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FOUR NEW *ACMAEODERA* (COLEOPTERA: BUPRESTIDAE) FROM HONDURAS, WITH NOTES ON SPECIES FROM CENTRAL AMERICA

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ABSTRACT

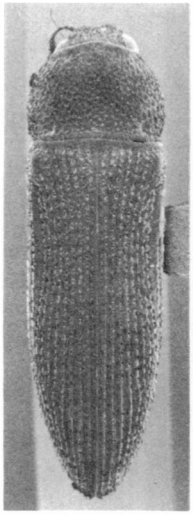
Four new species of *Acmaeodera, A. hondurensis, A. aguanyoro, A. culucoensis,* and *A. loei,* from Honduras, Central America, are described and illustrated. Specimens were collected from the arid regions of the upper Aguan Valley and from the Comayagua Valley. Notes are included on other Central American species and a key is provided for *Acmaeodera* of Honduras and adjacent regions.

Numerous species of *Acmaeodera* occur in the more arid regions of southwestern North America. However, few species range to the southern regions of Central America. Several species of *Acmaeodera* that were collected recently in Honduras represent new species, which are described below and are compared with previously described species from this region.

Acmaeodera flavomarginata (Gray), *A. scalaris* Mannerheim, *A. impluviata* Mannerheim, and *A. unicolor* Fisher are wide ranging species with Honduras and Nicaragua representing the southern limits of their range. *Acmaeodera setosa* Waterhouse has a more limited distribution from southern Mexico to Honduras. Three new species from Honduras, *A. hondurensis, A. aguanyoro,* and *A. culucoensis* occur in arid regions and are primarily known from the upper Aguan Valley of Honduras in the state of Yoro. *Acmaeodera loei,* new species, was collected only from the Comayagua region. *Acmaeodera regularis* Waterhouse appears to have the most southern distribution of the Central American *Acmaeodera,* being known only from Costa Rica. I know of the Nicaraguan *A. gratiosa* Thery only from description.

A key to the species of *Acmaeodera* known from Honduras and adjacent regions is provided.

Since many of the species covered in this paper were collected from the upper Aguan Valley, a short description of the region seems appropriate. The Aguan Valley is relatively isolated and follows along the north coast of Honduras behind the coastal range of mountains. The upper Aguan Valley is located about 50 kilometers south of La Ceiba and west of Olanchito, the only town of any size in the valley. The upper regions of the valley receive an average of 875 mm of rain per year, which comes mostly during the months of July through November. Scattered showers occur from March through June and generally bring enough rain so the region produces green foliage sometime between mid-March to mid-April. Rains are inconsistent and extended dry periods commonly occur between rains so that the region will not support agricultural production. November through March is dry and generally without significant rainfall. The vegetation is semiarid in nature, consisting mostly of scrub brush and succulents.



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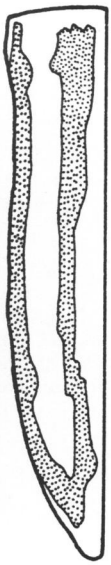

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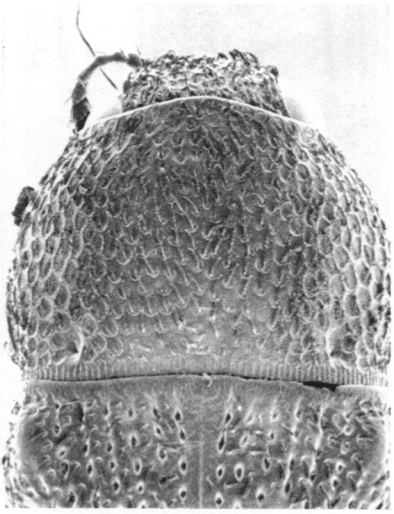

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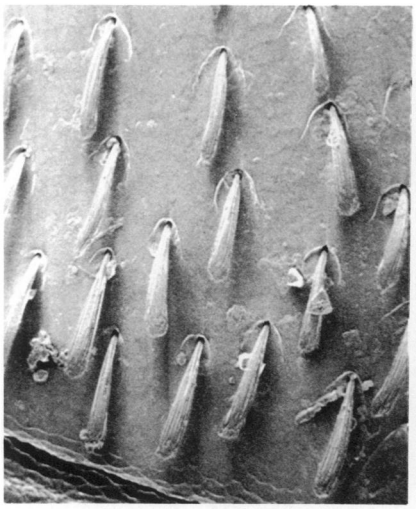

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Acmaeodera hondurensis Manley, **new species**
(Figs. 1–5)

