – Dominican Republic and Haiti), and that it is the rarest in Cuba. Regarding *P. cubaecola,* he affirmed: "Esta especie habita solamente la Isla de Cuba" [This species only inhabits the island of Cuba]. Zayas (1975) maintained the same position of Zayas (1957).

Blackwelder (1946) mentioned: *P. cubaecola* (Cuba, ? Puerto Rico); *P. cribrata* (Cuba, Hispaniola, Puerto Rico); *P. laevis* (Jamaica, Hispaniola). According to Chemsak *et al.* (1992), *P. cubaecola* occurs in Cuba, *P. cribrata* in Cuba, Hispaniola and Puerto Rico, and *P. laevis* in Hispaniola and Jamaica. Monné & Giesbert (1994), Monné (1994), Monné & Hovore (2005, 2006), and Monné (2006), followed Chemsak *et al.* (1992), but included *P. cubaecola* as occurring in Puerto Rico.

Santos-Silva (2002) divided *Parandra* into two subgenera, assigned *P. laevis, P. cribrata* and *P. cubaecola* to *Parandra (Parandra),* and added a key to the species of the subgenus, excepting *P. cubaecola.* In this work, *Parandra (Parandra) tavakiliani* was described from Puerto Rico: "O exame de diapositivo e fotografia do holótipo de *P. cribrata,* além das observações de Gérard L. Tavakilian (com. pess.) do MNHN, mostram diferenças entre essa espécie e *P. (P.) tavakiliani* sp. nov." [The examination of the slide and photograph of the holotype of *P. cribrata,* in addition to the observations of Gérard L. Tavakilian (*pers. comm.*) from MNHN, show differences between this species and *P. (P.) tavakiliani*]. With this, Santos-Silva (2002) affirmed that *P. cribrata sensu* Lameere (1902) corresponded to *P. (P.) tavakiliani,* and not to Thomson's species. Thus, *P. cribrata* was excluded from the fauna of Puerto Rico, something not noted by later authors (*e.g.* Monné, 2006). Santos-Silva (2002), in the key, also reported *P. (P.) laevis* from Cuba, Hispaniola and Jamaica.

Peck (2005) listed all the beetles known from Cuba and recorded three species of *Parandra: P. cribrata* from Cuba, Hispaniola and Puerto Rico;

P. cubaecola from Cuba and Puerto Rico and *P. laevis* from Cuba, Hispaniola and Jamaica.

Cardona-Duque *et al.* (2007) recorded *P. cribrata* only in Cuba, and *P. laevis* from Cuba, Hispaniola and Jamaica, writing in the introduction of the key to the species: "*Parandra cubaecola* Chevrolat, 1862 is not included because the taxonomical validity of the species needs to be revised; apparently it is a synonym, but this must to be confirmed or not with the detailed study of specimens from Cuba".

Monné & Bezark (2010), in the latest published Checklist, mention: *Birandra (Yvesandra) latreillei* (Hispaniola and Jamaica); *B. (Y.) cubaecola* (Cuba and Puerto Rico); and *B. (Y.) cribrata* (Cuba, Puerto Rico, Hispaniola). This, contradicts Lameere (1913) regarding *P. cubaecola* (inclusion of Puerto Rico), and Santos-Silva (2002) regarding *P. laevis* (exclusion of Jamaica) and *P. cribrata* (inclusion of Puerto Rico and Hispaniola).

Finally, Micheli (2010) listed only *B. (Y.) tavakiliani* from Puerto Rico, and wrote: "The subfamily Parandrinae has had two species listed from Puerto Rico, *Parandra cribrata* Thomson and *P. cubaecola* Chevrolat, as we find in Wolcott (1948)... All specimens of local Parandrinae examined by the author are *Birandra (Yvesandra) tavakiliani*".

We are now formally excluding *Birandra (Yvesandra) cribrata* from the fauna of Puerto Rico and Hispaniola, and *B. (Y.) cubaecola* from the fauna of Puerto Rico. We believe that all citations of those species from outside Cuba were based on misidentification.

MATERIAL

We examined specimens of Parandrinae in nearly all collections in Cuba, and some in Brazil. Only specimens of *Birandra (Yvesandra)* were found.

