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## A NEW SPECIES AND NEW RECORDS OF *Megacyllene* (CASEY, 1912) (COLEOPTERA: CERAMBYCIDAE: CERAMBYCINAE: CLYTINI) FROM ARGENTINA

*Una nueva especie y nuevos registros de Megacyllene (Casey, 1912) (Coleoptera: Cerambycidae:  
Cerambycinae: Clytini) de Argentina*

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**Abstract.** *Megacyllene bella* n. sp. from Misiones, in northeastern Argentina, is described and illustrated. A new record for Argentina is also given: *M. globosa* originally described from Brazil. The Argentinean fauna of *Megacyllene* is compared with adjacent countries, resulting that only six species of the genus remain as endemic in the country.

**Key words.** Cerambycidae, *Megacyllene*, New species, Systematics, Distribution.

**Resumen.** *Megacyllene bella* sp. n. de Misiones, en el noreste de Argentina, se describe e ilustra. También se da un nuevo registro para Argentina: *M. globosa*, descrita originalmente de Brasil. La fauna argentina de *Megacyllene* se compara con los países adyacentes, dando como resultado que sólo seis especies del género permanecen como endémicas para el país.

**Palabras clave.** Cerambycidae, *Megacyllene*, Nueva especie, Sistemática, Distribución.

## INTRODUCTION

The genus *Megacyllene* (Casey, 1912) is represented by 49 species on the Neotropical region, according to Monné (2015). Di Iorio (2006) recognizes 24 species of the genus for Argentina. In 2011, Aragão and Monné re-validated to *Megacyllene insignita* (Perroud, 1855), synonymized by Di Iorio in 2006 to *Megacyllene latreille* (Laporte and Cory, 1836). Monné (2015) proposed *M. minuta* as synonym of *M. boryi*. In the present contribution a new species of *Megacyllene* is described and illustrated, and a recently described species of Brazil (Aragão and Monné 2011) is a new record in the country, totalizing 26 species present in Argentina a total of 50 known species in the genus.

**Institutional abbreviations.** MACN, Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Buenos Aires, Argentina. MNRJ, Museu Nacional, Rio de Janeiro, Brazil. GZSM, Gastón Zubarán, San Miguel, Buenos Aires, Argentina. ODIC, Osvaldo Di Iorio collection, Buenos Aires, Argentina.

## SYSTEMATICS

**Orden Coleoptera** Linnaeus, 1758

**Familia Cerambycidae** Latreille, 1802

*Megacyllene* Casey, 1912

*Megacyllene bella* sp. n.

Figures 1-4

**Diagnosis.** *Megacyllene bella* differs from other species on the basis of the following combination of characters: large size, black tegument, the pattern of the four yellow bands and thin pubescent elytra.

**Etimology.** the name makes reference to its beautiful and delicate aspect.

**Holotype.** Female specimen, labeled “Arg.,

Misiones / San Pedro / 9-XII-05 / D. Penner leg.” [handwritten by Di Iorio on a white label inside a black frame], “HOLOTYPUS” [printed in black on a red paper], “*Megacyllene* / (*Megacyllene*) / *bella* sp. nov. / Zubarán and Di Iorio det. 2016” [handwritten by Zubarán on red paper]. The Holotype is deposited in the MACN collection.

**Description of holotype specimen.** Tegument completely black, except for a dark reddish brown on the antenna (except the scape), two articles distal from the fore tarsi, the underside of the tibiae, trochanters, and the base of the femora.

Pubescent bands yellow as follows: on the head, bordering the upper internal margin of ocular lobes, against antennal insertion; another band limiting ocular lower lobes, between the front and gena, continuing dorsally along the base of the lower ocular lobe towards the apex, and then joins the opposite side (Figure 4).

