

A New Species of the Seed Beetle Genus *Megacerus* Fåhraeus, 1839 (Coleoptera: Bruchidae) and Redescription of *Megacerus centralis* (Pic), with a Key to the Mexican Species and New Host and Distribution Records

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**A NEW SPECIES OF THE SEED BEETLE GENUS *MEGACERUS* FÄHRAEUS, 1839
(COLEOPTERA: BRUCHIDAE) AND REDESCRIPTION OF *MEGACERUS CENTRALIS* (PIC),
WITH A KEY TO THE MEXICAN SPECIES AND NEW HOST AND DISTRIBUTION RECORDS**

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ABSTRACT

Megacerus westcotti Romero, **new species**, is described and figured. A key to the 32 Mexican species of *Megacerus* Fähræus is presented, and new host and distribution records are given for species in the genus. *Megacerus centralis* (Pic) is redescribed.

Key Words: taxonomy, morphology, seed beetles, *Erythroxylum*, host plant, Mexico

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Some work has been done on the seed beetle genus *Megacerus* Fähræus, 1839 after its revision by Terán and Kingsolver (1977), such as by Johnson (1998), Murruga de L'Argentier and Terán (1980), Pfaffenberger (1980), Pfaffenberger *et al.* (1984), Terán and Kingsolver (1992), Terán and Johnson (2002), and Wang and Kok (1986). *Megacerus* is a genus exclusively from the New World. Romero and Johnson (2004) recorded 28 species in Mexico, and additional species were added by De la Cruz *et al.* (2013), Reyes *et al.* (2009), Romero and Yus (2008), and Terán and Kingsolver (1992); the total now stands at 32 species (including one described here as new). In the genus as a whole, Romero and Johnson (2002) list 54 species in three subgenera: *Megacerus* (31 species); *Pachybruchus* Pic (14 species); and *Serratibruchus* Terán and Kingsolver (9 species).

Megacerus hosts are primarily species of Convolvulaceae (about 76 species). However, some species utilize hosts in other plant families that can be considered marginal hosts, such as Meliaceae (one species), Bixaceae (one species) (Terán and Kingsolver 1992), and Dioscoreaceae (one species) (Terán and Johnson 2002).

In this paper, one new species in the subgenus *Megacerus* is described and figured. Notably, the specimens were reared from a species of Erythroxylaceae, a plant family not previously recorded as a host for this genus of beetles. In addition, new host and distribution records are given for species in the genus, and *Megacerus centralis* (Pic) is redescribed.

MATERIAL AND METHODS

Specimens of the new species of *Megacerus* were found in the C. D. Johnson collection at Northern Arizona University, Flagstaff, USA in 2005, which

later was incorporated into the Colección de Insectos del Instituto de Fitosanidad, Colegio de Postgraduados, Montecillo, Estado de México, Mexico (CEAM). Information was complemented with material from the following collections: Florida State Collection of Arthropods, Gainesville, Florida, USA (FSCA); Robert H. Turnbow private collection, Enterprise, Alabama, USA (RHTC); Texas A&M University, Department of Entomology Collection, College Station, Texas, USA (TAMU); and National Museum of Natural History, Washington, District of Columbia, USA (USNM). Records of new hosts and distributions were extracted from the BRUCOL database (Romero and Johnson 2002).

Specimens were studied following the methods described by Kingsolver (1970), Kingsolver and Whitehead (1974), and Terán (1967). Interpretation of genitalia is according to Romero and Johnson (1999), and terminology and taxonomic characters are those proposed by Terán and Kingsolver (1977).

RESULTS AND DISCUSSION

**KEY TO THE MEXICAN SPECIES OF *MEGACERUS*
(modified from Terán and Kingsolver 1977)**

1. Posteroventral border of metafemur smooth, or with a small tooth near the apex 2
- 1'. Internal border of ventral face of metafemur serrate with all of the teeth of equal size.
Subgenus *Serratibruchus* Terán and Kingsolver 3
2. Posteroventral border of metafemur smooth; elytral striae with large punctures making borders of intervals undulating; intervals rib-like and sometimes marked with a row of