DESCRIPTION. Holotype, male; narrowly elongate, subcylindrical, slightly convex above, rounded in front, narrowed in front of middle, moderately shining, black. Each elytron ornamented with yellow as follows: one dorsal longitudinal vitta and one lateral vitta extending from base and joining near apices, dorsal vitta more or less straight from base to apical ¼, then shifted slightly toward sutural margin of each elytron but not reaching it. HEAD slightly convex in front; transversely depressed behind clypeus; coarsely, confluently punctate; clothed with broad, erect white setae not obscuring surface; clypeus broadly, deeply, arcuately emarginate in front. Antenna extending to mesocoxa; segment 1 elongate, as long as following three segments combined; segments 2–4 short, globose; segments 5–10 serrate; segment 11 rounded. PRONOTUM more than one and one-half times as wide as long, narrower at apex than at base, widest just posterior to middle; sides broadly rounded, with margins narrow and scarcely visible from above; disk strongly, uniformly convex, without distinct depressions, but with three small foveae along base, one indistinct shallow fovea at median in front of scutellar region and one deeper fovea on each side toward posterior angles; surface coarsely, densely punctate, confluently alveolate-punctate and rather densely clothed with anteriorly facing, recumbent, broad, white setae. ELYTRA convex, transversely depressed along base near middle, at base equal in width to the base of pronotum; sides slightly concave behind humeral angle, diverging to posterior ¾, then arcuately converging toward posterior to tips which are broadly rounded; lateral margins smooth from humeral angles to near posterior, then becoming coarsely serrate toward apex; surface rather deeply, striately punctate, punctures in striae slightly oblong, separated from each other by about their own widths; interstrial spaces on sutural region flat, and two to three times as wide as strial punctures, wider and slightly convex toward sides, finely, regularly punctate, with a short semierect, broad, white seta arising from each puncture, interspaces finely, densely granulose. VENTRAL SURFACE with abdomen piceous, irregularly, shallowly punctate, moderately long setae arising from bottom of punctures, interspaces finely granulose; setae broadest on lateral regions of anterior abdominal sternites, sternite 1 with central portion having flat, spiniferous-like setae that become spatulate in shape on lateral aspect; segment 2 with semierect setae at middle becoming flat and spatulate shaped laterally; segment 3 with semierect acuminate setae in middle, becoming slightly spatulate shaped laterally; segment 4 similar to segment 3 except setae on sides less spatulate and segment 5 with erect, non-spatulate setae; last visible sternite broadly rounded at apex and without a subapical carina. Prosternum coarsely, deeply punctate at middle, intervals smooth, sides with large, shallow confluent punctures, base of each puncture granulose and with a single flat, broad seta; anterior margin subtruncate, truncate to slightly sinuate at middle. Meso- and metacoxae with flat spatulate setae arising from punctures. BODY SIZE, length 6.5 mm, greatest width 2.0 mm (elytra).

Allotype, female; form, color, and size similar to male. Sexes cannot be separated based on external morphology. Size: length, 6.5 mm; width, 2.0 mm.

TYPES. Holotype; Honduras, Coyoles, VI-19-1977, G. V. Manley (USNM). Allotype; Honduras, same data as holotype (GVMC). Paratypes; 30 specimens, Honduras, Coyoles on following dates: 3, VI-4-1977; 3, VI-5-1977; 11, VI-19-1977; 2, VI-20-1977; 4, VII-5-1977; 4, VI-21-1978; 1, VII-10-1978; 2, Honduras, Comayagua, VI-2-1978, all G. V. Manley. Paratypes in the following collections: 24, G. V. Manley; 2, H. F. Howden; 2, S. G. Wellso; 2, R. L. Westcott.

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Figs. 1–5. *Acmaeodera hondurensis,* new species. 1, dorsal view. 2, yellow color pattern (shaded area) on elytra. 3, pronotum. 4, setae on side of abdominal sternite 2. 5, setae on disk of pronotum.

VARIATION. This species is similar to *A. quadrivittata* Horn in color, and markings of the elytra, and *A. hondurensis* is larger and more elongate, the yellow vittae are narrower, elytra darker black, pronotum without lateral yellow spots and *A. quadrivittata* lacks the spatulate setae on the ventral surface.

