

The identity of *Parandra laevis* Latreille, 1804 and nomenclatural changes in the Parandrinae (Coleoptera, Cerambycidae)

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Abstract

Attelabus glaber (DeGeer, 1774) currently the type species of *Hesperandra* (*Zikandra*) Santos-Silva, 2003 is considered the type species of *Parandra* Latreille, 1802 (here validated). *Hesperandra* Arigony, 1977 and *Hesperandra* (*Zikandra*) become junior synonyms of *Parandra* Latreille, 1802, and *Gnathophorus* Kirby, 1837 is also confirmed as a synonym of this genus. *Birandra* Santos-Silva, 2002 is used to replace *Parandra* sensu lato. *Parandra laevis* Latreille, 1804 is placed as a synonym of *Attelabus glaber* DeGeer, 1774. New names are chosen to replace *Parandra laevis* Schönherr, 1817 (= sensu auctorum) (redescribed here) and the subgenus *Parandra* sensu Santos-Silva, 2002, respectively: *Birandra* (*Yvesandra*) *latreillei* and *Birandra* (*Yvesandra*). *Protospondylis* Linsley, 1942 is revalidated, excluded from Parandrinae, and placed incertae sedis in the Cerambycidae. An updated list of the reallocated species is given.

Keywords

Parandra, *Birandra*, *Hesperandra*, *Gnathophorus*, *Protospondylis*, nomen novum, synonymy

Introduction

The purpose of this paper is to resolve confusion regarding the identity of *Parandra laevis* Latreille, 1804 and to propose a new generic name for the species currently attributed to *Parandra* Latreille, 1804 (Monné 2006).

Parandra laevis Latreille, 1804 currently placed in *Parandra* (*Parandra*) (Monné 2006), is regarded as the type species of the genus *Parandra* Latreille, 1802 (Thomson 1864). Bousquet (2008) recognized the fact that *P. laevis* Latreille, 1804 was, under the current Code (ICZN 1999), a junior objective synonym of *Attelabus glaber* DeGeer, 1774. *Attelabus glaber* is the type species of *Parandra* Latreille, 1802, by monotypy and currently placed in *Hesperandra* (*Zikandra*) Santos-Silva, 2003 (Monné 2006). Thus any genera/subgenera which have the type species *A. glaber* become synonyms of *Parandra*. This also includes the mainly forgotten genus *Gnathophorus* Kirby, 1837 (Bousquet 2008).

Bousquet (op. cit.) correctly points out that the species *Parandra laevis* sensu auctorum is without valid synonyms (Monné 2006; Santos-Silva 2002) and thus a new name is needed. He also proposed that if it was deemed desirable to retain the species concept of *P. laevis* Latreille, 1804, to maintain current taxonomic stability, that it would be necessary to apply to the commission to suppress Olivier (1803) as the author of *Parandra* in favour of Latreille (1804). The problem with this suggestion is that Latreille's use of the name "*laevis*" in 1804 does not define or constitute a species separate from *Attelabus glaber* DeGeer, 1774 (see below) and as such cannot be used to validate the genus *Parandra* in Latreille (1804). It is therefore not an acceptable option. The subsequent validation, in this paper, of Latreille, 1802 as the author of the genus *Parandra* does not alter the need to propose a new generic name for the species currently placed in *Parandra* Latreille, 1804 (Monné 2006) as *Attelabus glaber* DeGeer (1774) is the only species given in the 1802 text. Thus *Hesperandra* Arigony, 1977 becomes a junior synonym of *Parandra* Latreille, 1802. *Parandra laevis* as a separate species concept, as proposed by Schönherr (1817) and Gyllenhal (1817), is retained and renamed accordingly.

Materials and methods

We examined specimens, males and females, of all species (including non American) in the same subgenus as *Parandra* (*Parandra*) *laevis* Latreille, 1804, specimens of *Hesperandra* (*Zikandra*) *glabra* (DeGeer, 1774) from various countries, and specimens of *Neandra brunnea* (Fabricius, 1798). These specimens belong to several museums and private collections, and were used to establish the identity of *Parandra laevis* Latreille (1802, 1804, 1806, 1807, 1818) and Olivier (1803) as it is understood today.

The acronyms used in the text correspond to the following institutions:

ICZN	International Commission on Zoological Nomenclature
MNCN	Museo Nacional de Ciencias Naturales, Madrid, Spain
MNHN	Muséum National d'Histoire Naturelle, Paris, France
MZSP	Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil
NRS	Naturhistoriska Riksmuseet, Stockholm, Sweden
NHM(UK)	(formally BM(NH)) The Natural History Museum, London, United Kingdom

The identity of *Parandra laevis* Latreille, 1804

The generic name *Parandra*, formally attributed to Latreille (1804), was subsequently attributed to Olivier (1803) (Bousquet 2008). However the concept of the genus *Parandra* was first proposed for the species *Attelabus glaber* DeGeer, 1774 by Latreille in 1802:160 (noted by Thomson, 1858, and Lameere, 1902). In the 1802 text Latreille used the vernacular name “Parandre; parandre”. As the name was not given a Latin form, this 1802 description of *Parandra* has been considered to be invalid according to ICZN Code, 1999:109. However the failure to give a Latin form for the name would appear to have been an error as all other genera mentioned in the Latreille (1802) text have the second expression of the name in Latin. According to Article 32.5.1 (ICZN Code 1999:39) “if there is clear evidence of an inadvertent error, such as a lapsus calami or a copyist’s or printer’s errors, it must be corrected”. In accordance with the format of the 1802 text the corrected spelling of the genus “Parandre; parandre” is “Parandre; Parandra”, and thus, the generic name *Parandra* becomes available from Latreille’s 1802 publication (Dr. Yves Bousquet is in agreement with this conclusion, pers. comm.).