- small punctures; mucro of metatibia as long as half width of tibia at apex, or much longer than width; lateral carina of metatibia ending very near or at base of mucro; apex of protibia of male with small hook. **Subgenus *Pachybruchus* Pic** 11
- 2'. Internal border of ventral face of metafemur flat, or with a single small tooth; elytral striae with punctures of variable size, which may or may not deform intervals, these without rows of small punctures; mucro of metatibia not as long as half width of tibia at apex; lateral carina of metatibia terminating in a small tooth at apical border; apex of protibia of male without small hook. **Subgenus *Megacerus Fähræus*** 18
3. Elytra with deep punctures; 2nd interval more prominent than 1st or 3rd 4
- 3'. Elytra with more superficial, elongated punctures; 2nd interval not prominent 7
4. Sixth interval narrowed at middle, dilated and prominent toward apex ***Megacerus capreolus* (Jekel)**
- 4'. Sixth interval of more or less uniform width, not dilated nor prominent 5
5. Elytra black 6
- 5'. Elytra red or brown; mucro of metatibia longer than lateral tooth; eye with prominent lateroposterior border terminating in a blunt tooth; parameres with hood-like membrane broad and with elongate sensory pits behind ***Megacerus callirhipis* (Sharp)**
6. Elytra with punctures of equal width or slightly wider than striae, surface with inconspicuous relief ***Megacerus callirhipis* (Sharp)**
- 6'. Elytra with large punctures, surface with prominent relief 9
7. Pygidium black 8
- 7'. Pygidium red, occasionally with brownish spots ***Megacerus maculiventris* (Fähræus)**
8. Elytral pubescence coppery or whitish, uniformly distributed; margins of abdomen and pygidium visible from above ***Megacerus schaefferianus* Bridwell**
- 8'. Elytral pubescence whitish, condensed into small spots on some intervals 10
9. Elytra with 3rd and 5th intervals very narrow; pygidial pubescence dense and orange ***Megacerus cubiciformis* (Sharp)**
- 9'. Third and 5th elytral intervals of normal width; pygidial pubescence whitish ***Megacerus leucurus* (Sharp)**
10. Elytra with external border brown from behind the epipleural lobe to the apex; hind leg, or only part of it, red ***Megacerus maculiventris* (Fähræus)**
- 10'. Elytra with external border black, occasionally with a small portion brown; hind leg black ***Megacerus contaminatus* (Sharp)**
11. Pygidium with glabrous areas in addition to glabrous spiracular areas 12
- 11'. Pygidium totally pubescent, or with only the spiracular areas glabrous 16
12. Glabrous areas of pygidium small, limited to the apical area 13
- 12'. Glabrous areas of pygidium extensive 14
13. Elytra with bands of white or golden setae along several intervals; metatibial mucro longer than apical width of metatibia ***Megacerus leucospilus* (Sharp)**
- 13'. Elytral pubescence uniformly distributed; metatibial mucro as long as apical width of metatibia ***Megacerus pubescens* Terán and Kingsolver**
14. Elytra entirely black, or sometimes with only external border dark 15
- 14'. Elytra with a brownish red or reddish black spot of varying size ***Megacerus bifloccosus* (Motschulsky)**
15. Pygidium red, with 2 elongate, glabrous areas connected by glabrous arc in apical half; metepisternum without median glabrous area ***Megacerus bifloccosus* (Motschulsky)**
- 15'. Pygidium black, apex with glabrous areas long and broad, separate from transverse glabrous area in middle toward base, or with apical and median glabrous areas connected laterally; metepisternum with a median glabrous area ***Megacerus melaleucus* (Fähræus)**
16. Elytra entirely black, or with spots of another color that do not occupy more than 1/4 of surface 17
- 16'. Elytra of another color, or with no more than 1/4 of surface black; elytral intervals each with a row of large punctures that cause the external border of each interval to be prominently carinate ***Megacerus reticulatus* (Sharp)**
17. Body entirely black ***Megacerus alabani* Terán and Kingsolver**
- 17'. Body with at least a small area of another color on elytra ***Megacerus ferrugineosignatus* Terán and Kingsolver**
18. Elytral striae with puncture diameters equal to or only slightly larger than stria width; intervals not elevated 19
- 18'. Elytral striae with deep punctures obviously wider than stria width; intervals generally elevated and with sinuate borders 46
19. Integument of pygidium unicolorous 20

- 19'. Integument of pygidium with dark spots ranging in size from 2 small punctures to covering nearly the entire surface 32
20. Elytra with dense, yellow, white, or pale pubescence on some part of the second interval 21
- 20'. Elytra without dense, yellow, white, or pale pubescence on the second interval 31
21. Pubescence of pronotum thick and yellow, uniformly covering the surface
..... **Megacerus curupaonis Terán and Kingsolver**
- 21'. Pubescence more dense in some places tending to form a pattern 22
22. Length over 2 mm 23
- 22'. Length 2 mm or less 24
23. Elytra with stria punctures shallow, not larger than striae; metafemur slender, about half as wide as coxa
..... **Male of Megacerus impiger (Horn)**
- 23'. Elytra with stria punctures large, deep, widely spaced; metafemur about wide as coxa
..... **Megacerus pescaprae (Fåhraeus)**
24. Elytra with fine yellowish or white vestiture, and with bands of white pubescence more dense on intervals 2–9 behind humerus 25
- 24'. Elytra with vestiture dense, yellow, with bands of white pubescence only on second interval 29
25. Internal sac of aedeagus with 2 posterior denticles distinctly separated from the remaining denticles 26
- 25'. Internal sac with 2 posterior denticles contiguous with remainder of denticles, although easily distinguishable from them 27
26. Eyes of male contiguous in front, ocular sinus shallow; spiculum gastrale with arms narrow and somewhat shorter than stem; denticles in internal sac forming an undulating line posteriorly
..... **Megacerus ripiphorus (Fåhraeus)**
- 26'. Eyes of male distinctly separated in front by frontal carina, ocular sinus wide and deep; spiculum gastrale with arms thick, slightly wider than stem; denticles in internal sac divergent posteriorly into 2 subparallel lines **Megacerus ferruginosus Terán and Kingsolver**
27. Body length (pronotum-elytra) 2.75–3.20 mm; denticles of internal sac forming 2 parallel, approximate lines posteriorly 28
- 27'. Body length (pronotum-elytra) 1.2 mm; denticles of internal sac forming 3 slightly convergent lines posteriorly
..... **Megacerus lherminieri (Fåhraeus)**
28. Internal sac of male genitalia with about 22–27 denticles, posterior couple each formed by a single denticle
..... **Megacerus cubiculus (Casey)**
- 28'. Internal sac of male genitalia with about 43 denticles, posterior couple each formed by 3 denticles (Fig. 1d) **Megacerus westcotti Romero, new species**
29. Denticles of internal sac forming 2 subparallel lines posteriorly 30
- 29'. Denticles of internal sac forming a short, undulating line posteriorly
..... **Megacerus incisithorax (Pic)**
30. Eyes of male with large, deep ocular sinus about half length of eye; spiculum gastrale with arms slender; denticles of internal sac forming 2 partly superimposed subparallel lines with 5 or 6 denticles in each line
..... **Megacerus ricaensis (Pic)**
- 30'. Eyes of male with narrow ocular sinus less than half length of eye; spiculum gastrale with arms broad; denticles of internal sac forming 2 well-separated, subparallel lines with 4 denticles in each line **Megacerus deceptor Terán and Kingsolver**
31. All elytral striae with punctures deep, not confluent, their diameters wider than width of stria; pygidium reddish
..... **Megacerus minusculus (Pic)**
- 31'. Elytral striae with punctures shallow, nearly confluent, their diameters not wider than width of stria; pygidium brownish black
..... **Megacerus impiger (Horn)**
32. Elytra long, in lateral aspect surpassing pygidium, with a slight lateral constriction behind humeral angle, and epipleural lobe developed; 10th stria extending beyond epipleural lobe; metatibia without lateral carina on external face, or with a carina poorly developed carina; elytra brownish orange **Male of Megacerus impiger (Horn)**
- 32'. Elytra not as above; metatibia frequently with well-marked lateral carina 33
33. Metacoxa unicolorous (brownish, blackish, or reddish) or with colors not definitely delimited 34
- 33'. Metacoxa with 2 delimited colors (brownish and reddish or blackish and reddish).....35
34. Terminal sternite unicolorous
..... **Female of Megacerus cubiculus (Casey)**
- 34'. Terminal sternite with a spot on each side of anal notch **Female of Megacerus impiger (Horn)**
35. Metacoxa with 1 color extending to occupy the pubescent external angle
..... **Megacerus codonophagus Terán and Kingsolver**