The collection acronyms used in this study are as follows: **BSC-E:** Colección Entomológica del Departamento de Zoología. Centro Oriental de Ecosistemas y Biodiversidad (BIOECO), Santiago de Cuba, Cuba; **BMNH:** The Natural History Museum, London, England; **CZCTR:** Museo de Historia Natural "Charles Ramsden", Facultad de Ciencias Naturales, Universidad de Oriente, Santiago de Cuba, Cuba; **CZACC:** Colección Zoológica de la Academia de Ciencias de Cuba en Instituto de Ecología y Sistemática (IES), La Habana, Cuba; **FZPC:** Colección Privada Fernando Zayas, La Habana, Cuba; **HG:** Colección Horacio Grillo, Laboratorio de Taxonomía, Centro de Investigaciones Agropecuarias, Facultad de Ciencias Agropecuarias, Universidad Central de Las Villas; **MFPUH:** Museo Felipe Poey, Universidad de la Habana, La Habana, Cuba; **MNHN:** Muséum National d'Histoire Naturelle, Paris, France; **MNHN-CU:** Museo Nacional de Historia Natural, La Habana, Cuba; **MNRJ:** Museu Nacional do Rio de Janeiro, Rio de Janeiro, Brazil; **MZUSP:** Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil; **UNM:** University of New Mexico, Albuquerque, USA; **USNM:** National Museum of Natural History, Washington D.C., USA. Other abbreviations used in the text: **Gr:** Granma; **Ho:** Holguín.

Key to the species of Parandrinae from Cuba

1. Mandibles falciform; urosternite V wide at apex, about as long as urosternite IV, or just longer (males) ..2
   Mandibles not falciform, sub-triangular; urosternite V narrow at apex, about twice as long as IV (females) 4
2(1). Carinae of ventral sensorial area of antennomeres III-XI (mainly IX-XI) distinctly visible from side. Hispaniola, Cuba, Jamaica..... *Birandra (Yvesandra) latreillei* Santos-Silva & Shute, 2009
   Carinae of ventral sensorial area of antennomeres III-XI not or very slightly visible from side.....3
3(2). Inner margin of mandibles with two teeth well separated (both with similar size). Cuba..... ..... *Birandra (Yvesandra) cubaecola* (Chevrolat, 1862)
   Inner margin of mandibles with a single tooth or two teeth together protracted (size very different). Cuba..... *Birandra (Yvesandra) cribrata* (Thomson, 1861)
4(1). Carinae of ventral sensorial area of antennomeres III-XI (mainly IX-XI) distinctly visible from side .... *Birandra (Yvesandra) latreillei*
   Carinae of ventral sensorial area of antennomeres III-XI not or very slightly visible from side.....5
5(4). Carinae of ventral sensorial area of antennomeres wide; clypeal projection truncated at apex .... *Birandra (Yvesandra) cubaecola*
   Carinae of ventral sensorial area of antennomeres narrow; clypeal projection narrow and somewhat rounded at apex..... *Birandra (Yvesandra) cribrata*

Birandra (Yvesandra) latreillei
Santos-Silva & Shute, 2009
(Figs. 1-6)

Parandra laevis Schönherr, 1817: 334; Peck, 2005: 164 (checklist); Monné, 2006: 16 (cat.).
Parandra cubaecola; Zayas, 1957: 159; 1975: 19; García & Ferrer, 1999: 14; Peck, 2005: 164 (checklist; part).
Birandra (Yvesandra) latreillei Santos-Silva & Shute, 2009: 24.

This species was recently redescribed by Santos-Silva & Shute (2009). The article and redescription is available online (open access) at www.zookeys.org/. Thus, a new redescription is not necessary.

Dimensions in mm (♂/♀) (only specimens from Cuba): Body length (including mandibles) 12.2-20.3/11.1-23.2; prothorax: length 2.4-3.9/2.6-4.9; anterior width, 3.2-5.9/3.3-6.3; posterior width, 2.2-4.7/2.6-5.5; humeral width, 3.3-5.7/3.1-7.7; elytral length, 7.3-11.7/6.8-13.9.

Type and type locality: Lectotype male, described from Dominican Republic (Santo Domingo), deposited at BMNH.

Geographical distribution: Hispaniola, Jamaica, and Cuba.

