

INSECTA MUNDI

A Journal of World Insect Systematics

0405

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(Coleoptera, Cerambycidae, Parandrinae)

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Date of Issue: February 6, 2015

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Insecta Mundi 0405: 1–5

ZooBank Registered: urn:lsid:zoobank.org:pub:84984101-559B-4265-9CC6-7DD41E4478CB

Published in 2015 by

Center for Systematic Entomology, Inc.

P. O. Box 141874

Gainesville, FL 32614-1874 USA

<http://centerforsystematicentomology.org/>

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Layout Editor for this article: Eugenio H. Nearn

A new species of *Parandra* (*Parandra*) Latreille from Peru (Coleoptera, Cerambycidae, Parandrinae)

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Abstract. *Parandra* (*Parandra*) *barclayi*, a new species of Parandrini from Peru is described, illustrated, and included in an existing key. The new species establishes an elevation record (3,550 m) for the genus in South America.

Key Words. Key, Parandrini, South America, Taxonomy.

Introduction

A new species of *Parandra* (*Parandra*) was discovered in a series of specimens from several regions of the world, sent for identification by Maxwell V. L. Barclay (BMNH). The new species is described and included in an existing key.

Parandra (*Parandra*) occurs in America, from North America (Mexico) to nearly all of South America (excluding Chile). Currently, *Parandra* (*Parandra*) encompasses 11 species, of which six have been described in the last 13 years (Monné 2014).

Some South American species of Parandrinae occur in high altitudes, for example, *Parandra* (*Tavandra*) *colombica* White, 1853, *P. (T.) scaritoides* Thomson, 1861, and *P. (Parandra) humboldti* (Santos-Silva, 2003). The new species described below establishes an elevation record (3,550 m) for the genus in South America.

Material and Methods

Photographs were taken with a Canon EOS Rebel T3i DSLR camera, Canon MP-E 65mm f/2.8 1-5X macro lens, controlled by Zerene Stacker AutoMontage software.

The collection acronyms used in this study are as follows:

BMNH – The Natural History Museum, London, England, United Kingdom

MNRJ – Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil

MZSP – Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil

Parandra (*Parandra*) *barclayi* sp. nov.

(Fig. 1–9)

Holotype male (Fig. 1–3, 5, 7). Integument reddish-brown, shiny; pronotum dark reddish-brown, with margins blackish; head mostly blackish, except for center of vertex and gula, which are dark reddish-brown; antennae dark reddish-brown; scutellum dark-brown, with irregular reddish-brown areas; elytral suture, margins of ventral segments of thorax, narrow distal band on each abdominal ventrite, narrow distal band on femora, margins of protibiae, distal margin of tibiae, and tibial spurs blackish; basal fourth of tibiae dark reddish-brown to blackish.

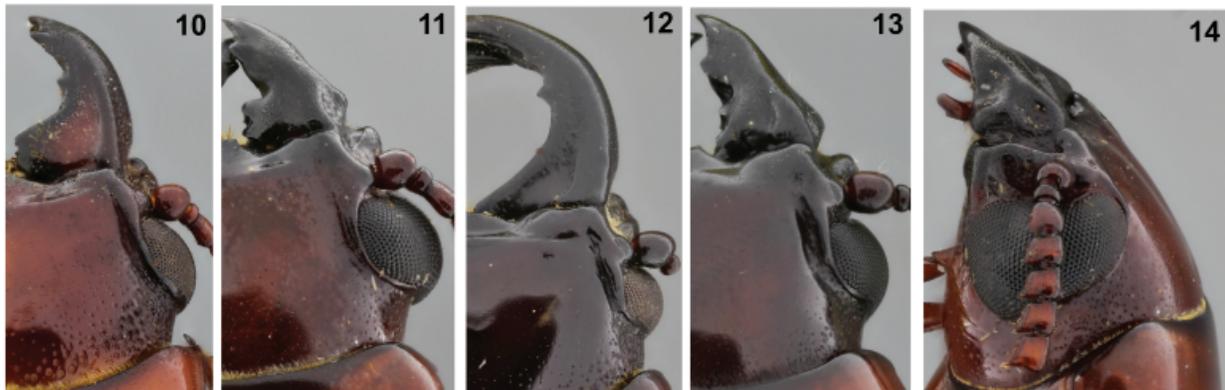
Head. Width of head plus eyes equal to 0.9 times largest width of prothorax; dorsal surface very fine, sparsely punctate, laterally with fine punctures near clypeus-labrum and antennal tubercles; laterally, from base of antennal tubercles to anterior edge of prothorax, gradually, distinctly coarsely punctate (this area larger towards anterior margin of prothorax). Frontoclypeal suture incomplete,