Five transversal bands on pronotum (Figures 1-3): first narrow, against anterior margin; second broader than others, in approximately 1/3 pronotal length; third narrow, slightly curved backwards, approximately 1/2 of the length pronotal; fourth bordering posterior angles, one at each side, fused with fifth band; the latter against posterior margin and wider in the middle; first and second bands pronotal latero-ventrally fused with prosternal pubescence (Figure 3); the lateral margin of the fifth band, located on the border prothoracic, ends in the polygonal area below the procoxal cavity (Figures 1 and 2).

Four transversal bands on elytra (Figures 1 and 2): first band, near the anterior margin, but without touching it; slightly ascendent from a little below the humeri to scutellum, continuing from there through the rear half, with the opposite band, with the

opposite band; the second, approximately half of the length of the elytra, with a small sutural spot between the suture and the elytral carina. The third divided in a small portion between the lateral margin and the carina of the elytra, and a bigger spot between elytral carina and suture; IV before the posterior margin of the elytra, divided by the elytral carina.

Prosternum, prosternal process, lateral sides of mesosternum, all mesosternal processes, metaepisternum, 3/4 of each lateral half of metasternum covered by a pale yellow pubescence; more dense and yellow pubescence on the mesoepisternum (except in its anterior margin); three lateral yellow spots on first three visible abdominal sternites; traces of lateral spots in the fourth abdominal sternite visible; a longitudinal yellow spot on the last visible tergite; a small patch of dense pubescence, yellow, on each side of the plate stridulatory mesonotum; a small patch of pale yellow pubescence at the apical part of the elytral epipleura. Pale whitish pubescence: procoxae, metacoxae, femurs and tibiae. Anterior and middle tarsus with golden yellow pads, second and fourth article of hind tarsus with the same color golden yellow. Black hairs on ventral side of first article in hind tarsi.

Coarse punctuation on vertex of head behind transverse yellow band; pronotum with punctuation thin and dense, elytra with the same dense and decumbent tiny black hairs.

Anterior margin of pronotum slightly arched forward; lateral margins slightly and regularly arched, converging anteriorly; base of pronotum narrowed, with rounded lateral posterior angles (Figures 1 and 3); elytra with lateral margins progressively convergent backwards (Figures 1 and 2); elytral apex with a strong spine, prolongation of the elytral carina (Figure 1).

Antennomeres V to X progressively pro-

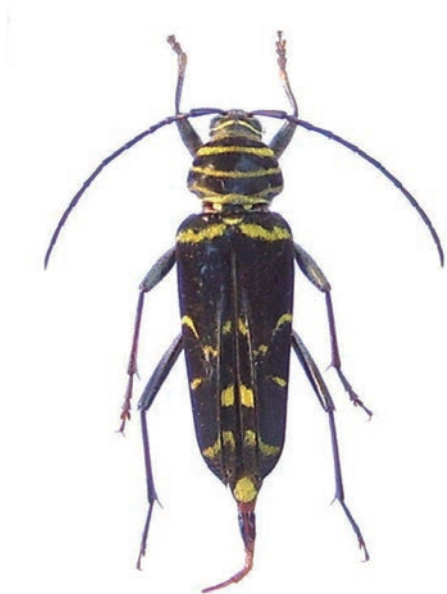
duced in an external apex of each article; scape longer than antennomere III; antennomere IV shorter than III; antennomere V to VII longer than remaining antennomeres VIII to XI; antennomere XI fused to XII. Prosternal process posteriorly widened, with the posterior margin slightly convex.

**Holotype measurements.** Maximum prothorax width (between posterior angles), 4.8 mm; prothorax length, 3.9 mm; maximum elytra width (below humeri), 5.82 mm; elytral length (including apical spines), 14.04 mm; total length, 20.00 mm.

**Remarks.** The single specimen of *M. bella* was captured running (probably in an oviposition behaviour) on felled branches of an undetermined tree, mixed with specimens of *Megacyllene acuta* (Germar, 1824) (D. Penner pers. com.). More research is needed on this subject, in order to get the male individuals and their host plant.