It was common practice in the early 19th century for European authors, particularly in the dictionaries, to use both vernacular and Latin names when referring to or describing species, regarding these names as interchangeable in the texts. Latreille (1804:252), in his redescription of *Parandra*, used the vernacular name “La Parandre lisse”, in conjunction with the Latin name “*parandra laevis*” (as “lisse” was the vernacular name given by DeGeer (1774) for *Attelabus glaber*). The name “*laevis*” is clearly being used for *A. glaber* DeGeer, with the reference to the description and figure of that species in DeGeer (1774) being given in the text. Latreille (1804) clearly states that the genus is being erected for one species. The name “*laevis*” in this text is not being used as a replacement name in the sense we would understand it today, but under the ICZN (1999) it would be regarded as such. In 1806 Latreille published a figure that he believed to be the male of *A. glaber* DeGeer. The text relating to the plates was published in Latreille (1807). In this text he again uses both the vernacular name “Parandre lisse” in conjunction with the Latin name *Parandra laevis*. However in the legend to the plate only the name *Parandra laevis* is used.

In the 1807 text Latreille synonymises *Tenebrio brunneus* Fabricius, 1798 and *Tenebrio purpurascens* Herbst, 1799 (now *Neandra* Lameere, 1912) under “*Parandra laevis*”. It is therefore clear from the texts of Latreille (1802, 1804, 1807) and Olivier (1803) that Latreille believed that the genus *Parandra* contained only one species, the “Parandre lisse”, *Attelabus glaber* of DeGeer. It is not until Schönherr (1817) that the name *Parandra laevis* is used to indicate a species distinct from *Attelabus glaber* DeGeer. Gyllenhal (1817:145) in the appendix of Schönherr’s Synonymian Insectorum (Descriptions Novarum Specierum) states that he has seen DeGeer’s “type” (at that time, apparently, the male(s) type(s) was(were) already lost: “Exemplar unicum femininum”) of *Attelabus glaber* and that Latreille’s 1806 figure, “*Parandra laevis*”, represented a different species. He uses the name “*Parandra laevi*” (sic) for this species presumably be-

cause it is the name used in the figure legend of Latreille (1806) and that it was politic at that time to attribute the name of a species to the person who “discovered” it rather than the reviser. This is reflected in Schönherr’s (1817:334) main text where *Parandra glabra* is attributed to DeGeer, *Parandra laevis* to Latreille, and *Parandra brunnea* and *Parandra purpurea* listed as distinct species. Unfortunately, by using the same Latin name (*Parandra laevis*), that Latreille used for “Parandre lisse” (*A. glaber*), for the species represented in the 1806 figure which Schönherr / Gyllenhal believed to be distinct from *Attelabus glaber* DeGeer, Schönherr (op. cit.) created a junior homonym.

Latreille (1818: 523) acknowledges and accepts Schönherr’s (Gyllenhal’s) view that *Attelabus glabra* DeGeer, 1774 and the 1806 figure of “*Parandra laevis*” are different species. He comments on the distribution of the two species and morphological differences of the specimens he has in his possession from the Antilles and Brazil. He particularly notes that the mandibles of the male in *P. glabra* are strongly curved and bidentate at the apex with a small tooth on the inner edge whereas in “*laevis*” the inner edge in the male is bidentate and the apex simple or weakly forked (however it is not clear if he was referring to either the inner element of the apical trifurcation as a second inner tooth, the basal tooth if the mandibles were open or a minor male). He disagrees that *Parandra brunnea* is a good species.

The form of the mandibles would be the “key” for application of the Article 70.3 of the ICZN (1999), for selecting a new type species for *Parandra*. Unfortunately the description of Latreille (1802) is not precise enough to determine if he was describing the mandibles of *Parandra laevis* sensu auctorum, or the mandibles of *Attelabus glaber* DeGeer.

Latreille (1818) published a further figure of *Parandra laevis* in the plates of the Encyclopédie Méthodique with some differences from the 1806 figure, principally the position of the jaws (figure legend p. 19 spelt *Perandra* corrected to *Parandra* p. 39). The text relating to the plates was not published until 1825. In this volume the senior author is Latreille but the text on *Parandra* was written by LePeletier and Audinet-Serville. In the 1825 text “*Parandre glabre; Parandra glabra*” is attributed to Schönherr (1817) and “*Parandre lisse; Parandra laevis*” to Latreille (1807). Thus the connection between “*lisse*” = *glaber* of DeGeer = *laevis* was lost.