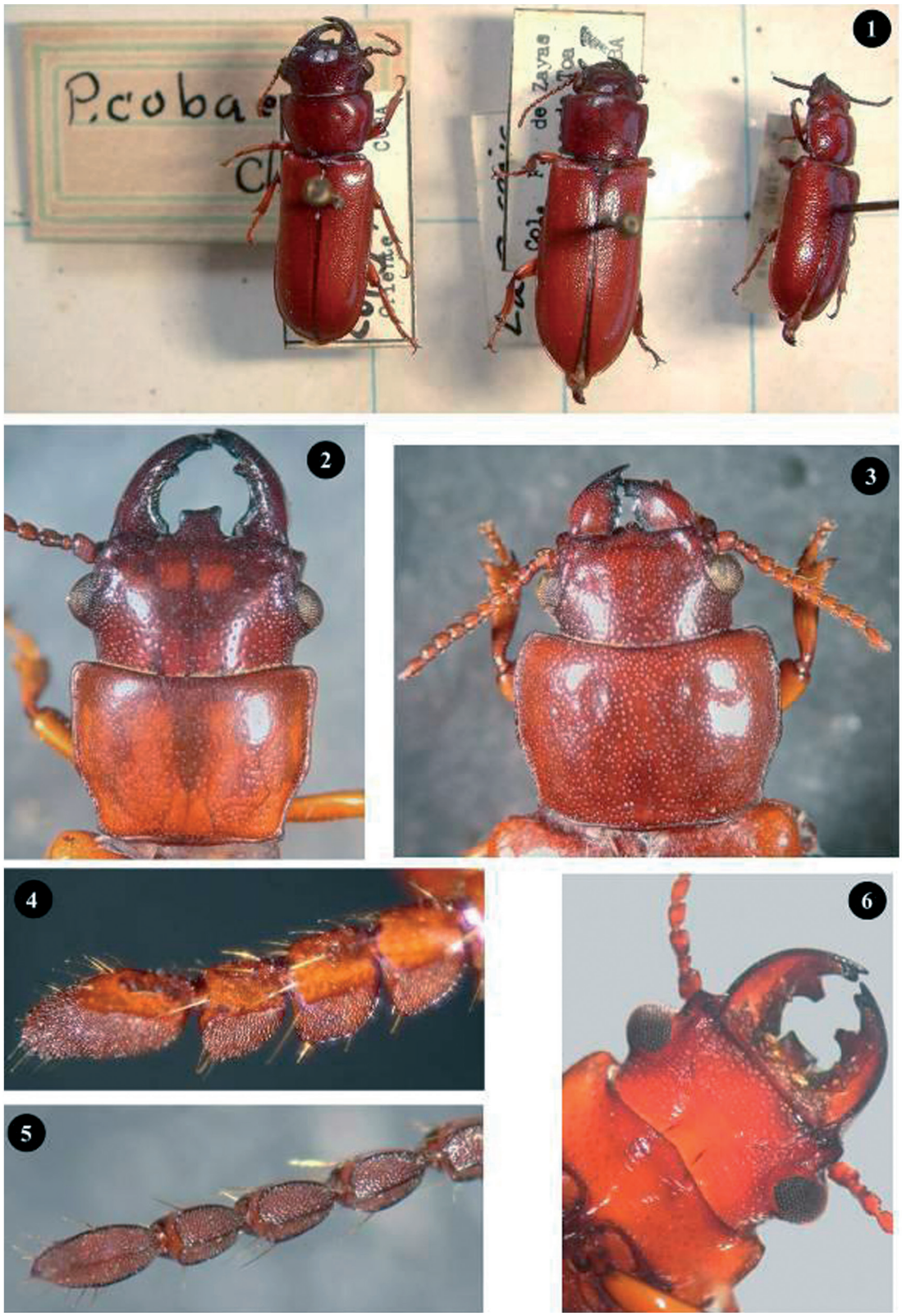
Comments: As noted above, Thomson (1862) was the first to mention *B. (Y.) latreillei* from Cuba. However it is not possible to know if this record was really based on specimen(s) of that species. In 1975, Zayas completed a revision of Cerambycidae from Cuba and wrote on *Parandra cubaecola* (= *B. (Y.) cubaecola*): "La más clara y depresa de las dos, y sólo conocida de la Isla de Cuba, donde vive en pequeñas colonias en troncos podridos. Poseemos ejemplares encontrados en tocones de pino". In the original description of *B. (Y.) cubaecola,* Chevrolat (1862) recorded: "Convexa, brunnea nitida, crebre punctata". The first part of the description, evidently, contradicts the note from Zayas (1975) ("depressa" as opposed to "Convexa"). In the key to the "two" species from Cuba, Zayas (1975) wrote in the couplet that leads to *Parandra cubaecola:* "Color castaño-ferruginoso, claro; forma poco convexa, superficie fina y esparcidamente punzada; lados del pronoto arqueados y más fuertemente estrechados hacia la base, quedando el ángulo anterior más prominente; mandíbulas arqueadas en los machos". Again, this description does not agree with *B. (Y.) cubaecola.* As noted, Chevrolat (1862) affirmed that the species is "crebe punctate". Additionally, the drawing of *Parandra cubaecola* in Zayas (1975: plate 1, figure "A") shows a specimen that is not of this species.