Figures 1–9. *Parandra (Parandra) barclayi*, new species. 1) Holotype male, dorsal habitus. 2) Holotype male, ventral habitus. 3) Holotype male, lateral habitus. 4) Paratype female, dorsal habitus. 5) Holotype male, head, dorsal. 6) Paratype female, head, dorsal. 7) Holotype male, head, lateral. 8) Paratype female, head, lateral. 9) Paratype female, head, ventral.

distinct only laterally. Clypeus very finely, sparsely punctate centrally, laterally fine, slightly denser punctate. Labrum finely, sparsely punctate; with very short, sparse setae; anterior edge centrally triangularly projected, with apex of projection sub-rounded. Antennal tubercles moderately finely, sparsely punctate; ocular carina wide, not distinctly separated from antennal tubercles; area between eyes and antennal carina, coarse, confluent punctate. Area behind upper eye lobes and basal half of lower eye lobes, coarse, abundantly punctate; area behind middle of lower eye lobes and gula, transversely sulcate, with fine sparse punctures. Gena moderately coarse, abundantly punctate under lower eye lobes, gradually finer, sparser towards mandibles. Gula fine, transversely, sparsely, weakly sulcate. Submentum coarse, abundantly punctate (punctures denser, anastomosed close to the anterior elevation; central area close to anterior elevation distinctly depressed; with short, sparse setae on depressed area; anterior elevation wide, shagreened, with coarse, shallow, sparse punctures, and very short, sparse setae. Eyes moderately small; posterior margin very distinct, abruptly projected from head. Antennomere III with very short, sparse setae near apex; antennomeres IV–X with moderately long, sparse setae; carina of ventral sensorial area of antennomere III, dividing the area into two regions of very different size (innermost about twice as long as outermost); antennal formula based on antennomere III: scape = 1.44; pedicel = 0.40; IV–X = 1.00. Mandibles slightly longer than head; dorsally fine, abundantly punctate, interspersed with coarser punctures at middle; laterally with punctures slightly coarser than dorsally; lateral carina wide, elevated from base to about middle; dorsal side with deep depression from base to just after middle (distinctly narrowed towards apex); inner margin with small, rounded tooth at distal third.

Thorax. Prothorax transverse. Pronotum very finely, moderately abundantly punctate; lateral sides sub-rounded, narrower at base than apex; lateral carina complete from anterolateral angle to posterolateral angle; middle lateral angle only slightly indicated; on each side, close to margin, between middle and posterior angles, with narrow, elongate depression. Hypomeron impunctate; with very short, very sparse setae between lateral pronotal carina and prosternum; with short, moderately abundant setae on projection of hypomeron. Prosternum laterally finely, sparsely punctate, with short, sparse setae; centrally with transverse, fine, weakly marked sulcus. Prosternal process centrally elevated (mainly towards apex); laterally with short, moderately sparse setae, distinctly more abundant at apex. Mesosternum centrally glabrous, impunctate; laterally moderately coarse, abundantly punctate, with long, abundant setae. Mesepisternum mostly coarse, abundantly punctate, with short, sparse setae (longer towards prothorax); laterally with wide, impunctate, glabrous area. Metepisternum moderately coarse, shallowly punctate; with short, moderately abundant setae. Metasternum mostly impunctate, except for sparse, fine punctures laterally; lateral sides and transverse area near metacoxal cavities with short, sparse (but distinct) setae (area with setae wider towards mesocoxal cavities). Elytra very finely, sparsely punctate.



Figures 10–14. Two species of *Parandra (Parandra)*. **10)** *Parandra (Parandra) glabra*, male from Colombia, head, dorsal. **11)** *P. (P.) glabra*, female from Colombia, head, dorsal. **12)** *P. (P.) humboldti*, male from Ecuador, head, dorsal. **13)** *P. (P.) humboldti*, paratype female from Colombia, head, dorsal. **14)** *P. (P.) glabra*, female from Colombia, head, lateral.

Abdomen. Ventrites I–IV centrally fine, sparsely punctate, laterally slightly denser; centrally with sparse setae (glabrous on ventrite I), laterally with setae moderately abundant. Ventrite V shallowly punctate, with very small asperities; laterally with sparse setae, denser on center distal half. **Legs.** Paronychium with four long setae, two at each side of apex, separated or together two by two.