Gyllenhal in Schönherr (1817) distinguished *P. laevis* Latreille as a separate species from *P. glabra* (DeGeer) with reference to the Latreille 1806 figure and 1807 text, but there is no mention in Gyllenhal’s text of any actual specimens or that he had seen Latreille’s material. Research has failed to locate any specimens determined as *Parandra laevis* Latreille in the Gyllenhal collection although there is a major male specimen of *Parandra laevis* in the Schönherr collection from Haiti. Annotations in Schönherr’s personal copy of *Synonymia Insectorum* (1817) in the NRS indicates that he had this specimen in his lifetime (Julio Ferrer pers. comm.) and it probably represents his and Gyllenhal’s species concept of *Parandra laevis* Latreille 1806, 1807.

Post 1818 all subsequent authors when dealing with *Parandra* have regarded *Parandra glabra* (DeGeer) and *P. laevis* Latreille (1804, 1807) as separate, valid species. All failed to realize that prior to 1817 the name *Parandra laevis* as used by Latreille did not define or constitute a separate species from *Attelabus glaber* DeGeer.

We know that Dejean acquired the Latreille cerambycid collection after his death in 1833. In his 1837 catalogue Dejean attributes the female of *Parandra laevis* Latreille to another species *Parandra cayenensis* Dejean, now regarded as *Parandra punctatissima* Thomson, 1861 and placed in *Acutandra* Santos-Silva, 2002. Dejean did not use the name *Parandra glabra* (DeGeer) which may be why Kirby (1837:166) erected a new genus *Gnathophorus* for *Attelabus glaber* DeGeer, not realizing that it had already been placed in the genus *Parandra* by Latreille, 1802.

Westwood (1839:358), in a footnote, refers to *Attelabus glaber* DeGeer as the type species of *Parandra* and mentions that Kirby (op. cit.) proposes to call it *Gnathophorus* but fails to comment on the fact that this would make Kirby's name a junior synonym of *Parandra*.

The Dejean catalogues were very influential in their time and many subsequent synonyms and taxonomic problems can be attributed to them. Thomson (1867) validated many of Dejean's *Parandra* species names hence the large number of synonyms currently listed.

Chevrolat acquired the Dejean cerambycid collection after 1845. Chevrolat (1862:275) states that he has Latreille's "type" of *Parandra laevis*. The Chevrolat collection was divided and sold before his death with the cerambycids coming to the BM(NH) via J. Bowring in 1863. In the manuscript catalogue of the Chevrolat collection in the BM(NH), four specimens are listed as being determined as *Parandra laevis* Latreille (both sexes). Unfortunately none of the specimens bear Latreille's original determination labels having been relabelled by Dejean. Only one male is labelled as "*laevis*" Latr. from Latreille's collection. It bears an original handwritten locality label "St. Domingae" (Santo Domingo), the locality given by Thomson (1864:316) in his type species designation and by Lameere (1902:86). The other specimens that have been identified as coming from Latreille's collection (ex. Dejean collection), were given a variety of different names by Dejean, these are all now determined as *Neandra brunnea* (Fab.) confirming the fact that Latreille's 1807, 1818 concept of *Parandra laevis*, was a composite one. The *Parandra laevis* male from the Chevrolat (ex. Latreille collection) was labelled as "type", by C. O. Waterhouse, a former BM(NH) curator, with reference to Chevrolat (1862), shortly after it was acquired in 1863. It is thought that the BM(NH) red type label was probably added by K. G. Blair (former curator) ca. 1930s. Since 1863 this specimen would have been regarded as the "type" of *Parandra laevis* Latreille, 1804 by subsequent authors and maybe regarded as representing the species concept of *P. laevis* Latreille as it is accepted today.

As explained above, the name *Parandra laevis* as used by Latreille (1804, 1807) does not represent a species separate from *P. glabra* DeGeer, 1774. The first author to establish *Parandra laevis* as being a different species from *Parandra glabra* was Schönherr (1817).

The figure given by Latreille (1806), that Schönherr and Gyllenhal (1817) cited in their text as representing a second species to *Parandra glabra* and the subsequent 1818 figure of Latreille are too crude to be sure of the species they represent. We know from the Latreille 1807, 1818 texts that his species concept of "laevis" was a composite one. To resolve any confusion as to the identity of the species currently known as *Parandra laevis*, Latreille 1804 a new description, and name is provided (to resolve homonymy)

and a lectotype selected. It has been decided to designate the specimen labelled as the “type” of *Parandra laevis* Latreille from the Latreille collection cited by Chevrolat, 1862, now in the NHM(UK), as the lectotype of *Parandra laevis* Schönherr, 1817. It is not possible to determine, without doubt, which Latreille’s specimen is the holotype of *P. laevis* Schönherr, 1817, and the specimen figured by Latreille (1806), (ICZN 1999: Articles 73.1.4, 72.4.2, 75.1). Latreille 1818 states that the 1806 figure was drawn from a male from the Antilles. Selecting this specimen, which is from Santo Domingo and which has been cited in the past literature as the “type” of *Parandra laevis* Latreille, 1804 (see above), maintains the taxonomic stability and species concept of *Parandra laevis* Latreille, 1804 as it is known and accepted today (ICZN 1999: Article 60.3, 72.4.1).