- 35'. Metacoxa with 1 color limited to anterior border, especially in the angle near trochanteral articulation 36
36. Whitish setae on elytra distributed in indistinct patches, especially near base, but nowhere dense 37
- 36'. Whitish setae on elytra in dense bands on some intervals, or absent 38
37. Elytra with obscure spots running longitudinally behind humeral angle between 4th and 7th striae *Megacerus ramicornis* (Erichson)
- 37'. Elytra with some obscure spots behind humeral angle in middle along suture and around apical margin, and at base of pygidium **Female of *Megacerus cubiculus* (Casey)**
38. Pygidial spots reduced, present only near apex 39
- 38'. Pygidial spots extensive 42
39. Elytra without spots, with only small, shaded areas at humeral angle and apices **Female of *Megacerus impiger* (Horn)**
- 39'. Elytra with obscure spots at humeral angle, at center approximately between 4th and 7th striae, and in apical area 40
40. Ocular sinus in male at least half length of eye; spiculum gastrale with arms narrow; denticles of internal sac aligned posteriorly in subparallel lines partly superimposed one on the other *Megacerus cubiculus* (Casey)
- 40'. Ocular sinus in male less than half of length of eye; spiculum gastrale with arms broad; denticles of internal sac aligned posteriorly in subparallel lines not superimposed one on the other 41
41. Parallel rows of denticles in internal sac continuous with anterior group of denticles *Megacerus deceptor* Terán and Kingsolver
- 41'. Parallel rows of denticles perceptibly separated from anterior group of denticles *Megacerus pescaprae* (Fähræus)
42. Elytra brownish orange with more or less extensive darker spots; pygidium with irregular dark brownish spots 43
- 42'. Elytra reddish with some black spots; pygidium with a pair of black spots near apex, sometimes concealed, and a large, central, subbasal spot, the latter divided by a cuneiform, median line of white setae 44
43. Denticles of internal sac aligned posteriorly into a short, undulating line flanked anteriorly by a pair of curved denticles *Megacerus incisithorax* (Pic)
- 43'. Denticles of internal sac aligned posteriorly into 2 approximate, subparallel lines, without flanking curved denticles *Megacerus cubiculus* (Casey)
44. Anterior portion of lateral lobes of male genitalia with median flap in ventral view; posterior group of denticles separated from anterior group, posterior group with more than 1 pair of denticles *Megacerus flabelliger* (Fähræus)
- 44'. Anterior portion of lateral lobes of male genitalia with indistinct flap in ventral view; only 1 pair of denticles in posterior group 45
45. Ocular sinus of male less than half length of eye; spiculum gastrale with arms broad; denticles of internal sac aligned posteriorly into parallel rows, not partly superimposed one on the other *Megacerus deceptor* Terán and Kingsolver
- 45'. Ocular sinus reaching middle of eye in male; spiculum gastrale with slender arms; denticles of internal sac aligned in subparallel rows partly superimposed one on the other *Megacerus ricaensis* (Pic)
46. Integument of pronotum and elytra brownish or reddish violet; elytral striae with large punctures, few in number, and widely spaced *Megacerus porosus* (Sharp)
- 46'. Integument of pronotum and elytra not as above 47
47. Middle 3rd of pygidium with horizontal glabrous line 48
- 47'. Pygidium with 2 small, glabrous areas at apex and 2 more at middle 3rd, sometimes concealed by white pubescence *Megacerus tricolor* (Suffrian)
48. Pygidium with 2 glabrous lines connected to form a "T" *Megacerus centralis* (Pic)
- 48'. Pygidium with 1 glabrous, transverse median line *Megacerus tricolor* (Suffrian)

TAXONOMY

Megacerus (*Megacerus*) *westcotti* Romero,
new species
(Fig. 1a–d)

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Type Series. Holotype and two paratypes: Sierra de Alamos, Sonora, MEXICO; XII/1987, collector unknown, reared from seed of *Erythroxylum mexicanum* Kunth (holotype and one paratype at CEAM, one paratype at USNM).