Peck (2005) wrote: "**Cuba localities.** Not recognized by Zayas (1975) for Cuba, but listed in Monné & Giesbert (1995) without documentation". Evidently the citation of Cuba in Monné & Giesbert (1994) (1995 was a second edition), was based on Thomson (1862).

Santos-Silva & Shute (2009) noted: "The occurrence of *Birandra (Y.) latreillei* in Cuba (Thomson 1861, Monné 2006) is doubtful and needs to be confirmed in the future. Zayas (1957, 1975) did not record *"Parandra laevis"* from Cuba". There is no doubt that Zayas (1957, 1975) confused *B. (Y.) latreillei* with *B. (Y.) cubaecola.* The first author examined all specimens of Parandrinae in FZPC (Fig. 1), and could conclude that *Parandra cubaecola sensu* Zayas (1957, 1975) is *B. (Y.) latreillei* (17 specimens). Apparently, Zayas (1957, 1975) based his concept of *B. (Y.) cubaecola* using only color: usually lighter in *B. (Y.) cubaecola* and *B. (Y.) latreillei* than in *B. (Y.) cribrata.* But as usually occurs in many species of Parandrinae, coloration can vary considerably.

Birandra (Yvesandra) latreillei differs notably from *B. (Y.) cubaecola* by the shape of the carina of ventral sensorial area of antennomeres: distinctly fine at apex in the former (Fig. 5) and notably wide in the later (Figs. 12, 14). Besides, the inner margin of the mandibles in *major* males is strongly different: with a single tooth in *B. (Y.) latreillei* (Figs. 2, 6), and with two teeth in *B. (Y.) cubaecola* (Figs. 8, 10).

Material examined: CUBA, ♂, 2 ♀♀ [no date and collector indicated] (CZCTR); ♂ [no date and collector indicated] (FZPC); ♂ [no data], J. Acuña col. (FZPC). *Matanzas:* Playa Larga, ♀, VI.1963, I. García col. (CZACC); Ciénaga de Zapata, ♀, V.1964, I. García col. (HG). *Sancti Spírutus:* Jíbaro, ♀, VI-78, [no collector indicated] col. (HG); Topes de Collantes, ♀, VI-2010, [no collector indicated] col., (HG). *Camagüey:* Santa Lucía, ♂, 3 ♀♀, VI.1959, F. Zayas col. (FZPC). *Holguín:* Pinares de Mayarí, ♂, X.1961, F. Zayas col. (CZACC); Sierra Cristal, 3 ♂♂, 4 ♀♀, 16-20.II.1948, F. Zayas & J. Ferrás col. (CZACC; FZPC); ♀, 16-20.II.1948, F. Zayas & J. Ferrás col. (MNRJ); ♂, VI.1956, F. Zayas col. (CZACC); Moa, ♀, 02.VI.1951, [no collector indicated] (CZACC); 2 ♀♀, I.1964, F. Zayas col. (FZPC); ♂ 10.V.2010, R. Teruel col. (BSC-E). *Santiago de Cuba:* La Punta, ♂, IX.1980, L.R. Hernández col. (CZACC); Loma del



FIGURES 1-6: *Birandra (Yvesandra) latreillei.* **1.** Specimens in Zayas' Collection, identified as *Parandra cubaecola* (left, male; right, two females); **2.** Male, head and pronotum; **3.** Female, head and pronotum; **4.** Antenna, lateral view; **5.** Antenna, ventral view; **6.** Male, head, ventral view.