Nomenclatural problems and solutions

Attelabus glaber DeGeer, 1774 is the type species of *Parandra* Latreille, 1802 (by monotypy) and not *Parandra laevis* Latreille, 1804 (an unjustified emendation). Thus *Hesperandra* Arigony, 1977 (Monné 2006) becomes a junior synonym of *Parandra* Latreille, 1802 and all the species currently standing as *Parandra* (*Parandra*) Latreille, 1804 in Monné (op. cit.) now require a new generic name. The first available name is *Birandra* Santos-Silva, 2002 (Bousquet 2008) (see note on *Protospondylis* below). *Birandra* is currently a subgenus of *Parandra* Latreille (Monné op. cit.), thus the species currently standing as *Parandra* (*Birandra*) (Monné op. cit.) will become *Birandra* (*Birandra*) Santos-Silva, 2002. The species standing as *Parandra* (*Parandra*) Latreille (sensu Santos-Silva 2002) will become *Birandra* (*Yvesandra*) nom. n. Although the nomenclatural problems regarding *Parandra* and *P. laevis* were known to us before Bousquet (op. cit.) published his work, he was the first to point out these problems. Thus, we chose the name *Yvesandra* (feminine gender) to honor Yves Bousquet.

The subgenus *Hesperandra* (*Zikandra*) Santos-Silva, 2003 which has as its type species *Attelabus glaber* (DeGeer, 1774) is a junior objective synonym of *Parandra* Latreille, 1802 and *Parandra laevis* Latreille, 1804 is a junior objective synonym of *Parandra glabra* (DeGeer, 1774) (Bousquet 2008).

The name *Birandra* (*Yvesandra*) *latreillei* nom. n. is proposed for *Parandra laevis* Schönherr, 1817 (= *Parandra laevis* sensu auctorum, and not *Parandra laevis* Latreille, 1804, an unjustified emendation of *Attelabus glaber* DeGeer, 1774), thus *Parandra laevis* Schönherr, 1817 is the type species of *Birandra* (*Yvesandra*). *Birandra* (*Yvesandra*) *latreillei* is described below.

Birandra (*Yvesandra*) *latreillei* nom. n.

Figs 1–9

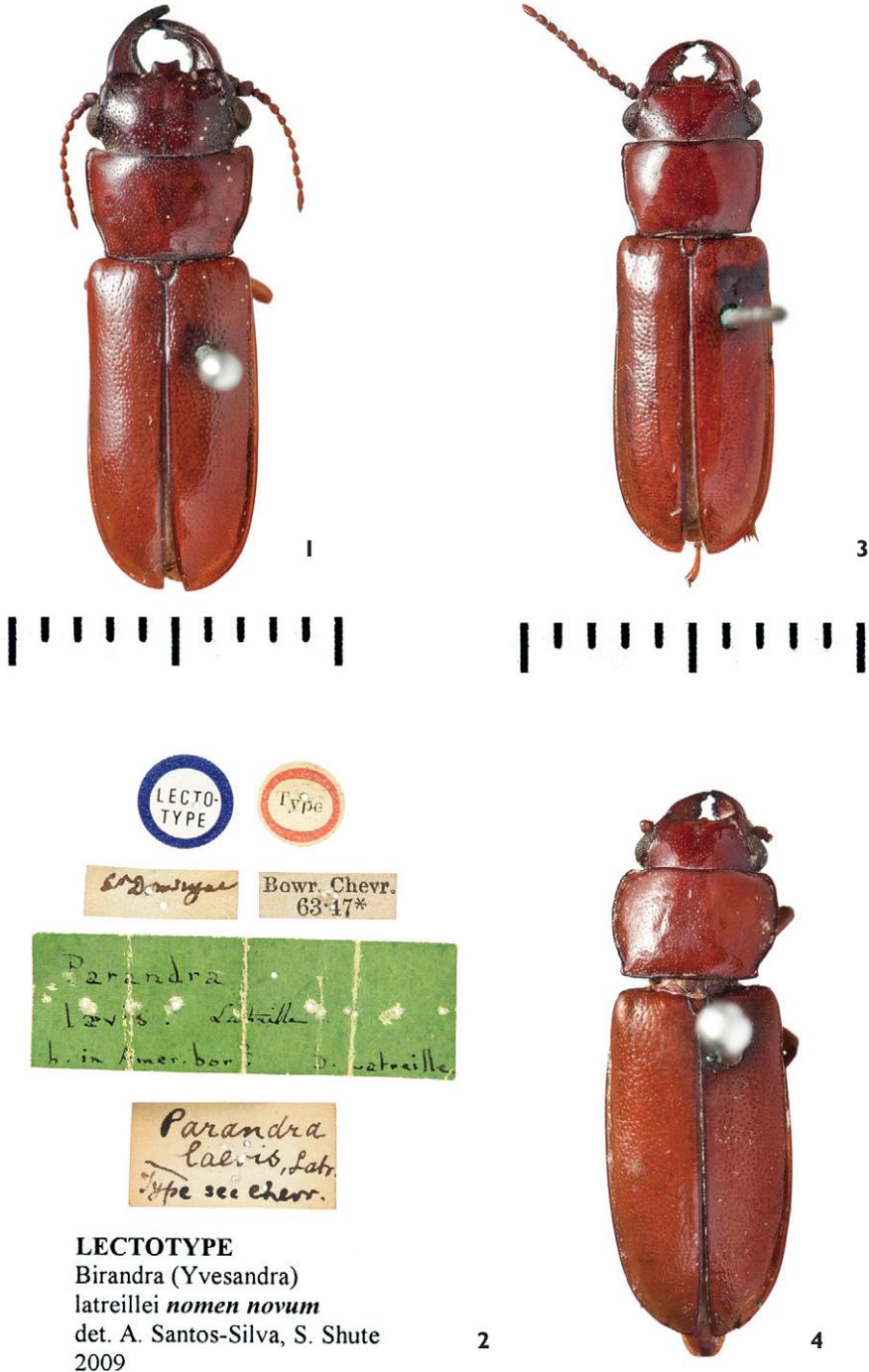
Parandra laevis Schönherr, 1817: 334; Monné, 2006 (cat.; part).