Description. Male (Fig. 1a–d). Length (pronotum-elytra) 2.75–3.05 mm; width 1.55–1.67 mm; maximum thoracic depth 1.50–1.75 mm. **Integument color:** Body reddish brown, except head, antenna, a transverse mesal spot on pronotum, 3 spots on external margin on elytra and 2 indistinct areas on internal

margin, metacoxa, ventral portion of metafemur, and 2 pygidial antepical lateral spots black. **Vestiture:** Body with white pubescence, with scattered spots of yellowish setae; pygidium with white setae forming a dense, triangular, median, basal spot; spiracular areas not glabrous, clothed with whitish setae. **Head:** Short, constricted behind eyes; densely micropunctulate; frons very narrow with a strong median carina; ocular sinus 0.35–0.48X width of eye, posterior margin of eye protruding from adjacent surfaces; antennae pectinate from 4th antennomere. **Prothorax:** Pronotum

subconical, without lateral carina; disc convex, densely foveolate; prosternal process narrow, triangular, acute. **Meso- and metathoraces:** Scutellum square, bidentate apically; elytral striae with large punctures slightly wider than striae; striae 1–6 reaching elytral base, 7 reaching middle of humerus, 8–10 reaching humeral base; mesepimeron foveolate; metepisternum punctate with scattered foveolae and a dorsal curved carina; elytra with salient humeri. **Legs:** Metacoxa densely foveolate; metafemur moderately swollen, ventral carinae obsolete; internal ventral margin

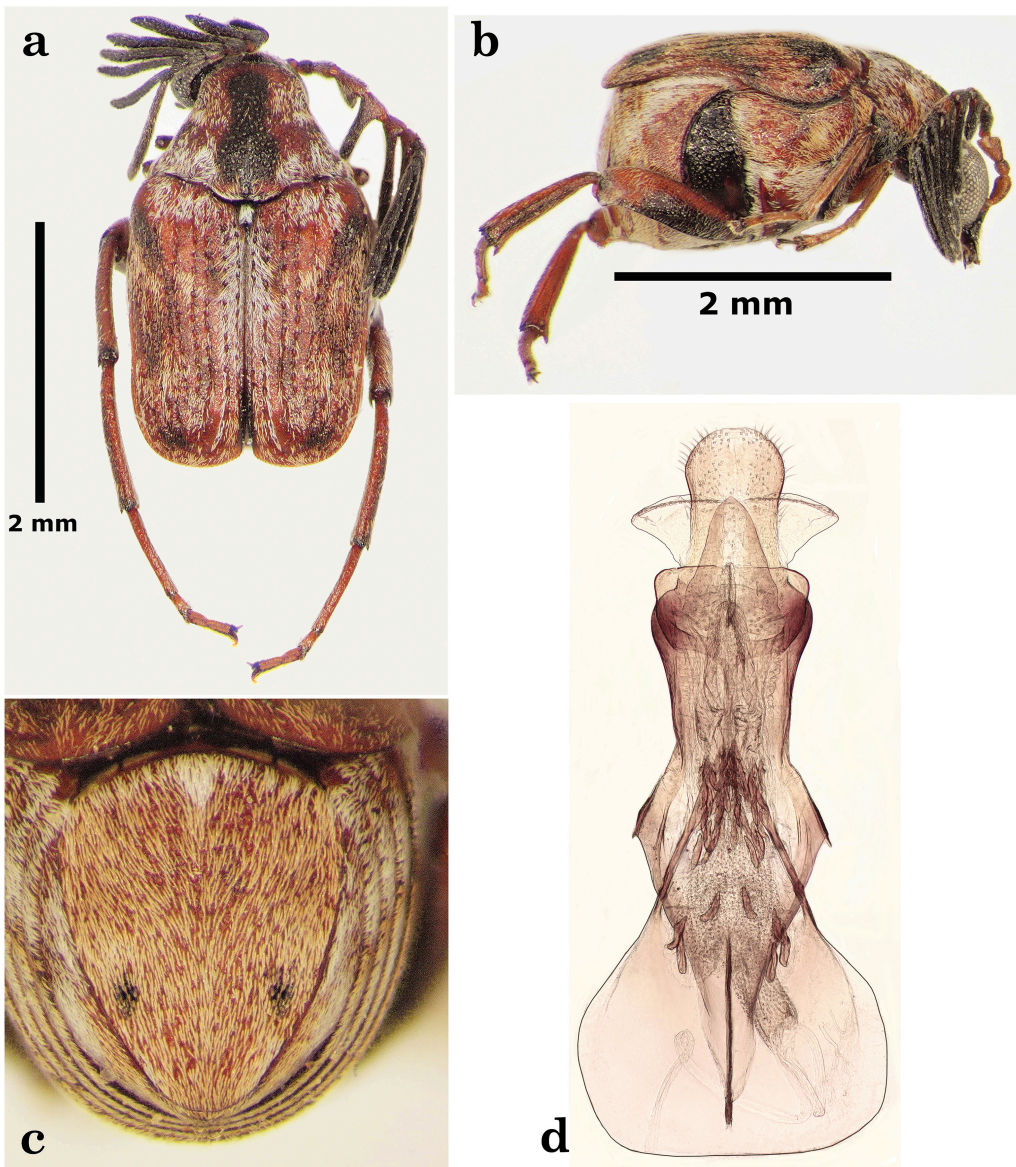


Fig. 1. Male *Megacerus westcotti*. a) Dorsal habitus, b) Lateral habitus, c) Pygidium, d) Genitalia.