Gato, ♂, [no date and collector indicated] (CZACC); Cobre, 2 ♂♂, ♀, 25-26.IV.1952, F. Zayas & P. Alayo col. (CZACC; FZPC; HG); El Caldero, ♂, ♀, VI.1963, F. Zayas col. (FZPC); La Francia, ♂, 2 ♀♀, 24.VI.1980, Inés B. & G.A.N. col. (BSC-E); Gran Piedra, ♀, VI-2001, J.A. Genaro col. (MNHN-CU). *Guantánamo:* Baracoa, ♂, VI.1974, I. García col. (CZACC); El Ímbaro, ♀, V.1998, R.F. Arcila col. (MNHN-CU); Yateras, ♀, VI.1964, I. García col. (FZPC); Yunque de Baracoa, ♀, VII.1955, F. Zayas col. (FZPC).

Birandra (Yvesandra) cubaecola (Chevrolat, 1862) (Figs. 7-14)

Parandra cubaecola Chevrolat, 1862: 275; Thomson, 1862: 96; 1867: 117; Lacordaire, 1868: 23; Gemminger & Harold, 1872: 2751 (cat.); Gundlach, 1891: 243; Gahan, 1895: 80 (excluding the citation of Puerto Rico); Lameere, 1902: 89 (synonymy); 1912: 115 (revalidation); Blackwelder, 1946: 551 (cat.) (excluding the citation of Puerto Rico); Chemsak *et al.,* 1992: 13 (checklist); Santos-Silva, 2002: 33; Peck, 2005: 164 (checklist; part) (excluding the citation of Puerto Rico); Cardona-Duque *et al.,* 2007: 43.

Parandra (Parandra) cubaecola; Lameere, 1913: 6 (cat.); 1919: 17; Monné & Giesbert, 1994: 1 (checklist) (excluding the citation of Puerto Rico); Monné, 1994: 2 (cat.) (Excluding the citation of Puerto Rico); Monné & Hovore, 2005: 6 (checklist) (excluding the citation of Puerto Rico); 2006: 5 (checklist) (excluding the citation of Puerto Rico); Monné, 2006: 16 (cat.) (excluding the citation of Puerto Rico).

Birandra (Yvesandra) cubaecola; Santos-Silva & Shute, 2009: 32 (comb. nov.); Monné & Bezark, 2010: 5 (excluding the citation of Puerto Rico).

Male (Fig. 7): Integument reddish; head darker than remainder of dorsum, particularly anterior margin, mandibles, and post ocular area; anterior margin of pronotum, and elytral suture also darker.

Dorsal surface of head coarsely punctate. Mandibles (Figs. 8, 10) shorter than length of head, robust, densely punctate; inner margin with two large teeth; apex trifurcate: two large teeth in dorsal view, and small tooth ventro-apical (not visible when viewed dorsally). Projection of clypeus-labrum short, centrally rounded, with small projection at each side, twice wider than long. Eyes large, protruding, very slightly emarginated; longer than median width, when viewed laterally; lower ocular lobe broader than upper ocular lobe. Submentum coarsely punctate, denser antero-laterally than medially, anteriorly with some setae. Ventral sensorial area of antennomeres III-XI (Figs. 12, 14) divided by complete, elevated and thick carina, slightly visible from side (Fig. 11), mainly in the distal segments. Dorso-apical sensorial area of antennomere XI rounded, well defined.

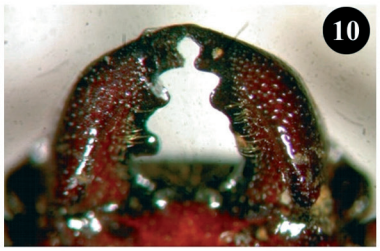
Pronotum (Fig. 8) square-shaped; largest width at anterior angles; anterior angles rounded and concave; anterior, posterior and lateral margins sinuate; disc finely, sparsely punctate; laterally, distinctly, coarsely, and more densely punctate. Elytra (Fig. 7) elongated; surface finely punctate, more or less as on pronotal disc. Metasternum coarsely, somewhat sparsely punctate laterally, more abundant towards anterior and posterior regions, finer towards central area; metepisternum coarsely punctate.

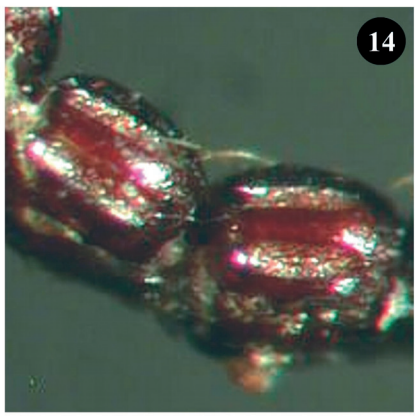
Ventrites I-IV with few, short setae. Femora with minute and indistinct setae. Tibiae strongly dilated towards apex, with setae longer than in femora.