General colouration of integument a vitreous light chestnut to deep- reddish brown, head may be darker in colour than rest of dorsum, particularly in male; apices and

inner margins of mandibles, anterior margin of head, post ocular area, margins of pronotum, scutellum, elytral suture, episternum and anterior margins of femora normally dark to pitchy brown.

Male (Figs 1, 3). Width of head (Figs 5, 6) plus eyes equal to that of pronotum at anterior angles; length of mandible equal to that of head, finely and densely punctured, punctures slightly smaller than those on disc of head, becoming slightly coarser at apices; apices of mandible trifurcate; mandible in *major* male (Fig. 5) robust with a large tooth on inner edge just above the middle (see Santos-Silva 2002:36), size of sub-median tooth more or less equal to that of dorsal inner apical tooth which is in turn slightly shorter than terminal element but longer and broader than ventral apical tooth, ventral tooth (not visible when viewed dorsally) small and somewhat indistinct, apical teeth may be worn or broken; mandible in *minor* male (Fig. 6) less robust, sub-median inner tooth broadly flattened, width twice that of inner apical tooth, outer margin of sub-median tooth weakly emarginated; there is also a large basal tooth which is similar in size to sub-median tooth but this is only visible if the jaws are widely open; mandibular dorsal carina distinct, elevated from the base of mandible to just beyond sub-median inner tooth, inner edge of mandible with a fringe of long, pale, setae which project beyond margin and over sub-median tooth. Dorsal surface of the head (Figs 5, 6) more or less evenly convex with a weak median longitudinal sulcus, disc moderately and finely punctured, punctures irregular, size and distribution similar to that on disc of pronotum, becoming distinctly larger and coarser towards the ocular carina and occiput, post occipital area and genae coarsely and abundantly punctate, size of punctures at least three times that of largest on pronotum (maybe confluent in places), dense punctuation extending beneath head to gula which is medially impunctate; dorsal ocular carina distinct, moderately elevated, extending from mid level of eye to base of jaw, width more or less equal to the base of mandibular carina. Frons weakly depressed at sides, prior to anterior margin, resulting in a slight median, transverse ridge at level of anterior margin of antennal insertions. Clypeus weakly elevated medially with a strong median projection; projection at least three times wider than long; anterior margin weakly emarginated. Eye (Fig 8) very weakly emarginated; posterior ocular edge very distinct; length of eye twice that of median width, when viewed laterally; ventral ocular lobe only slightly broader than dorsal lobe. Sub-mentum with similar strong, dense punctuation, elevation of sub-mentum more or less equal to that of genae, delimited behind by a shallow transverse sulcus, punctures with a long pale seta which is at least five times the length of the puncture. Carina of ventral sensorial area of the antennomeres III-XI (Figs 8, 9) distinctly elevated, visible from the side; pilosity of the antennomeres III-XI pale, distinct, longest setae forming posterior fringe on segments, setal length almost equal to that of segment.

Pronotum (Figs 5, 6) transverse, somewhat flattened dorsally, maximum width at anterior angles, being slightly greater than that of elytra at humeri, anterior angles rounded not strongly projected; anterior margin very weakly concave; posterior margin weakly sinuate; lateral margins narrow but well defined, becoming gradually but distinctly concave after anterior third with minimum width just prior to posterior angles



LECTOTYPE
 Birandra (Yvesandra)
 latreillei *nomen novum*
 det. A. Santos-Silva, S. Shute
 2009

Figures 1–4. *Birandra (Yvesandra) latreillei*: **1** *Parandra laevis* Schönherr, 1817, lectotype (major male), habitus **2** labels **3** minor male, ex. Chevrolat collection (ex. Dejean) (data not readable), habitus **4** female from Dominican Republic (Guaimati), habitus. Bar = 1 cm.

that are weakly projected; disc finely and irregularly punctuate, punctures finer than those on disc of head, becoming gradually larger towards margins, largest punctures not greater than those on anterior area of head. Elytron 3.8 times longer than broad, maximum width at humeri, becoming only slightly narrowed just prior to apex which is broadly rounded; surface adjacent to median suture finely punctate, punctures equal in size to smallest on disc of pronotum, distribution irregular, punctures on average 4–5 times their own width apart becoming slightly larger and denser sub-laterally below humeral third. Metepisternum distinctly and irregularly punctuate, punctures of similar size or slightly smaller than those on adjacent area of metasternum, becoming denser near anterior margin; punctures on metasternum large and distinct adjacent to metepisternum 2.3 times their own width apart, becoming distinctly finer towards metasternal suture. Apical ventrite of abdomen only slightly longer than preceding segment, more distinctly punctured than rest of abdomen with long pale sub-erect setae. Femora minutely and indistinctly punctured throughout, setae minute and indistinct. Tibiae becoming strongly dilated towards apex, width at apical margin at least 4× that at base, punctures minute, as on femora, setae minute just extending beyond margins of punctures, ventral fringe short; protibiae somewhat flattened giving narrow, sharp dorsal edge. Metatarsomere V approximately as long as I–III combined.