with very small subapical spine; metatibia straight, enlarged, with dorsomesal and ventral carinae, lateral and ventrolateral carinae obsolete; mucro longer than lateral coronal denticle. **Abdomen:** More or less telescoped, 5th sternite deeply emarginate; pygidium vertical with scattered foveolae. **Genitalia:** Median lobe moderately long, wider at base; ventral valve triangular and deeply arcuate in lateral view; basal internal sac spinulate, with median group of about 25 spines followed by a double line of 6 spines and a basal group formed by 3 spines on each side (Fig. 1d); lateral lobes fused, wider than apex of median lobe, with apical setae, without median flap in ventral view. **Female.** Unknown.

Host Plant. *Erythroxyllum mexicanum* Kunth. (Erythroxylaceae).

Distribution. Mexico (Sonora).

Etymology. This species is dedicated to Richard L. Westcott, a friend of the author and a great collector. We shared field trips full of exciting experiences many times.

Diagnosis. This species is near *M. cubiculus* within the subgenus *Megacerus*, which is characterized by having 22–27 spines in the internal sac of the male genitalia and only one pair of spines posteriorly. In contrast, *M. westcotti* has more spines, about 43, and the posterior spines are grouped into two groups of three. Erythroxylaceae represents a new host family for both the genus and the subfamily.

***Megacerus (Megacerus) centralis* (Pic, 1913)**
(Fig. 2a–d)

Bruchus rubiginosus Motschulsky, 1873
Bruchus centralis Pic, 1913

Redescription. Male (Fig. 2a–d). Length (pronotum–elytra) 3.0–3.7 mm; width 2.5–3.5 mm; maximum thoracic depth 2.25 mm. **Integument color.** Body black, except profemur, protibia, mesofemur, mesotibia, mesotarsus, metafemur, metatibia, and metatarsus yellowish brown, and an anterior orange red spot on elytra extending from stria 2 to lateral border. **Vestiture:** Body with dense, white pubescence, except on pronotum and elytra where it is less dense; pygidium with median, glabrous, longitudinal line connected with a median glabrous transverse line to form a “T”; spiracular areas glabrous. **Head:** Short and broad, densely micropunctulate, frons with impunctate median carina, distance between base of eyes 0.27X as wide as eye width, ocular sinus about 0.71X width of eye, posterior margin of eye protruding from adjacent surfaces; antennae pectinate from 4th antennomere. **Prothorax:** Pronotum subconical, without lateral carina; disc convex, densely foveolate, basal lobe with mesal impunctate sulcus; prosternal process narrow, triangular, acute. **Meso- and metathoraces:** Scutellum subsquare and sculptured; elytral striae

with large punctures wider than striae; striae 1–6 reaching elytral base, 7–10 reaching humeral base; elytra with salient humeri; mesepimeron foveolate; metepisternum punctate with scattered foveolae and a dorsal curved carina; metasternum punctate with scattered foveolae. **Legs:** Metacoxa densely foveolate; metafemur moderately swollen, ventral carinae obsolete; internal ventral margin with blunt subapical spine; metatibia straight, enlarged, with dorsomesal, ventral, and ventrolateral carinae, lateral carina absent; mucro 0.16X as long as 1st tarsomere. **Abdomen:** More or less telescoped, 5th sternite deeply emarginate; pygidium vertical with scattered foveolae. **Genitalia:** Median lobe moderately long, wider at base; ventral valve triangular and deeply arcuate in lateral view; basal internal sac spinulate, with median group of about 25 spines followed by a double line of 6 spines and a basal group formed by 3 spines on each side (Fig. 2d); lateral lobes fused, wider than apex of median lobe, with apical setae, with median flap in ventral view. **Female.** Unknown.

Material Examined. Mexico: Zacazonapan, Estado de México, 25/VI/1998; A. Luz & L. Delgado (1 ex, CEAM); Puerto Vallarta, nr. port, Jalisco, 15/VII/1987, R. H. Tumbow (2 ex RHTC, 1 ex FSCA, 2 ex CEAM).

Host Plant. Unknown.

Distribution. Mexico (Estado de México, Jalisco).

Discussion. This species was described by Motschulsky (1873) as *Bruchus rubiginosus*. Because the name was preoccupied by *Serratobruchidius* (= *Bruchus*) *rubiginosus* (Desbrochers, 1869), Pic (1913) noted the homonym and designated the new name *Bruchus centralis* Pic. Later, Blackwelder (1946) transferred it to *Megacerus*. Because of Pic's (1913) poor description, Terán and Kingsolver (1977) published a redescription; however, the male holotype is missing some body parts, and the female is unknown. For this reason, I provide a new redescription herein. This species keys near to *M. tricolor*, but it can be separated easily because the pygidium exhibits a glabrous longitudinal line connected with a glabrous transverse line to form a “T”.

***Megacerus (Megacerus) codonophagus* Terán and Kingsolver, 1977**

Distribution. Old records: Mexico, Panama, Peru, Puerto Rico, Venezuela. New records: **Ecuador:** Guayas, 40 km W Guayaquil, 20/II/1982, G. V. Manley (1 ex CEAM). **Trinidad and Tobago:** St. Augustine, Mt. St. Benedict Abby, 6/VII/1994, B.K. Dozier (1 ex FSCA).