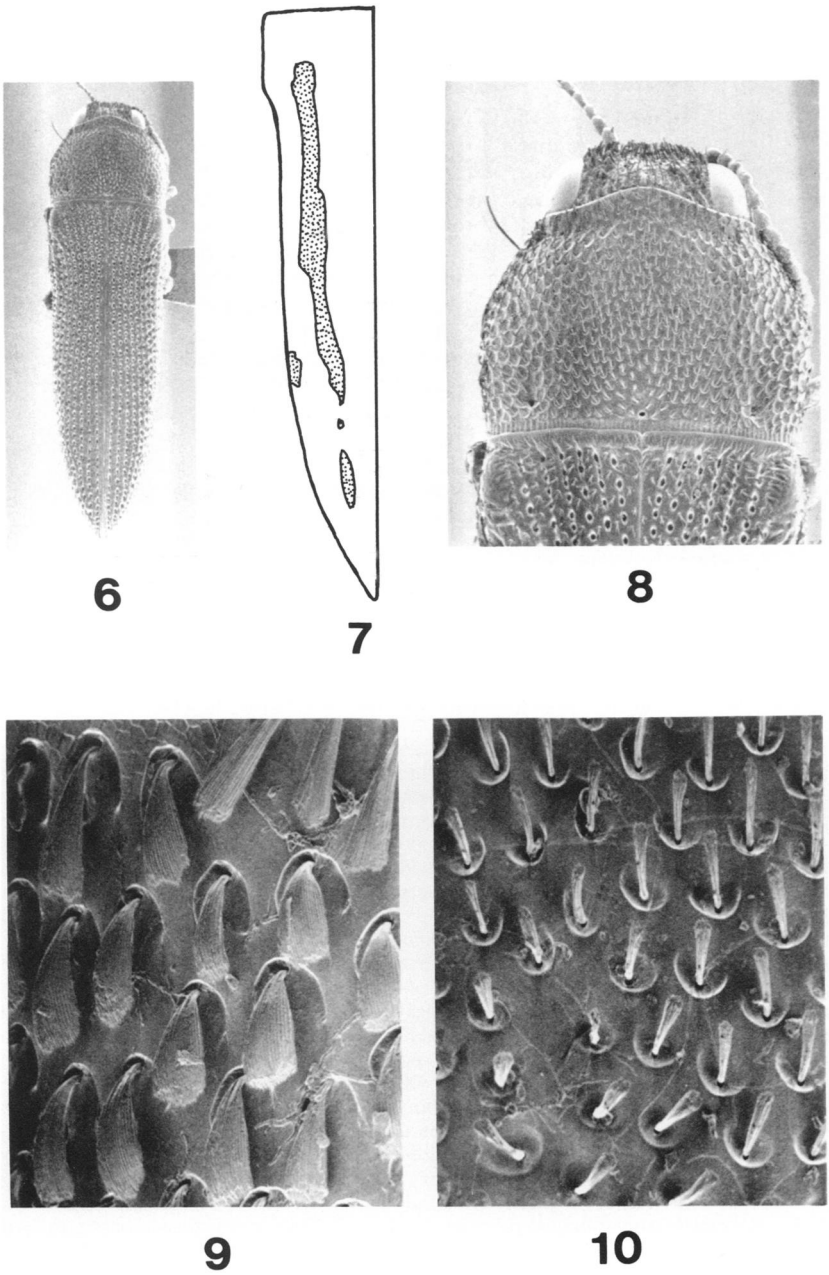
Little variation in color pattern was noted in the type series. Specimens from Comayagua Valley showed no differences from Aguan Valley specimens. Size ranged from 5.3–7.4 mm in length.

ETYMOLOGY. This species is named after the country of origin.

BIOLOGY. Specimens (except for 2 from the Comayagua Valley) were collected from the upper Aguan Valley between June 4 and July 10, which is the middle of the hot, rainy season. Specimens were collected in arid, scrub brush habitats of the valley floor from flowers of prickly pear cactus (*Opuntia* sp.) and from foliage of an undetermined *Acacia* sp. (Leguminosae).

Acmaeodera aguanyoro Manley, **new species**
(Figs. 6–10)