Body length (including mandibles) 10.3–18.7 mm; prothorax: length 2.2–3.3 mm; anterior width, 3.0–4.8 mm; posterior width, 2.5–4.0 mm; elytral length, 6.2–11.5 mm.

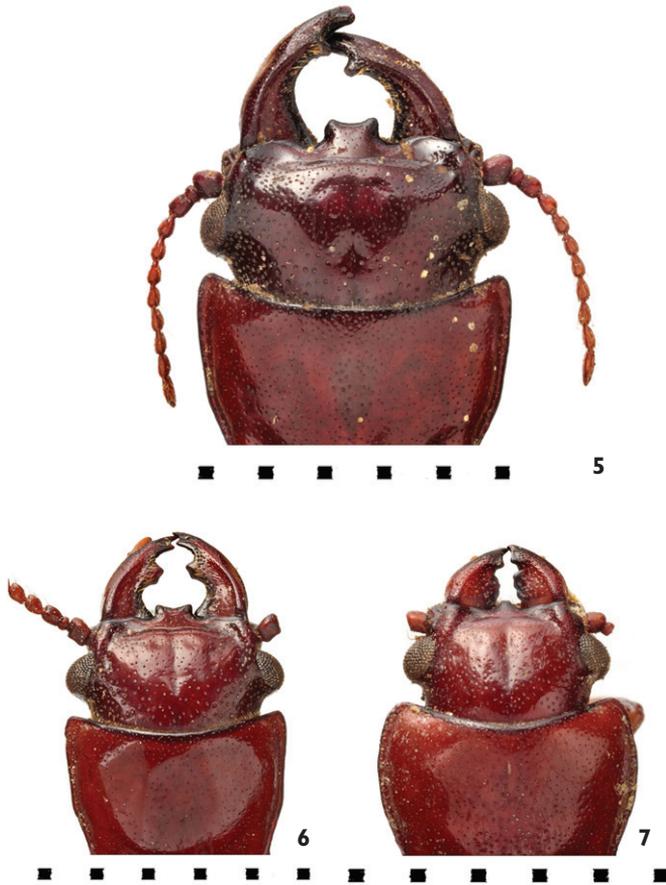
Female (Fig. 3). Head less robust, width plus eyes slightly narrower than that of pronotum at anterior angles. Eyes slightly broader and less pronounced than in male. Mandible (Fig. 7) subtriangular, length equal to two thirds that of head, more coarsely punctured than in male, punctures on dorsal surface irregular, largest equal in size to post ocular punctures; dorsal carina present but less well defined than in male; ventral apical tooth small (not visible dorsally); dorsal inner edge with small rounded preapical tooth, basal half with a broad flattened, weakly sinuate tooth which is slightly more pronounced on left mandible. Clypeal projection not broader than long, distinctly narrowing towards apex. Pronotum (Fig. 7) similar to male but with anterior two thirds slightly more rounded at sides prior to becoming narrowed and with anterior angles less pronounced. Apical ventrite of abdomen twice length of preceding segment, puncturation slightly denser than in male and setae shorter.

Body length (including mandibles) 15.0–18.7 mm; prothorax: length 3.2–3.7 mm; anterior width, 4.1–4.6 mm; posterior width, 3.5–4.3 mm; humeral width, 4.1–5.1 mm; elytral length, 9.0–11.1 mm.

Lectotype

As explained above, we have chosen the specimen from Latreille's collection, deposited at NHM(UK), as the Lectotype of *Birandra (Yvesandra) latreillei*. This specimen has the following labels (Fig. 2):

1. Purple (printed circular NHM label; added by us): Lectotype
2. printed red circular NHM type label
3. St. Domingae [San Domingo] (white h/w label)



Figures 5–7. *Birandra (Yvesandra) latreillei*, head and pronotum: **5** *Parandra laevis* Schönherr, 1817, lectotype (major male) **6** minor male, ex. Chevrolat collection (ex. Dejean) (data not readable) **7** female from Dominican Republic (Guaimati). Bar = 5 mm.

4. Bowring Chevrolat [18]63: 47* (BM(NH) registration for Chevrolat collection via J.C. Bowring 1863)
5. *Parandra laevis* Latreille, h.in Amer.bor. D[om]. Latreille (green Dejean h/w label)
6. *Parandra laevis* Latr., Type see Chevr. (white h/w C.O. Waterhouse det. label c. 1860s).
7. Lectotype *Birandra (Yvesandra) latreillei* nomen novem. A. Santos-Silva & S. Shute 2009

Material examined

DOMINICAN REPUBLIC: 1 ♀ Antilles, S.Dom [San Domingo], ex mus Laferte, Fry coll. 1903–100, *Parandra laevis* T. Arigony det. 1980 (NHM(UK)); 2 ♂ St. Domgo [San



Figures 8–9. *Birandra (Yvesandra) latreillei*, lectotype of *Parandra laevis* Schönherr, 1817, antenna: **8** ventral view **9** ventral view, detail. Bar = 1 mm.