***Megacerus (Megacerus) columbinus* Terán and Kingsolver, 1992**

Distribution. Old records: Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico,

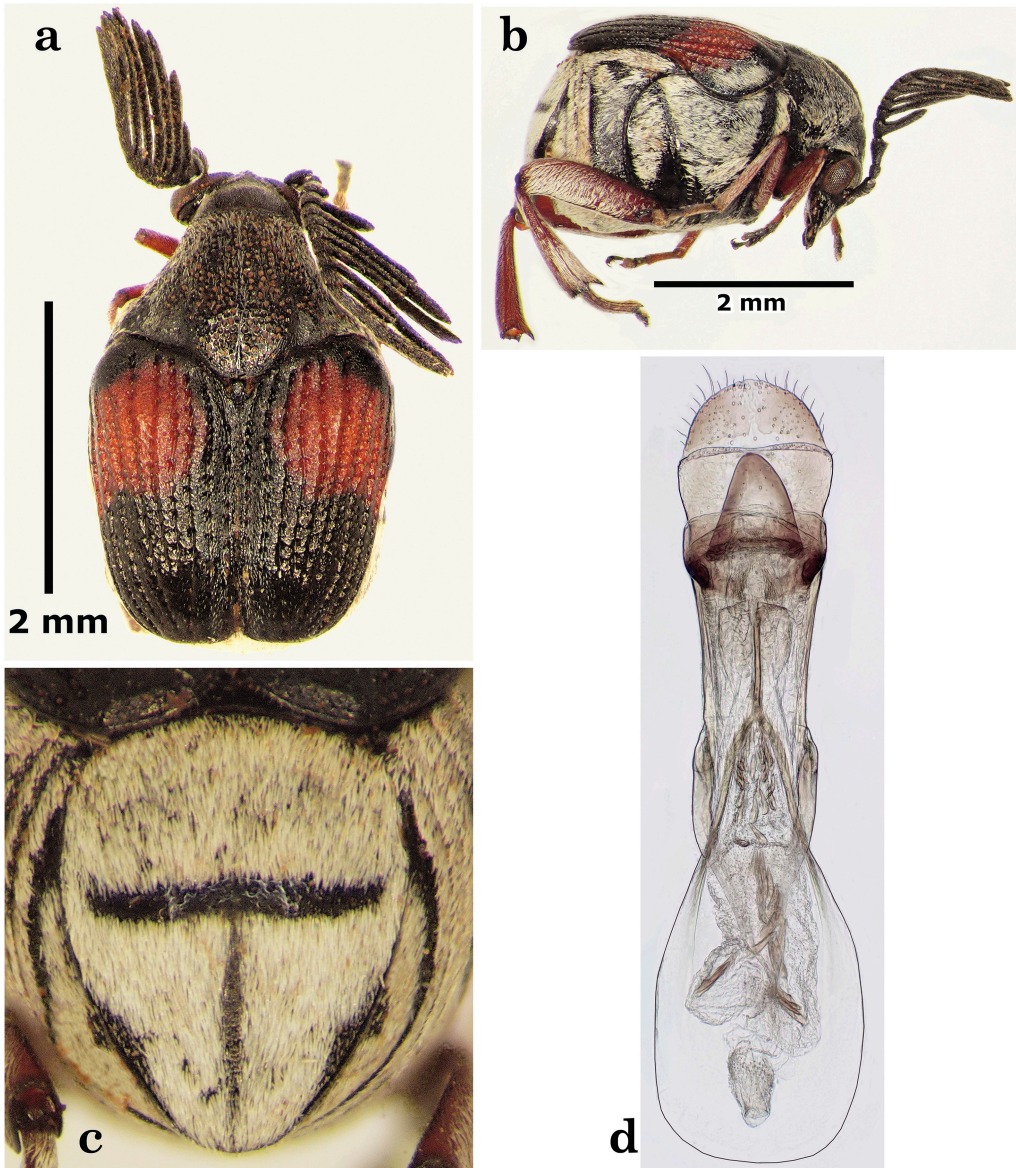


Fig. 2. Male *Megacerus centralis*. a) Dorsal habitus, b) Lateral habitus, c) Pygidium, d) Genitalia.

Nicaragua, Panama, Trinidad and Tobago, Venezuela. New records: **Bolivia**: Santa Cruz, 3.7 km SSE Buena Vista vic, Hotel Flora & Fauna, 13/II/2000, 430 m, M. C. Thomas (4 ex FSCA); same data but 26/X/2000 (4 ex FSCA); Santa Cruz, 4-6 km SSE Buena Vista, F&F Hotel, 22/X/2004, Morris & Wappes (1 ex FSCA); same data but 31/X/2002, Wappes & Morris (4 ex FSCA); same data but 8/XI/2002, J. E. Wappes (1 ex FSCA); Santa Cruz, 5 km SSE Buena Vista vic, Hotel Flora & Fauna, 22/X/

2004, 440 m, J. E. Eger, 63°39.128'W, 17°29.925'S (4 ex FSCA); Santa Cruz, Buena Vista vic, Hotel Flora & Fauna, 25/X/2000, R. Morris (1 ex FSCA); same data but 26/X/2002, Morris & Wappes (1 ex FSCA); same data but (4 ex CEAM); same data but 31/X/2002, Morris & Wappes (8 ex FSCA); same data but R. Morris (13 ex FSCA); Santa Cruz, Potrerillos del Guendá, 40 km NW Santa Cruz de la Sierra, 20/XI/2004, B. K. Dozier (1 ex FSCA). **Brazil**: Rondonia, 62 km SW Ariquemes, nr. Fzda.