Female (Fig. 9): Integument dark-brown. Head less robust; width plus eyes equal to 0.8 times largest width of prothorax. Eyes broader than in male; distance between upper ocular lobes equal to about 7.3 times the length of antennomere III. Mandibles as long as 0.5 times length of head; dorsal carina slightly elevated; outer surface moderately, densely and coarsely punctate; inner surface with moderately long and abundant setae; inner margin with two teeth, together protracted, located about the middle. Clypeal projection wide and truncated at apex. Anterior angles of prothorax projected forward, moderately acute; lateral angles absent; posterior angles almost in right angle. Pronotum coarsely, densely punctate laterally, mainly towards anterior angles, finer and sparser towards center of disc. Elytra coarsely, moderately densely punctate, mainly laterally. Metasternum coarsely, moderately densely punctate laterally.

Variation: Males – Integument dark-brown; dorso-apical sensorial area of the antennomere XI elliptic and undefined; projection of the clypeus-labrum truncated at apex; prothorax laterally enlarged at anterior fourth.

Dimensions in mm (♂/♀): Body length (including mandibles) 16.2/16.0; prothorax: length 3.4/3.3; anterior width, 4.2/4.2; posterior width, 3.4/4.1; humeral width, 4.2/4.5; elytral length, 9.2/9.7. Holotype, according to Chevrolat (1862): "Long. 15 mill., lat. 4 1/2 mill."





FIGURES 7-14: *Birandra (Yvesandra) cubaecola.* **7.** Male, dorsal habitus; **8.** Male, head and pronotum; **9.** Female, head and pronotum; **10.** Mandibles, dorsal view, holotype male; **11.** Antenna, lateral view; **12.** Antenna, ventral view; **13.** Holotype male, dorsal habitus; **14.** Antenna, holotype male, ventral view.

Type and type locality: Holotype male (Fig. 13), described from Cuba (La Habana), deposited at BMNH.

Geographical distribution: Birandra (Yvesandra) cubaecola is known only from Cuba.

Comments: It is not possible to know if the redescription of *Parandra cubaecola* in Gundlach (1891) corresponds to this species or not. Nevertheless, the description of the mandible ("las mandíbulas de longitud como la cabeza y negras, por dentro con 4 dientes") agrees more with *B. (Y.) cubaecola* than with *B. (Y.) latreillei* (female or small male).

Peck (2005) wrote: "Cuba localities. Gr: Guamá. Ho: Sierra Cristal. In trunks of pine trees". That information is from Zayas (1957). Thus, the species actually involved is *B. (Y.) latreillei.* However, as the work is a checklist, we need to maintain it as reference to *B. (Y.) cubaecola.*

Photographs of the holotype, sent by Sharon Shute (BMNH), allowed us to correctly identify *Birandra (Yvesandra) cubaecola.* Apparently, the species is quite rare; among the specimens from Cuba we only saw two males and one female, and those specimens were collected more than 80 years ago.

The following references should be transferred from *Birandra (Yvesandra) cubaecola* to *B. (Y.) tavakiliani* (Santos-Silva, 2002): Gundlach (1894); Leng & Mutchler (1914); Wolcott (1924, 1936, 1948). Thus, we are formally excluding *B. (Y.) cubaecola* from the fauna of Puerto Rico.

Material examined: CUBA, *La Habana:* Santiago de las Vegas, ♂, VI.1925, J. Acuña col. (BSC-E). *Camagüey:* Camagüey, ♀, VIII.1924, J. Acuña (MNRJ); Camagüey, ♂, 31.VII.1925, J. Acuña col. (CZACC).

Birandra (Yvesandra) cribrata (Thomson, 1861) (Figs. 15-22)

Parandra cribrata Thomson, 1861: 87; Chevrolat, 1862: 275; Thomson, 1867: 118; Lacordaire, 1868: 23; Gemminger & Harold, 1872: 2751 (cat.); Thomson, 1878: 4 (type); Gahan, 1895: 80 (distr.); Blackwelder, 1946: 551 (checklist) (excluding the citation of Hispaniola and Puerto Rico); Zayas, 1957: 159; 1975: 18; Chemsak *et al.,* 1992: 13 (checklist) (excluding the citation of Hispaniola and Puerto Rico); Peck, 2005: 164 (checklist) (excluding the citation of Hispaniola and Puerto Rico).