Domingo] [18]51–116 [purch. of Salle], compared with type C.J.G. [C. Gahan], *Parandra laevis* T. Arigony det. 1980 (NHM(UK); 3 ♂, 1 ♀ Dominican Republic, Guaimati, July, 1925, Pres. by Imp. Inst. Ent. Brit. Mus. 1930–336, *Parandra laevis* T. Arigony det. 1980 (NHM(UK); 2 ♂, La Vega: Constanza (“Paraje Los Flacos, Valle Nuevo”), IX.1962, E. Marcano col. (MZSP); 1 ♂, Hato Mayor: Parque Nacional los Haitises (3 km W Cueva de Arena; 19°04'N, 69°29'W), VII.7–9.1992, S. Davidson Col. (MZSP); 2 ♀, Monsenor Nouel: 8 miles W Jayaco, VIII.03.1967, J.C.Schaffner col. (MZSP).

HAITI: 1 ♂ 10816 [dark green handwritten label] ferruginea, Port au Pri[nce] Chr. [white h/w label] *Parandra laevis* Latr.? {large light green, black margined h/w label} *laevis* Latr. [ex Schonherr coll.] (NRS); 2 ♂ Antilles, Haiti [ex Fry coll. 1903–100] *Parandra laevis* E. Gilmour det. (NHM(UK).

JAMAICA: 1 ♂ Jamaica B.W.I, St. Andrew, Clydesdale, 27 Aug. 1950, R.P. Bengry, 5455 E 92+, *Parandra laevis* E. Gilmour det., *Parandra laevis*, *Parandra laevis* Latr. T. Arigony det. 1980 (NRS).

LOCALITY ? : 2 ♂ green Dejean labels, (not readable), Bowring Chevrolat [18]63:47* (NHM(UK)).

Comments. *Birandra (Yvesandra) latreillei* is similar to *B. (Y.) angulicollis* (Bates, 1879), *B. (Y.) pinchoni* (Villiers, 1979), and *B. (Y.) antioquensis* (Cardona-Duque et al., 2007) but differs, mainly, in the elytral punctures being finer and somewhat shallower. In *B. (Y.) angulicollis*, *B. (Y.) pinchoni* and *B. (Y.) antioquensis* the elytral punctures are conspicuously coarse and strong. In general, the pronotal punctures are also finer and shallower in *B. (Y.) latreillei* than in the other three species. Some differences pointed out by Bates (1879) and Lameere (1902), such as the form of anterior angles of the pronotum, are frequently variable intraspecifically and are not reliable when used alone.

Birandra (Y.) latreillei differs from *B. (Y.) cribrata* (Thomson, 1861) by the length of the sensorial area of antennomeres III–XI (antennomeres III–X, approximately two times longer than broad), and by the punctures of pronotum and elytra less deep and finer. In *B. (Y.) cribrata* the sensorial area of the antennomeres III–XI is distinctly narrow and elongate (antennomeres III–X, approximately three times longer than broad), and the punctures of pronotum and elytra are deeper and coarser. *B. (Y.) latreillei* can be separated from *B. (Y.) lata* (Bates, 1884) by the maximum width of the prothorax (width less than 1.5 times the length) and narrow lateral margins in both sexes. *Birandra (Y.) lata* has the prothorax distinctly transverse (width more than 1.5 times the length) with wide lateral margins in both sexes. Finally, *B. (Y.) tavakiliani* (Santos-Silva, 2002) does not have the sensorial area of antennomeres III–X divided by carina, whereas they are distinctly divided in *B. (Y.) latreillei*. (For figures and key to species see Santos-Silva 2002 and Cardona-Duque et al. 2007 (modified key).

Geographical distribution. Hispaniola, Jamaica. 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. We believe, on examination of the type, that *Parandra cubaecola* sensu Zayas (op.cit.) is not the same species as that of Chevrolat (1862). It is possible that the specimens seen by Zayas are *B. (Y.) latreillei* (“*Parandra laevis*” sensu Thomson (op.cit.) from Cuba) or a new species. It has not been possible to find the specimen from Jamaica (J. Bowrey Coll.) examined by Waterhouse (1878), but a specimen from the NRS collection from Jamaica collected in 1950 has proved to be *B. (Y.) latreillei*.

Summary of the final position of the taxa of Parandrini involved

Parandra Latreille, 1802

Hesperandra Arigony, 1977: 163; Monné, 2006: 9. **syn. n.**

Gnathophorus Kirby, 1837: 166.

Hesperandra (Zikandra) Santos-Silva, 2003: 120; Monné, 2006: 12. **syn. n.**

Type-species: *Attelabus glaber* DeGeer, 1774 (monotypy).