Rancho Grande, 20/XI/1994, J. E. Eger (1 ex FSCA). **Dominican Republic:** La Romana, 7.5 km N Guaymate, 15/V/1992, R. H. Turnbow (1 ex FSCA).

Megacerus (Megacerus) cubiculus (Casey, 1884)

Distribution. Old records: Honduras, Mexico, Nicaragua, USA, Venezuela. New records: **Bahamas:** Atala Coppice, Andros Is., 6/VI/2004, M. C. Thomas & BLT (1 ex FSCA). **Trinidad and Tobago:** Goldsborough, 26/V/1994, M. J. Sommeijer (1 ex FSCA); same data but 3/III/1994 (1 ex FSCA); same data but 31/III/1994 (1 ex FSCA).

New Host Plants. USA, Florida, Oak Haven nr. Lake City, Columbia Co., 1/XII/2010, Staples G., reared seed *Ipomoea cordatotriloba* Dennst. (5 ex FSCA). Venezuela, Anzoategui, 14 km NE Santa Rosa, 18/II/1985, 396 m, C. D. Johnson, reared seed *Ipomoea incarnata* (Vahl) Choisy (3 ex TAMU).

Megacerus (Megacerus) deceptor Terán and Kingsolver, 1977

Distribution. Old records: Brazil, Dominican Republic, Honduras, Mexico, USA, Venezuela. New records: **Nicaragua:** Masaya, Las Flores, 1/VIII/1994, J. M. Maes (1 ex FSCA); same data but 18/VII/1994 (1 ex FSCA); same data but 8/VII/1994 (1 ex FSCA); same data but VI/1994 (1 ex FSCA). **USA:** Texas, 28 mi. S Ft. Stockton, Pecos Co., 14/IV/2002, R. H. Turnbow (1 ex RHTC).

New Host Plants. Honduras, Francisco Morazán, 32 km E Tegucigalpa, El Zamorano, 15/II/1985, J. Vega, reared seed *Ipomoea cholulensis* Kunth (5 ex FSCA).

Megacerus (Megacerus) euryglossus Terán and Kingsolver, 1977

Distribution. Old records: Brazil, Honduras. New records: **Bolivia:** Santa Cruz, Potrerillos del Guendá, 40 km NW Santa Cruz de la Sierra, 10/XI/2006, B. K. Dozier (1 ex FSCA).

Megacerus (Megacerus) flabelliger (Fähræus, 1839)

Distribution. Old records: Argentina, Brazil, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Peru, Venezuela. New records: **Bolivia:** La Paz, 4 km W Chulumani, Sud Yungas, 25/V/1989, 1560 m, J. E. Eger (1 ex FSCA); Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 13/II/2000, M. C. Thomas (1 ex FSCA); Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 28/X/2000, B. K. Dozier (1 ex FSCA); Santa Cruz, 4-6 km SSE Buena Vista F&F Hotel, 16/XI/2003, Wappes, Morris & Nearn; sama data but 29/

X/2000, Wappes & Morris (1 ex FSCA); same data but 8/X/2004 (1 ex FSCA); Santa Cruz, Buena Vista vic., Flora & Fauna Hotel, 25/X/2000, R. Morris (1 ex FSCA); same data but 26/X/2002, Morris & Wappes (1 ex FSCA); Santa Cruz, Potrerillos del Guendá, 40 km NW Santa Cruz de la Sierra, 20/X/2004, B. K. Dozier (1 ex FSCA). **Panama:** Cocles, Las Guias R., 23/III/1985, M. Baca (4 ex FSCA). **Trinidad and Tobago:** St. Augustine, Mt. St. Benedict Abby, 23/V/1996, B. K. Dozier (29 ex FSCA); same data but 29/VI/1994 (2 ex FSCA).

Megacerus (Megacerus) lunulatus (Pic, 1913)

Distribution. Old record: Belize, Brazil, Panama, Peru. New records: **French Guiana:** 27 km SE Roura on Kaw Rd., 21/IV/2007, J. E. Eger (1 ex FSCA); 33 km SE Roura on Kaw Rd., 13/IV/2007, 227 m, D. G. Hall & J.E. Eger (1 ex FSCA); same data but 17/IV/2007 (2 ex FSCA).

Megacerus (Megacerus) luteolineatus (Pic, 1913)

Distribution. Old records: Bolivia, Brazil. New records: **French Guiana:** 33 km SE Roura on Kaw Rd., 1/XII/2002, 227 m, J. E. Eger (1 ex FSCA); 41 km SE Roura on Kaw Rd., 8/XII/2002, 272 m, J. E. Eger (1 ex FSCA); 8 km W Risquetout, 8/VI/2005, 45 m, J. E. Eger & M.T. Messenger (1 ex FSCA).

Megacerus (Megacerus) marginaticollis (Pic, 1934)

Distribution. Old records: Argentina, Brazil, Venezuela. New records: **Bolivia:** Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 15/XI/2001, 405 m, M. C. Thomas & B. K. Dozier (2 ex FSCA).