Parandra (Parandra) cribrata; Lameere, 1913: 6 (cat.) (excluding the citation to Haiti and Puerto Rico); 1919: 17 (excluding the citation to Haiti and Puerto Rico); Monné & Giesbert, 1994: 1 (checklist) (excluding the citation of Hispaniola and Puerto Rico); Monné, 1994: 2 (cat.) (excluding the citation of Hispaniola and Puerto Rico); Santos-Silva, 2002: 33, 45; Monné & Hovore, 2005: 6 (checklist) (excluding the citation of Hispaniola and Puerto Rico); 2006: 5 (checklist) (excluding the citation of Hispaniola and Puerto Rico); Monné, 2006: 16 (cat.) (excluding the citation of Hispaniola and Puerto Rico); Cardona-Duque *et al.,* 2007: 44 (key).

Birandra (Yvesandra) cribrata; Santos-Silva & Shute, 2009: 32 (comb. nov.); Monné & Bezark, 2010: 5 (checklist) (excluding the citation of Hispaniola and Puerto Rico).

Male (Fig. 15): Integument from brown to dark-brown; head, edge of clypeus-labrum, mandibles, post ocular area and anterior margin of pronotum darker.

Dorsal surface of head punctate, more abundant and coarser laterally. Mandibles (Figs. 17, 20) approximately as long as head, robust, densely punctate; inner margin with two teeth together protracted, located between middle and apex: smaller, more distal, and larger slightly bilobed at apex; apex trifurcate: two large teeth in dorsal view, and small tooth ventro-apical (not visible when viewed dorsally). Projection of clypeus-labrum wider than long; anterior margin weakly emarginate or straight. Eyes weakly emarginate. Submentum (Fig. 20) coarsely punctate, denser antero-laterally than medially; anteriorly with setae, deeply grooved transversely. Ventral sensorial area of antennomeres III-XI (Fig. 19) divided by a complete, low and slender carina, not visible from side. Dorso-apical sensorial area of antennomere XI elliptic, feebly defined.

Pronotum (Fig. 17) square-shape; largest width at anterior angles; anterior angles weakly rounded; posterior angles almost in right angle; anterior and lateral margins sinuate; posterior margin almost straight; disc coarsely, sparsely punctate, distinctly coarser and more abundantly laterally. Elytra elongated, coarsely punctate. Metasternum (Fig. 21) coarsely, somewhat sparsely punctate laterally, more abundant towards anterior and posterior regions. Metepisternum (Fig. 21) coarsely punctate.

Ventrites I-IV smooth; ventrite V with long setae on media and posterior regions. Femora with minute and indistinct setae. Tibiae strongly dilated towards apex, with setae distinctly longer than in femora; apex with four spurs, two larger than other.

FIGURES 15-22: *Birandra (Yvesandra) cribrata.* **15.** Male, dorsal habitus; **16.** Female, dorsal habitus; **17.** Male, head and pronotum; **18.** Female, head and pronotum; **19.** Antenna, ventral view; **20.** Holotype male, ventral view; **21.** Holotype male, lateral view; **22.** Holotype male, dorsal view.

Female (Fig. 16): Integument from reddish-brown to dark-brown. Head (Fig. 18) less robust. Eyes broader than in male. Mandibles subtriangular, smaller than head; inner surface with moderately long and short setae; inner margin with three small rounded teeth. Projection of clypeus-labrum weakly wide, truncated at apex. Anterior and posterior margins of pronotum sinuate; lateral margins concave; disc coarsely, densely punctate laterally. Elytra coarsely, densely punctuate. Metasternum coarsely, densely punctate. Ventrite V with minute setae.

Variation: Males – Larger tooth of the inner margin of the mandibles not bilobed at apex; smaller tooth of inner margin of the mandibles slightly distinct; projection of the clypeus-labrum longer than wide; lateral margins of the prothorax divergent from base to apex. *Females:* projection of the clypeus labrum rounded at apex.