DESCRIPTION. Holotype, male; narrowly elongate, slightly acuminate, subcylindrical, slightly convex above, rounded in front, narrowed behind middle, moderately shining, black with faint deep brownish tinge; dorsal surface clothed with erect, spatulate like setae. Each elytron ornamented with yellow as follows: one dorsal–lateral longitudinal vitta, one elongate dorsal marking near apex and one lateral marking above abdominal segments 2 and 3; longitudinal vitta beginning at posterior margin of umbone and continuing until posterior margin of the third abdominal segment, lateral margins of vitta irregular and broken, shifted towards the dorsal and the suture of the elytra posteriorly. HEAD flattened in front with a slight depression between eyes, transversely depressed behind clypeus between antennal sockets, coarsely, confluently ocellate-punctate, clothed with broad, erect white setae; clypeus broadly, deeply, arcuately emarginate in front. Antenna extending to procoxa; segment 1 elongate, as long as following three segments combined; segments 2–4 short, globose; segments 5–10 serrate; segment 11 rounded. PRONOTUM more than one and one-half times as wide as long, narrower at apex than at base, widest near middle; sides nearly parallel along basal ½, diverging slightly towards middle, then angulate and strongly converging in a straight line to anterior border, margins narrow, only slightly visible from above near middle; disk convex, a narrow, shallow elongate sulcus at middle from posterior to near anterior margin; three small foveae along base, one in front of scutellar region and one slightly deeper one on each side toward posterior angle, anteriorly to each lateral fovea a broad shallow elongate depression extends in an anterior–lateral direction to middle of pronotum; surface coarsely, densely punctate, interspaces narrow and smooth; densely clothed with semierect anterior facing, spatulate, white setae (Fig. 10); posterior margin straight, anterior margin strongly lobed at middle. ELYTRA convex, transversely depressed along base near middle, base equal in width to base of pronotum; umbone strongly elevated, smooth; sides at anterior slightly expanded and parallel to first abdominal segment, then abruptly narrowed and nearly parallel to middle, then arcuately, acuminately converging toward apices; lateral margins smooth from humeral angles to near apical third, then serrate; surface densely, deeply striately punctate, punctures in striae slightly oblong, separated from each other by one-half their own widths; interstrial spaces on sutural region flat, about equal in width to strial punctures, slightly more convex towards sides, with semierect, broad, spatulate, white setae arising from shallow punctures, interspaces finely granulose. VENTRAL SURFACE with abdomen piceous, shallowly punctate, moderately long recumbent setae arising from bottom of punctures, interspaces smooth; setae extremely broad and spatulate (Fig. 9) on lateral regions of sternites 2–4, width of seta equals one-half length, last visible sternite truncate at apex and without a subapical carina, setae semierect, not spatulate. Prosternum coarsely, deeply punctate, anterior margin subtruncate, truncate at middle. Meso- and metasternum shallowly punctate,



Figs. 6–10. *Acmaeodera aguanyoro,* new species. 6, dorsal view. 7, yellow color pattern on dorsal of elytra. 8, pronotum. 9, setae on side of abdominal sternite 2. 10, setae on disk of pronotum.

clothed with broad spatulate setae. BODY SIZE; length, 7.0 mm.; greatest width, 2.1 mm (humeri of elytra).

Allotype, female; form, color, and size similar to the male. Sexes not easily separated externally, except that the female abdomen is slightly enlarged. Size: length, 7.0 mm; width, 2.1 mm.

TYPES. Holotype; Honduras, Coyoles, VI-12-1978, G. V. Manley (USNM). Allotype; same data as holotype except V-31-1977 (GVMC). Paratypes; four specimens, same data as holotype except: 1, VI-19-1977; 1, VI-12-1978; 1, VI-21-1978; 1, IX-25-1978 (GVMC).

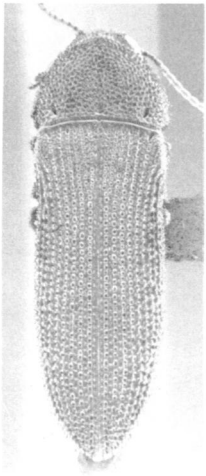
VARIATION. Little variation was noted between the six specimens examined. All are very similar to each other in form, size, and markings.

ETYMOLOGY. Aguan, for Aguan Valley and Yoro, for the Honduran state of Yoro in which the upper Aguan Valley is located.

BIOLOGY. Specimens were collected from the upper Aguan Valley between May 31 and September 25. All specimens were collected from the flowers of prickly pear cactus (*Opuntia* sp.) in the same habitats as *A. hondurensis* and *A. unicolor.*

Acmaeodera culucoensis Manley, **new species**
(Figs. 11–14)