**Comparisons.** *Megacyllene bella* differs from all other Argentine species (Di Iorio 2005: Plates 43-45) for its large size, the black tegument and the pattern of the four yellow bands and thin pubescent on the elytra. It also differs in the pattern of pubescent elytra yellow bands, from all other Brazilian species that are not present in Argentina (Aragão and Monné, 2011).

*Megacyllene ebenina* (Monné and Napp, 2004), known only from a single specimen of Santa Catarina (Brazil), is similar for the black tegument, pronotum and forms of elytra (except for the absence of pronotal and elytral bands (Napp and Monné, 2004, Aragón and Monné, 2011)), and only four yellow spots on the ventral side of the body (one on each rear half of metaepisternum and one on each side of the first visible abdominal segment (Monné and Knapp,



**Figure 1** - Dorsal view of *Megacyllene bella* n. sp.



**Figure 2** - Lateral view of *Megacyllene bella* n. sp.



**Figure 3** - Detail of the pronotum of *Megacyllene bella* n. sp. (lateral view).



**Figure 4** - Detail of the head of *Megacyllene bella* n. sp. (anterior view).

2004)). The “male” holotype of *M. ebenina*, illustrated by Napp and Monné (2004) and Aragão and Monné (2011), appears to be a female. This prevents the confusion that *M. bella* and *M. ebenina* belong to a same species with sexual dimorphism, as in some species of Clytini (but not present in *Megacyllene* yet). *Megacyllene bella* is also similar to *M. chalybeata* (White, 1855) by the black integument and the pattern of the elytra, but the latter has two large pubescent yellow spots on the pronotum, next to posterior angles (absent in *M. bella*). Pubescent

elytra have three bands (instead of four as in *M. bella*), and the first two abdominal sternites have lateral spots (compared to the three sternites in *M. bella*).

***Megacyllene globosa*  
(Aragão and Monné, 2011)**

*Megacyllene boryi* (Laporte and Gory, 1836), in part: Di Iorio 2006: 3 (distribution). BRAZIL: Paraná: Arapongas, XI-1951, A. Maller col., 1 male holotype

[MNRJ] (Aragão and Monné, 2011).

**Material examined.** ARGENTINA: Misiones: Puerto Iguazú, 16-XII-1988, ex Col. D. Dauber, 1 female [DIOC].

**Remarks.** The specimen, previously identified as “*bonplandi?*” and “*ellifranziana?*” (Fuchs, 1961), by Diethard Dauber, was included with scepticism among those referred as *Megacyllene boryi* by Di Iorio (2006).

Except for the black prothorax (the elytra, abdomen and legs are reddish brown), its description and illustration matches with *M. globosa* described by Aragón and Monné (2011). Thus, this constitutes a new country record.

## DISCUSSION

From 50 species known for *Megacyllene*, 26 species are present in Argentina (Table 1). From this total species present in the country, 1 is probably shared with Chile, 8 with Bolivia, 12 with Paraguay, 16 with Brazil, and 10 with Uruguay (Table 1). Therefore, only six species remain endemic in Argentina: *M. bella* n.sp., *M. castroi*, *M. rotundicollis*, *M. rufofemorata*, *M. tafivallensis*, and *M. trifasciata* (Table 1).

About the distribution of Argentinean species of *Megacyllene* per provinces, Misiones has the highest number (13 species), followed by Salta, Tucumán and Entre Ríos (with 11