Female (Fig. 4, 6, 8, 9). Head less robust, width plus eyes equal to 0.7 times largest width of prothorax. Eyes as in male. Mandible sub-triangular, length equal to 0.55 times that of head; sculpture similar to that of male; dorsal surface not depressed; lateral carina wide, slightly surpassing basal third; inner margin with three teeth: two large, before middle; one small, about middle. Labrum with setae slightly longer, more abundant than in male. Area behind upper eye lobes and basal half of lower eye moderately finely, sparsely punctate. Submentum not depressed close to anterior elevation; setae more conspicuous than in male.

Variation. Male paratype has pronotum and gula slightly lighter than in holotype; tooth of inner side of mandible much more distinct than in holotype.

Dimensions in mm (male/female). Total length (including mandibles), 23.5–27.1/25.6; length of prothorax at center, 4.2–5.1/5.0; largest width of prothorax, 6.8–8.0/8.0; width of prothorax at posterolateral angles, 5.5–6.4/6.7; humeral width, 6.3–7.6/7.9; elytral length, 13.2–15.2/16.3. The largest dimensions of males are those of the holotype.

Etymology. The species is named for Maxwell V. L. Barclay (BMNH), collector of the type series, for his constant help with information on type specimens deposited at the BMNH.

Type material. Holotype male from Peru, *Cuzco*: Purmamarca (3550 m; 2 hours N of Ollantaytambo), IV.1999, M. V. L. Barclay col. (BMNH). Paratypes – 1 male (MZSP), 1 female (BMNH), same data as holotype.

Remarks. *Parandra (Parandra) barclayi* differs from *P. (P.) glabra* (De Geer, 1774) as follows: posterior margin of eyes distinct and abruptly projected from head in male (Fig. 5) and female (Fig. 6); eyes in female notably slender (Fig. 8); metepisterna and lateral sides of metasternum with short, but very distinct setae. In *P. (P.) glabra* the posterior margin of eyes is gradually projected from head in male (Fig. 10) and female (Fig. 11), the eyes in female distinctly wider (Fig. 14), and the metepisterna and lateral sides of metasternum are glabrous or, at most, have very sparse and short setae (more frequently on metepisterna). *Parandra (Parandra) barclayi* also differs from the other species of the subgenus by the shape of posterior margin of eyes.

Parandra (Parandra) barclayi can be included in the alternative of couplet “2” (male) and “12” (female), from Santos-Silva (2007) (translated):

- | | | |
|---------|--|---|
| 2(1). | Metepisterna without dense setae, but distinct setae throughout | 2' |
| – | Metepisterna glabrous or with setae only on basal third, or very sparse throughout | 3 |
| 2'(2). | Posterior margin of eyes very distinct, abruptly projected from head (Fig. 5). Peru | <i>P. (P.) barclayi</i> sp. nov. |
| – | Posterior margin of eyes gradually projected from head (Fig. 12). Colombia, Ecuador, Peru | <i>P. (P.) humboldti</i> (Santos-Silva, 2003) |
| 12(11). | Inner distal tooth of mandibles wide and truncate at apex. Costa Rica, Panama | <i>P. (P.) solisi</i> (Santos-Silva, 2007) |
| – | Inner distal tooth of mandibles narrow and acute towards apex | 12' |

- 12'(12). Posterior margin of eyes distinct and abruptly projected from head (Fig. 6). Peru
..... *P. (P.) barclayi* sp. nov.
- Posterior margin of eyes gradually projected from head (Fig. 13). Colombia, Ecuador, Peru
..... *P. (P.) humboldti* (Santos-Silva, 2003)

Acknowledgments

Thanks to Maxwell V. L. Barclay (BMNH) for the loan of the specimens of the new species herein described. Thanks also to Larry G. Bezark and Miguel A. Monné (MNRJ) for corrections to an earlier version of the manuscript.

Literature Cited

- Monné, M. A. 2014.** Catalogue of the Cerambycidae (Coleoptera) of the Neotropical Region. Part III. Subfamilies Lepturinae, Nelydalinae, Parandrinae, Prioninae, Spondylidinae and Families Oxypeltidae, Vesperidae and Disteniidae. Available from: <http://www.cerambyxcat.com/> (Last accessed October 2014).
- Santos-Silva, A. 2007.** Nova espécie de *Hesperandra* (*Zikandra*) Santos-Silva e chave para o subgênero (Coleoptera, Cerambycidae, Parandrinae). Les Cahiers Magellanes, 66: 1–11.

Received January 12, 2015; Accepted February 1, 2015.
Review editor Eugenio H. Nearn.