DESCRIPTION. Holotype, male; elongate, flattened above, broadly rounded in front, narrowed posteriorly, moderately shining; head and pronotum brown, underside uniformly black, elytra brownish-black with yellow markings as follows: four transverse irregular bands; one just behind umbone becoming filaceous on disk with two anterior fila projecting forward and one posterior filum reaching median suture of each elytron, a second irregular transverse band near middle, a third irregular oblique band at posterior ¾, and a fourth band near apices; also some scattered, irregular, small, yellow, indistinct spots on elytra. HEAD flat in front, slightly depressed between eyes, transversely flattened behind clypeus, with a deep pit between antennal sockets, a short longitudinal carina on occiput, front rather deeply, coarsely, confluently ocellate-punctate; clothed with rather long, erect white setae; clypeus broadly, rather deeply emarginate in front. Antenna extending nearly to base of pronotum; segment 1 elongate, longer than following two segments combined; segments 2 and 3 globose, segments 4–10 triangular, segment 11 oblong and rounded at tip. PRONOTUM wider than long, apex distinctly narrower than base, widest posterior to middle; sides diverging in a slightly arched but nearly straight line from apices to near bases then abruptly converging to bases, margins narrow and not visible anteriorly from above; disk strongly convex, flattened on top, sides vertical, rising sharply from margins; three small foveae along base, a median fovea in front of scutellar region and one slightly deeper fovea on each side toward posterior lateral angle, anteriorly to median fovea a shallow elongate depression extending to near middle of pronotum; surface uniformly, densely, deeply, confluently punctate and clothed with rather long, semierect, curved white setae; posterior margin slightly arcuate, concave at middle; anterior margin lobed at middle. ELYTRA convex, flattened on disk, at base equal in width to base of pronotum; umbone strongly elevated, smooth; side margins sinuate, concave just behind umbone, then expanded reaching greatest width just posterior to middle, then converging to conjointly rounded apices; lateral margins finely serrate near apices. Surface striately punctate, punctures in striae rather large, and narrowly separated from each other; interstrial spaces on sutural region slightly convex, flattened dorsally and subequal in width to the strial punctures, more convex toward sides; sparsely, shallowly, irregularly punctate, with a semierect, white seta arising from each puncture. VENTRAL SURFACE with abdomen sparsely, finely punctate, clothed with rather long, erect, recumbent, white setae, which are slightly broadened toward sides on segments 1, 2, and 3; intervals smooth, segment 1 more densely, and coarsely punctate than other segments and with a large orange spot at middle on anterior ¼; last



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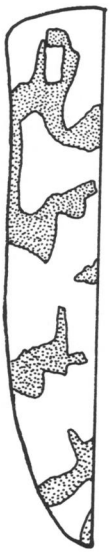

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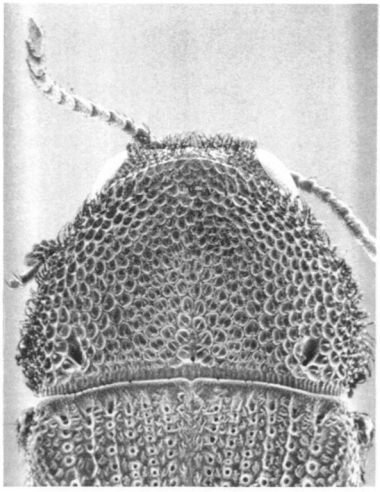

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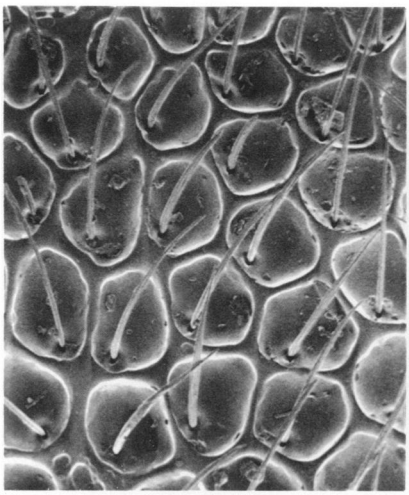

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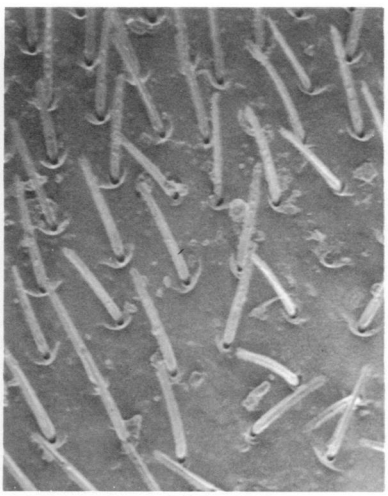

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Figs. 11–14. *Acmaeodera culucoensis,* new species. 11, dorsal view. 12, yellow color pattern on dorsal of elytra. 13, pronotum. 14, setae on disk of pronotum. Fig. 15. *Acmaeodera loei,* new species, setae on disk of pronotum.

visible sternite broadly rounded at apex, without a subapical carina. Prosternum coarsely, deeply, confluently punctate at middle, more sparsely punctate at sides, clothed with recumbent, rather long, stout, white setae; anterior margin emarginate. BODY SIZE; length, 7.2 mm; greatest width, 2.4 mm.