Megacerus (Megacerus) porosus (Sharp, 1885)

Distribution. Old records: Brazil, Colombia, Costa Rica, Cuba, Guatemala, Mexico, Panama, Peru, Puerto Rico, Venezuela. New records: **Bolivia:** Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna 15/XI/2001, 430 m, M. C. Thomas, 63°33.152' W, 17°29.949' S (1 ex FSCA); same data but M. C. Thomas & B. K. Dozier, 63°33.152' W, 17°29.949' S (2 ex FSCA, 1 ex CEAM); Santa Cruz, Buena Vista vic., Hotel Flora & Fauna, 20/X/2000, R. Morris (1 ex FSCA), same data but 27/X/2000 (1 ex FSCA), same data but 31/X/2002, R. Morris (1 ex FSCA). **Trinidad and Tobago:** St. Augustine, Mt. St Benedict Abby, 10/VI/1996, B. K. Dozier (2 ex FSCA); same data but 23/V/1996 (2 ex FSCA); same data but 4/VI/1996 (1 ex FSCA); same data but 7/VI/1996 (1 ex FSCA); Tunapuna, Mt. St Benedict Abby, 9/VII/1999, G. B. Edwards (1 ex FSCA).

***Megacerus (Megacerus) tricolor* (Suffrian, 1870)**

Distribution. Old records: Brazil, Colombia, Costa Rica, Cuba, Curaçao, Dominican Republic, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, USA, Venezuela. New records: **Bolivia:** Santa Cruz, Potrerillos del Guendá, 40 km NW Santa Cruz de la Sierra, 20/XI/2004, B. K. Dozier, 63°27.44' W, 17°40.26' S (2 ex FSCA). **Ecuador:** 20 km N Guayaquil, 23/I/1982, Manley G.V. (1 ex FSCA); Guayas, 40 km SW Guayaquil, 6/III/1982, G. V. Manley (1 ex FSCA).

New Host Plants. MEXICO, Intercepted at New York, lot 46-2201 and 46-2472, 20/XI/1945, reared seed *Exogonium bracteatum* (Cav.) Choisy (11 ex USNM).

***Megacerus (Pachybruchus) bifloccosus* (Motschulsky, 1873)**

Distribution. Old records: Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Venezuela. New records: **Suriname:** Saramacca, 25/IX/2005, Steck G.J. (2 ex FSCA).

***Megacerus (Pachybruchus) coryphae* (Olivier, 1795)**

Distribution. Old records: USA and Venezuela.

New Host Plants. USA, Florida, Orlando, VI/1994, reared seed *Ipomoea pes-caprae* (L.) R. BR. (1 ex FSCA).

***Megacerus (Pachybruchus) leucospilus* (Sharp, 1885)**

Distribution. Old records: Colombia, Costa Rica, El Salvador, Honduras, Mexico, Nicaragua, Panama, USA. New records: **French Guiana:** ca. 10 km E Cayenne, 6/VI/2005, J. E. Eger & M. T. Messenger (3 ex FSCA).

New Host Plants. Mexico, Intercepted at Brownsville, Texas, lot 47-16867, 28/II/1947, Shiller, reared seed *Ipomoea carnea* subsp. *fistulosa* (Mart. ex Choisy) D.F. Austin (2 ex CEAM, 4 ex USNM).

***Megacerus (Pachybruchus) melaleucus* (Fähræus, 1839)**

Distribution. Old records: Brazil. New records: **Mexico:** Tabasco, 4 km S Sánchez Magallanes, 4/V/1983, 20 m, Vogt G.B. (1 ex USNM).

***Megacerus (Pachybruchus) reticulatus* (Sharp, 1885)**

Distribution. Old records: Argentina, Bolivia, Brazil, Colombia, Guyana, Panama, Peru, Suriname, Venezuela. New records: **Ecuador:** Napo,

vic Puerto Misahuali, 19/IX/1998, J. E. Eger (1 ex FSCA); **Mexico:** Tamaulipas, Ciudad Mante, XI/1954, N. L. H. Krauss (1 ex USNM); **Paraguay:** Cor. Oviedo, 12/XI/1987, H. L. Dozier (1 ex FSCA); **Trinidad and Tobago:** Waller Field, 28/V/1996, B. K. Dozier (1 ex FSCA).

***Megacerus (Pachybruchus) testaceipennis* (Pic, 1913)**

Distribution. Old records: Brazil. New records: **Bolivia:** Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 19/X/2000, 430 m, M. C. Thomas (1 ex FSCA); Santa Cruz, 5 km SSE Buena Vista, Hotel Flora & Fauna, 10/X/2004, 440 m, J. E. Eger (1 ex FSCA); Santa Cruz, Buena Vista vic, Hotel Flora & Fauna, 20/X/2000, R. Morris (1 ex FSCA); same data but 27/X/2000 (1 ex FSCA); Santa Cruz, Buena Vista, F&F Hotel, 44/X/2004, Morris & Wappes (2 ex FSCA).

***Megacerus (Serratibruchus) callirhipis* (Sharp, 1885)**

Distribution. Old records: Brazil, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua. New records: **Panama:** Panama, Cerro Campana, 29/IV/1992, 600 m, J. E. Wappes (1 ex FSCA); Panama, Parque Nacional Altos de Campana, 17/V/1991, 810 m, R. Turnbow (1 ex FSCA).

***Megacerus (Serratibruchus) maculiventris* (Fähræus, 1839)**

Distribution. Old records: Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Peru, USA, Venezuela. New records: **Panama:** Chiriquí, 5 km N Hornito, 15/V/1996, R. Turnbow (4 ex FSCA); same data but 17/V/1996 (1 ex RHTC); Coclé, Altos de Campana, 13/V/1996, R. Turnbow (1 ex RHTC); Panama, Cerro Jefe, 11/V/1996, R. Turnbow (1 ex RHTC). **Trinidad and Tobago:** San Augustine, Mt. St. Benedict Abby, 23/V/1996, B. K. Dozier (1 ex FSCA).

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