Parandra (Parandra) Latreille, 1802

Included species:

Parandra (*Parandra*) *brasilica* Zikán, 1948;
Parandra (*Parandra*) *glaberrima* Zikán, 1948;
Parandra (*Parandra*) *glabra* (DeGeer, 1774)
Parandra laevis Latreille, 1804. **syn. n.**;
Parandra (*Parandra*) *humboldti* (Santos-Silva, 2003);
Parandra (*Parandra*) *minuscula* Zikán, 1948;
Parandra (*Parandra*) *monnei* (Santos-Silva, 2001);
Parandra (*Parandra*) *separanda* Zikán, 1948;
Parandra (*Parandra*) *solisi* (Santos-Silva, 2007);
Parandra (*Parandra*) *thomasi* (Santos-Silva, 2002);
Parandra (*Parandra*) *ubirajarai* (Santos-Silva, 2001).

Parandra (*Tavandra*) Santos-Silva, 2003

Hesperandra (*Tavandra*); Monné, 2006: 10.

Type-species: *Parandra longicollis* Thomson, 1861 (original designation).

Included species:

Parandra (*Tavandra*) *brachyderes* Lameere, 1902;
Parandra (*Tavandra*) *brevicollis* Lameere, 1902;
Parandra (*Tavandra*) *colombica* White, 1853;
Parandra (*Tavandra*) *guianensis* (Tavakilian, 2000);
Parandra (*Tavandra*) *lalannecassouorum* (Tavakilian, 2000);
Parandra (*Tavandra*) *longicollis* Thomson, 1861;
Parandra (*Tavandra*) *polita* Say, 1835;
Parandra (*Tavandra*) *scaritoides* Thomson, 1861;
Parandra (*Tavandra*) *solangeae* (Santos-Silva, 2003);
Parandra (*Tavandra*) *villei* Lameere, 1885.

Parandra (*Hesperandra*) Arigony, 1977

Hesperandra (*Hesperandra*); Monné, 2006: 9.

Type-species: *Parandra expectata* Lameere, 1902 (original designation).

Included species:

Parandra (*Hesperandra*) *conspicua* Tippmann, 1960;
Parandra (*Hesperandra*) *expectata* Lameere, 1902;
Parandra (*Hesperandra*) *imitatrix* (Santos-Silva, 2005);
Parandra (*Hesperandra*) *tucumana* Zikán, 1948.

Birandra Santos-Silva, 2002

Parandra (*Birandra*); Monné, 2006: 17.

Type-species: *Parandra punctata* White, 1853 (original designation).

Included species:

Birandra (*Birandra*) *lucanoides* (Thomson, 1861);
Birandra (*Birandra*) *mariahelenae* (Santos-Silva, 2002);
Birandra (*Birandra*) *punctata* (White, 1853);
Birandra (*Birandra*) *silvaini* (Tavakilian, 2000).

Birandra (*Yvesandra*) **nom. n.**

Parandra (*Parandra*); Monné, 2006: 16.

Type-species: *Parandra laevis* Schönherr, 1817.

Included species:

Birandra (Yvesandra) antioquensis Cardona-Duque et al. 2007

Birandra (Yvesandra) angulicollis (Bates, 1879);

Birandra (Yvesandra) cribrata (Thomson, 1861);

Birandra (Yvesandra) cubaecola (Chevrolat, 1862);

Birandra (Yvesandra) lata (Bates, 1884);

Birandra (Yvesandra) latreillei **nom. n.**

Parandra laevis Schönherr, 1817 (not Latreille, 1804)

Parandra laevis sensu auctorum (Monné 2006, part);

Birandra (Yvesandra) pinchoni Villiers, 1979;

Birandra (Yvesandra) tavakiliani (Santos-Silva, 2002).

Non American species provisionally allocated in *Birandra (Yvesandra)* (under study by Santos-Silva, Heffern and Matsuda):

Birandra (Yvesandra) austrocaledonica (Montrouzier, 1861);

Birandra (Yvesandra) capicola (Thomson, 1860);

Birandra (Yvesandra) formosana (Miwa & Mitono, 1939);

Birandra (Yvesandra) frenchi (Blackburn, 1895);

Birandra (Yvesandra) gabonica (Thomson, 1858);

Birandra (Yvesandra) heterostyla (Lameere, 1902);

Birandra (Yvesandra) janus (Bates, 1875);

Birandra (Yvesandra) lanyuana (Hayashi, 1981);

Birandra (Yvesandra) moretto (Adlbauer, 2004);

Birandra (Yvesandra) passandroides (Thomson, 1867);

Birandra (Yvesandra) puncticeps (Sharp, 1878);

Birandra (Yvesandra) shibatai (Hayashi, 1963);

Birandra (Yvesandra) solomonensis (Arigony, 1983);

Birandra (Yvesandra) striatfrons (Fairmaire, 1879).

Revalidation of *Protospondylis* Linsley, 1942

Vitali (2006) considered *Protospondylis* Linsley, 1942 to be synonymous with *Parandra* Latreille, 1804. However this was a tentative placement and we believe that it is not possible to affirm that *Protospondylis* is a true Parandrinae based on the figure of the fossil and the characters discussed by Vitali. Vitali states (p.24) that “The conservation of this fossil makes it difficult to use the key to genera provided by Santos-Silva (2002)” thus it is impossible to establish, without doubt, that *Protospondylis* is synonymous with *Parandra* sensu lato.

To solve this problem we are revalidating *Protospondylis* as a genus different from *Parandra* sensu lato, and place it incertae sedis in the Cerambycidae until its true taxonomic position can be resolved by the discovery of further specimens of *Protospondylis florissantensis* (Wickham, 1920).

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