TYPE. Holotype; Honduras, Coyoles, VI-19-1977, Gary V. Manley. Holotype currently in G. V. Manley collection, but will be deposited in USNM.

REMARKS. A single male was collected north of Coyoles in an area known by the local residents as Culuco. The closest name recorded on maps of Honduras is San Lorenzo in the state of Yoro.

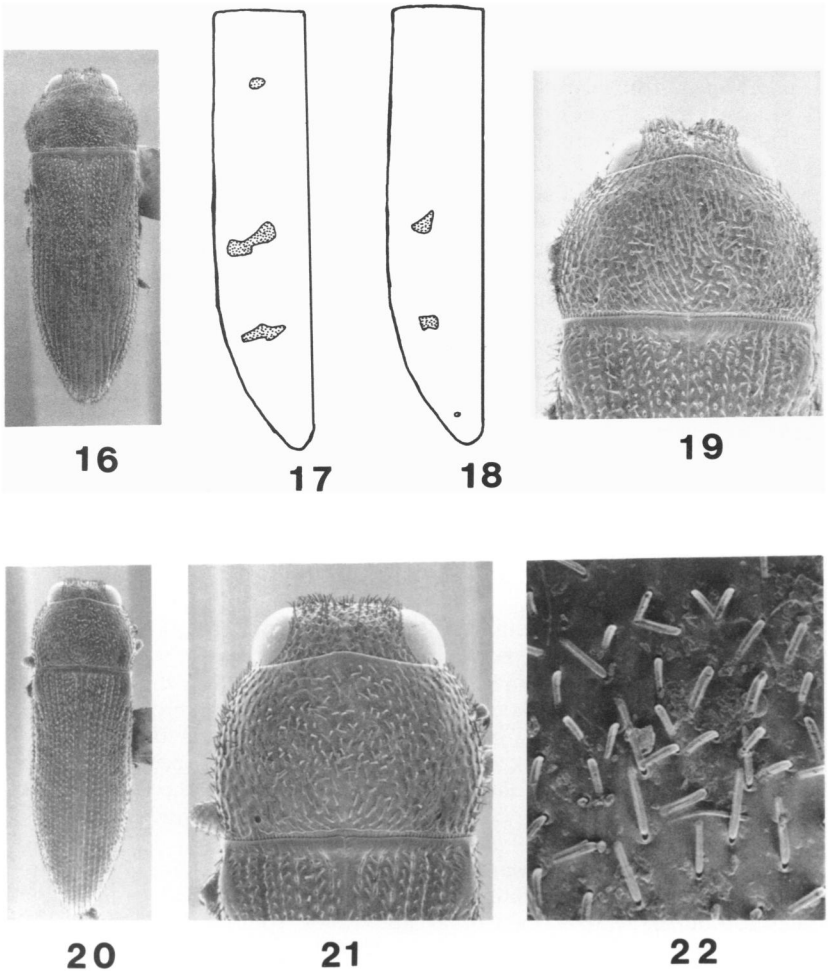
In form and size the species is similar to *A. cazieri* Knull, but the color pattern is very different (Fig. 12).

ETYMOLOGY. This species is named for the type locality known as Culuco, an arid scrub brush region along the Rio Aguan.

Acmaeodera loei Manley, **new species**
(Figs. 15–19)