Dimensions in mm (♂/♀): Body length (including mandibles) 16.8-18.5/14.9-17.7; prothorax: length 3.5-3.7/3.3-3.7; anterior width, 5.2-5.4/3.9-5.0; posterior width, 4.5-4.7/3.9-4.4; humeral width, 5.1-5.9/4.5-5.7; elytral length, 9.6-12.0/9.5-12.0.

Type and type locality: Holotype male (Figs. 20-22), described from Cuba (La Habana), deposited at MNHN.

Geographical distribution: Birandra (Yvesandra) cribrata remains known only from Cuba.

Comments: Zayas (1975) affirmed that *Birandra (Yvesandra) cribrata* also occurs in Puerto Rico and Hispaniola. He also recorded: "Es la más robusta, convexa, oscura y punzada de nuestras dos especies, también la menos frecuentemente hallada en el campo, pero como acude mucho a la luz, más que la siguiente [*Parandra cubaecola,* actually *B. (Y.) latreillei*], aparecen en las colecciones más o menos en un número equivalente de ejemplares". The information, on the quantity of specimens in collections is correct. Unfortunately, nearly all specimens that we examined were collected more than 40 years ago.

Apparently the redescription of *Parandra cribrata* in Gundlach (1891) corresponds to this species. However, it could correspond to *B. (Y.) cubaecola.*

The following references should be transferred from *Birandra (Yvesandra) cribrata* to *B. (Y.) tavakiliani* (Santos-Silva, 2002): Gundlach (1894); Lameere (1902); Leng & Mutchler (1914); Wolcott (1924, 1936, 1948); Perez-Gelabert (2008). Thus, we are formally excluding *B. (Y.) cribrata* from the fauna of Puerto Rico. Lameere (1913) also recorded this species from Haiti, and was followed by later authors. We do not know which species studied by Lameere led him to record *B. (Y.) cribrata* in Hispaniola, but we believe that it is not Thomson's species. Unfortunately, we do not know where that specimen(s) is deposited. Nevertheless, based on the incorrect identification of *B. (Y.) cribrata* by Lameere (1902) we are formally excluding it from the fauna of Hispaniola.

Material examined: CUBA, ♂ [no data] (CZCTR); ♀ [no data] (FZPC). *Pinar del Rio:* Aspiro, ♀, 03.VI.1934, A. Bierig col. (MZSP). *La Habana:* Santiago de las Vegas, ♀, VI.1968, J. Acuña col. (CZACC); Río Cristal, ♀, VI.1947, J. Ferrás (FZPC). *Mayabeque:* Jaruco, ♀, 15.VI.1933, [no collector indicated] (MFPUH). *Matanzas:* Matanzas, ♂, ♀, VI.1962, P. Alayo y I. García col. (CZACC); ♀, VI.1962, F. Zayas col. (FZPC); Ciénaga de Zapata, 2 ♂♂, 2 ♀♀, V.1964, I. García col. (CZACC); Playa Larga, 2 ♂♂, 2 ♀♀, V.1963, F. Zayas, P. Alayo & I. García col. (CZACC); Península de Zapata, 4 ♂♂, 2 ♀♀, V.1963, F. Zayas col. (FZPC). *Camagüey:* Camagüey, ♂, 31.VII.1925, J. Acuña col. (FZPC); California, ♀, 1955, F. Zayas col. (FZPC); Nuevitas, ♂, VI.1955, F. Zayas col. (FZPC). *Granma:* Cabo Cruz, ♂, VI.1955, F. Zayas col. (FZPC). *Santiago de Cuba:* Ciudamar, ♂, VI.1954, F. Zayas & P. Alayo col. (FZPC).

RESUMO

Três espécies de Parandrinae são reconhecidas em Cuba, todas pertencentes ao subgênero Birandra (Yvesandra) *Santos-Silva & Shute, 2009:* B. (Y.) cubaecola *(Chevrolat, 1862);* B. (Y.) cribrata *(Thomson, 1861); e* B. (Y.) latreillei *Santos-Silva & Shute, 2009. Esta última, confundida por Zayas (1957, 1975), é confirmada como espécie comum na ilha.* Birandra (Y.) cubaecola *é excluída da fauna de Porto Rico;* B. (Y.) cribrata *também é excluída da fauna de Porto Rico assim como da ilha de Espanhola (Haiti e República Dominicana).*

Palavras-Chave: *Birandra;* Parandrini; Revisão; Taxonomia; *Yvesandra.*

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