	CHI	BOL	BRA	PAR	ARG	URU
<i>M. acuta</i> (Germar, 1821)	-	X	X	X	X	X
<i>M. anacantha</i> (Chevrolat, 1862)	-	-	X	X	X	-
<i>M. bella</i> Zubarán & Di Iorio sp. n	-	-	-	-	N	-
<i>M. bonplandi</i> (Gounelle, 1911)	-	-	X	P	X	-
<i>M. boryi</i> (Laporte & Gory, 1836)	X	-	X	X	X	X
<i>M. castanea</i> (Laporte & Gory, 1836)	-	-	X	X	X	P
<i>M. castroi</i> (Prosen, 1947)	-	-	-	-	X	-
<i>M. falsa</i> (Chevrolat, 1862)	-	-	X	X	X	X
<i>M. globosa</i> Aragón & Monné, 2011	-	-	X	P	N	-
<i>M. guarani</i> Aragón & Monné, 2011	-	-	-	X	P	-
<i>M. hoffmanni</i> (Laporte & Gory, 1836)	-	-	X	X	P	-
<i>M. insignita</i> (Perroud, 1855)	-	-	X	-	X	X
<i>M. latreillei</i> (Laporte & Gory, 1836)	-	-	X	-	X	P
<i>M. magna</i> Di Iorio, 1997	-	X	-	-	X	-
<i>M. mellyi</i> (Chevrolat, 1862)	-	X	X	X	X	X
<i>M. multiguttata</i> (Burmeister, 1865)	-	X	-	X	X	-
<i>M. murina</i> (Burmeister, 1879)	-	-	-	X	X	X
<i>M. neblinosa</i> Di Iorio, 1995	-	X	X	P	X	-
<i>M. nebulosa</i> (Laporte & Gory, 1836)	X?	X	X	X	X	X
<i>M. proxima</i> (Laporte & Gory, 1836)	-	X	X	X	X	P
<i>M. quinquefasciata</i> (Melzer, 1931)	X	X	-	-	X	-
<i>M. rotundicollis</i> Zajciw, 1963	-	-	-	-	X	-
<i>M. rufipes</i> (Laporte & Gory, 1836)	-	-	X	P	X	X
<i>M. rufofemorata</i> Di Iorio, 1997	-	-	-	-	X	-
<i>M. spixi</i> (Laporte & Gory, 1836)	-	-	X	X	X	X
<i>M. tafivallensis</i> Di Iorio, 1998	-	-	-	-	X	-
<i>M. trifasciata</i> Viana, 1994	-	-	-	-	X	-
<i>M. unicolor</i> Fuchs, 1955	-	-	X	X	X	X
<b>Total spp. per country</b>	<b>1</b>	<b>8</b>	<b>16</b>	<b>13</b>	<b>25</b>	<b>10</b>
<b>Probable new records</b>	-	-	-	<b>4</b>	<b>2</b>	<b>3</b>
<b>Dubious record</b>	<b>1</b>	-	-	-	-	-
<b>New records</b>	-	-	-	-	<b>2</b>	-

**Table 1** - Species of *Megacyllene* from Argentina and adjacent countries. References: N, new record; P, probable record; X, mentioned in literature. Species mentioned only from Bolivia and Brazil (endemic) are not included here, thus the number of species in these countries may be underestimated.

**Table 2** - Species of *Megacyllene* from Argentinian regions and provinces. References: X, mentioned in literature; N, new records; P, probable presence.