DESCRIPTION. Holotype, male; elongate, slightly flattened above, broadly rounded in front, narrowed posteriorly, shining; head, pronotum, and underside of body black; elytra black with each elytron ornamented with yellow markings as follows: a small round spot on disk at posterior corner of umbone and an irregular, slightly oblique, transverse mark near middle and posterior ¾ midway between lateral and sutural margins. HEAD slightly transversely convex in front between eyes, slightly flattened in center of frons, transversely flattened behind clypeus, with a short, longitudinal carina on occiput; surface rather coarsely, confluently punctate, clothed with rather long, erect, flattened, white setae; clypeus shallowly, arcuately emarginate in front. Antenna extending nearly to base of pronotum; segment 1 elongate, as long as following three segments combined; segments 2–4 globose; segments 5–11 compact, more or less triangular, distinctly wider than long, and subequal in length and width to one another. PRONOTUM wider than long, distinctly narrower at apex than at base, widest just anterior to base; sides arcuately converging from bases to apices, margins narrow and not visible anteriorly from above; disk convex, rounded on sides, transversely depressed along anterior margin; three small foveae along base, a median shallow fovea in front of scutellar region and one slightly larger fovea on each side toward posterior lateral angle; surface densely, shallowly punctate on center of disk; punctures becoming larger and elongate-confluent on posterior and anterior margins forming longitudinal, oblique elongate cells which are more or less parallel forming a sinuate rugose texture; on sides punctures irregular and coarser but not forming elongate longitudinal cells; a rather long, erect, white seta arising from base of each puncture. ELYTRA convex, slightly flattened on disk, base subequal in width to base of pronotum; sides slightly sinuate anteriorly, concave at basal ⅓, widest at posterior ¾ and then arcuately converging to conjointly rounded apices; lateral margins smooth to end of abdominal segment 2 and then serrate, teeth becoming progressively larger toward apices; interval 3 slightly wider and raised; surface striately punctate, punctures very small on disk, becoming larger toward the sides, separated from each other by about 2 to 3 times their own width, toward apices punctures smaller and more widely separated; interstrial spaces on suture region slightly convex, flattened on top, and 5 to 6 times as wide as the strial punctures, wider, more irregular and more convex toward sides; sparsely, regularly punctate, with a rather long, erect, whitish seta arising from each puncture. VENTRAL SURFACE with abdomen punctate, more coarsely on segment 1; a rather long, semierect seta arising from each puncture; last visible sternite broadly rounded at apex, without a subapical carina. Prosternum coarsely, rather sparsely, irregularly punctate at middle; sides sparsely ocellate-punctate, clothed with short, recumbent, white setae arising from punctures; anterior margin, slightly broadly emarginate, rounded, smooth. BODY SIZE; length, 6.1 mm, greatest width, 2.0 mm.

Allotype, female; similar to male except larger (length, 7.0 mm; width, 2.5 mm) and



Figs. 16–19. *Acmaeodera loei,* new species. 16, dorsal view. 17, 18, yellow pattern on dorsal of elytra, holotype and allotype, respectively. 19, pronotum. Figs. 20–22. *Acmaeodera unicolor* Fisher. 20, dorsal view. 21, pronotum. 22, setae on disk of pronotum.

yellow markings on elytra differ as follows: three pairs of round yellow spots; one near middle, one near posterior ¾, and a small pair near apices.

TYPES. Holotype; Honduras, Comayagua, X-20-1979, Gary V. Manley (USNM). Allotype, female; Honduras, Comayagua, XI-10-1979, G. V. Manley (GVMC). Paratypes; 7 specimens with same data as holotype except 4, IX-19-1979; 3, X-10-1979 (GVMC).

VARIATION. All specimens examined were uniformly black, but the yellow

markings on the elytra vary in number, size, position, and shape. Number of spots on elytra varied from none to seven in the type series. Spots varied in shape from small round spots (small dots) to transverse bars.

Acmaeodera loei is similar in form, size, and color to *A. tubulus* Fabricius, but differs from *A. tubulus* in the following characters: pronotum much less punctate, interspaces subequal to width of punctures, and punctures more shallow; punctures in *A. tubulus* confluent and deep; pronotum disk more convex, not flattened on dorsal and lateral margins, strongly expanded and less acute; elytra of *A. loei* more convex along sutural margins and longitudinal ridges on disk raised and more sharply defined toward anterior margin; forecoxae of *A. loei* also lack branched setae characteristic of *A. tubulus* (Wellso *et al.*, 1976); and yellow markings of *A. loei* variable and any particular spot may be absent or present, but when present usually located in rather well defined areas and never connected to each other.

BIOLOGY. Specimens were collected from the Comayagua Valley between September 19 and November 10, which is equal to the early part of the dry season in this area.

ETYMOLOGY. The species is named after Dr. Robert W. Loe, a friend as well as supervisor in La Ceiba, Honduras, who encouraged collection and study of insect life in the region.

Acmaeodera unicolor Fisher, 1949
(Figs. 20–23)

REMARKS. Specimens of this species collected from the Aguan Valley of Honduras agree well with the holotype from Mexico and also with specimens collected from Guatemala. However, specimens collected in the Comayagua Valley of Honduras usually have a pale yellow vitta on each elytron (Fig. 23). This vitta is variable, ranging from a strong, solid, distinct vitta to a broken line, a series of irregular spots, or only a single spot. A few specimens typical of the species were without markings. One specimen from the Aguan Valley also had a faint vitta. In other characters the Honduran specimens are similar to the holotype.