	Northwestern			Centralwestern			Central			Northeastern			Eastern			Southern						
	Ju	Sa	Tu	Ca	LR	SJ	Me	SE	Cb	SL	LP	Fo	Ch	SF	Mi	Co	ER	BA	Ne	RN	CH	SC
<i>M. acuta</i> (Germar, 1821)	P	X	X	X	X	P	X	X	X	-	-	P	X	X	X	X	X	X	-	-	-	-
<i>M. anacantha</i> (Chevrolat, 1862)	-	X	X	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-	-
<i>M. bella</i> Zubarán & Di Iorio sp. n.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	-	-	-	-	-	-	-
<i>M. borplandi</i> (Gounelle, 1911)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
<i>M. boryi</i> (Laporte & Gory, 1836)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	X	-	-	-	-
<i>M. castanea</i> (Laporte & Gory, 1836)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	X	-	-	-	-
<i>M. castroi</i> (Prosen, 1947)	-	-	X	X	-	-	-	P	P	P	-	-	-	-	-	-	-	-	-	X	X	-
<i>M. falsa</i> (Chevrolat, 1862)	-	-	-	-	-	-	-	-	-	-	-	X	P	P	X	P	X	-	-	-	-	-
<i>M. globosa</i> Aragão & Monné, 2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	-	-	-	-	-	-	-
<i>M. insignita</i> (Perroud, 1855)	-	-	-	-	-	-	-	-	X	X	-	-	-	X	X	X	X	X	-	-	-	-
<i>M. latreillei</i> (Laporte & Gory, 1836)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	P	X	-	-	-	-	-
<i>M. magna</i> Di Iorio, 1997	-	X	P	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>M. mellyi</i> (Chevrolat, 1862)	-	X	X	X	-	-	-	X	X	X	-	-	-	-	-	X	X	X	-	-	-	-
<i>M. multiguttata</i> (Burmeister, 1865)	-	X	X	X	X	P	X	X	X	X	X	P	P	X	-	P	X	X	-	-	-	X
<i>M. murina</i> (Burmeister, 1879)	-	X	X	-	-	-	-	X	-	-	-	-	-	X	-	-	-	-	-	-	-	-
<i>M. neblinosa</i> Di Iorio, 1995	-	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>M. nebulosa</i> (Laporte & Gory, 1836)	-	X	X	X	X	X	X	X	X	X	X	P	X	X	X	X	X	X	-	-	-	X
<i>M. proxima</i> (Laporte & Gory, 1836)	-	X	X	X	X	-	X	-	X	X	-	-	P	P	X	-	-	-	-	-	-	-
<i>M. quinquefasciata</i> (Meizer, 1931)	X	X	-	-	-	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-	-	-
<i>M. rotundicollis</i> Zajciw, 1963	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>M. rufipes</i> (Laporte & Gory, 1836)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	P	X	-	-	-	-
<i>M. rufemorata</i> Di Iorio, 1997	-	X	X	X	P	-	-	P	X	X	-	-	-	-	X	X	X	X	-	-	-	-
<i>M. spixi</i> (Laporte & Gory, 1836)	-	-	X	X	-	-	-	P	X	-	-	P	P	-	X	X	X	X	-	-	-	-
<i>M. tafvaliensis</i> Di Iorio, 1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>M. trifasciata</i> Viana, 1994	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>M. unicolor</i> Fuchs, 1955	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	X	X	P	-	-	-	-
<b>Total spp. per province</b>	<b>1</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>13</b>	<b>9</b>	<b>11</b>	<b>9</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>
<b>Probable new records</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total spp. per region</b>	<b>14</b>						<b>10</b>		<b>9</b>			<b>6</b>			<b>19</b>					<b>3</b>		



species), and Catamarca (10 species).

The rest has less than 10 species per province (Table 2). Probably, these numbers would increase in future records between contiguous provinces (Table 2).

In this sense, and based on Table 2, Jujuy, San Juan and Formosa are the provinces with less *Megacyllene* records.

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## REFERENCES

- Aragão, A.C. and Monné, M.A. 2011. O gênero *Megacyllene* s. str. Casey (Coleoptera, Cerambycidae) na Mata Atlântica: descrição de duas espécies inéditas, chave para identificação e novas ocorrências. *Revista Brasileira de Entomologia*, 55: 159-171.
- Bosq, J.M. 1945. Longicornios del Paraguay capturados por los padres Bridarolli y Williner. *Revista argentina de Zoogeografía*, 5: 45-54.
- Bosq, J.M. 1947. Catálogo preliminar de los coleópteros de Paraguay. Parte III. Superfamilia Cerambycoidea. Entrega 2. Familia Cerambycidae. *Revista de la Sociedad Científica de Paraguay*, 7: 11-17.
- Casey, T.L. 1912. Studies on the Longicornia of North America. *Memoirs on the Coleoptera*, 3: 215-376.
- Di Iorio, O.R. 1995. The Argentine species of the genus *Megacyllene* Casey, 1912 (Coleoptera: Cerambycidae), with description of a new species. *Insecta Mundi*, 9: 317-328.
- Di Iorio, O.R. 1997. Neotropical species of the genus *Megacyllene* (s.str.) Casey, 1912 (Coleoptera: Cerambycidae: Cerambycinae: Clytini), with descriptions of two new species from Argentina. *Giornale italiano di Entomologia*, 8: 383-398.
- Di Iorio, O.R. 1998. New species, combinations, synonymies, and records of Clytini (Coleoptera: Cerambycidae). *Insecta Mundi*, 12: 5-14.
- Di Iorio, O.R. 2004. Aporte al catálogo de Cerambycidae del Paraguay (Insecta - Coleoptera). Parte IV. Addenda a Bosq (Partes I y II) y Viana (Parte III). *Boletín del Museo Nacional de Historia Natural del Paraguay*, 15: 9-65.
- Di Iorio, O.R. 2005. A field guide of the long-horned beetles (Coleoptera: Cerambycidae) from Argentina. Esteban Abadie and Pablo Wagner (Coordinators). Buenos Aires, 192 pp.
- Di Iorio, O.R. 2006. New records, synonymies and a new species of Clytini from South America (Coleoptera: Cerambycidae: Cerambycinae). *Les Cahiers Magellanes*, 58: 1-28.
- Fuchs, E. 1961a. Zwei neue Cyllene-Arten aus der Sammlung des Senckenberg-Museums. *Senckenbergiana Biologica*, 42(5-6): 447-450.
- Fuchs, E. 1961b. Neue Cerambyciden aus Südbrasilien. *Pesquisas, Zoologia*, 12: 1-10.
- Germer, E.F. 1824. *Insectorum species novae aut minus cognitae, descriptionibus illustratae*. Hendeel and Sons, Halae, 624 pp.
- Laporte, F.L.N. and Gory, H.L. 1836. Monographie du genre *Clytus*. In: Histoire Naturelle et iconographie des insectes coléoptères, publié par monographies séparées. Duménil, Paris, 124 pp.
- Monné, M.A. 2015. Catalogue of the Cerambycidae (Coleoptera) of the Neotropical Region. Part I. Subfamily Cerambycinae. Available from [cerambyxcat.com/Part1\\_Cerambycinae](http://cerambyxcat.com/Part1_Cerambycinae).
- Monné, M.A. and Napp, D.S. 2004. *Megacyllene* Casey (Coleoptera, Cerambycidae): novas sinonímias e descrição de uma nova espécie. *Revista Brasileira de Entomologia*, 48: 323-324.
- Perroud, B.P. 1855. Description de quelques espèces nouvelles ou peu connus et création de quelques nouveaux genres dans la famille des longicornes. *Annales de la Société Linnéenne de Lyon*, 2 : 327-401.
- Prosen, A.F. 1947. Nuevos cerambycoides argentinos (Col., Cerambycidae). *Revista de la Sociedad Entomológica Argentina*, 13: 254-257.
- Tavakilian, G. and Chevillotte, H. 2016. TITAN: *Cerambycidae* database (version Apr 2015). In: Species 2000 and ITIS Catalogue of Life, 28th September 2016. Digital resource at [www.catalogueoflife.org/col](http://www.catalogueoflife.org/col). Species 2000: Naturalis, Leiden, the Netherlands.
- Viana, M.J. 1972. Aporte al catálogo de Cerambycidae del Paraguay (Insecta, Coleoptera).



- Revista del Museo de Ciencias Naturales "Bernardino Rivadavia", Serie Entomología*, 3: 207-405.
- White, A. 1855. *Catalogue of the coleopterous insects in the collection of the British Museum. Longicornia* 2. British Museum, London, 8: 175-412.
- Zajciw, D. 1963. Novos longicórneos neotrópicos da tribo Clytini (Col., Cerambycidae, Cerambycinae). *Revista Brasileira de Biologia*, 23: 171-179.

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