BIOLOGY. The species appears to have a rather long seasonal distribution. Specimens were collected from February 16 to September 25 in the Aguan Valley and during April in the Comayagua Valley from the flowers of prickly pear cactus (*Opuntia* sp.). The species appears to be active throughout the rainy season and apparently responds to the very first widely scattered light rains, which begin to occur in the upper Aguan Valley during February and March in some years. Significant rains that cause foliage to appear throughout the upper regions of the valley generally do not occur until mid-March or early April.

Acmaeodera setosa Waterhouse, 1882

REMARKS. Three specimens of *A. setosa* were collected from Comayagua, Honduras, during September 1979.

Acmaeodera setosa is most similar to *A. loei,* but can readily be separated from that species by the presence of a rather large, obtusely rounded lobe on the prosternum located on either side of the middle in front of the procoxae. Both species are variable in elytra markings and immaculate individuals probably occur in both species.

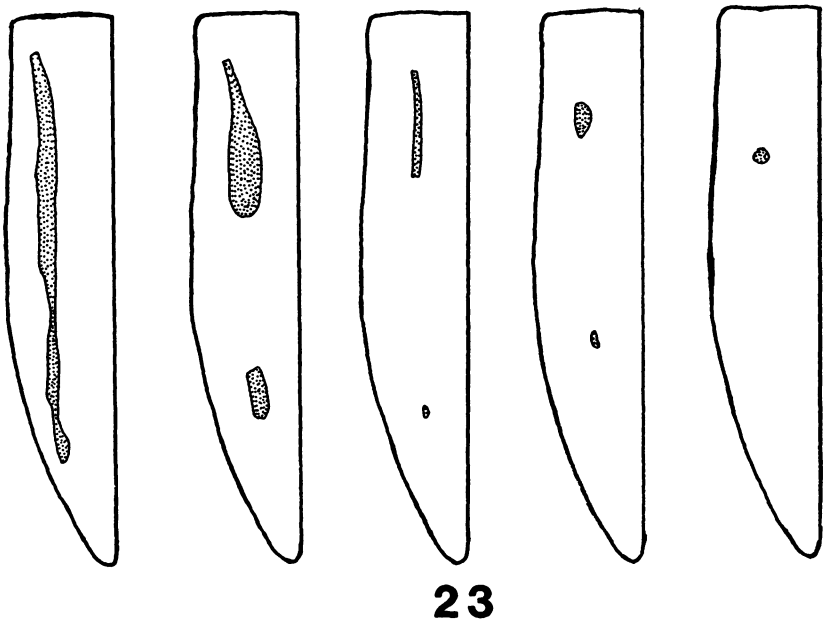


Fig. 23. *Acmaeodera unicolor* Fisher, variation of yellow pattern on elytra of specimens from the Comayagua Valley.

Acmaeodera regularis Waterhouse, 1882

REMARKS. Specimens of *A. regularis* were collected from flowers (Compositae) between December 15, 1983, and March 10, 1984, from the mountains between Colon and Santa Ana on the south side of the Central Valley of Costa Rica in the state of San Jose. Specimens were collected between 2,900 and 4,200 feet. Seasonally this time period equals the end of the wet season and the first half or three-fourths of the dry season depending on the distribution of rain in any particular year.

KEY TO SPECIES OF *ACMAEODERA* FROM HONDURAS AND ADJACENT REGIONS

1. Lateral surface of abdominal sternites 1, 2, and 3 with spatulate setae, setae flat, and strongly recumbent, often adhering to the surface of the sternite (Figs. 4, 9) 2
— Lateral surface of abdominal sternites 1, 2, and 3 without such setae, setae variable 4
2. Setae on pronotum and elytra gold, rather long, fine and not broadened or clubbed at tips. Punctures on disk of pronotum very coarse, deep, and confluent (Fig. 14). Yellow markings on elytra transverse. Honduras ..... *A. culucoensis,* new species
— Setae on pronotum and elytra white, rather short, stout, coarse, and broadened or clubbed at tips (Figs. 5, 10). Punctures not as above

(Figs. 5, 10) and interspaces granulose. Yellow markings on elytra vittate. Honduras 3

3. Setae on sides of abdominal sternite 1 and 2 nearly as wide as long (Fig. 9). Each elytron with a single dorsolateral vitta, plus other irregular small scattered yellow markings (Fig. 7). Honduras ..... *A. aguanyoro,* new species

— Setae on sides of abdominal sternite 1 and 2 less than ½ as wide as long (Fig. 4). Each elytron, with two yellow vittae, one dorsal and one lateral, meeting at apices (Fig. 2), without additional markings. Honduras ..... *A. hondurensis,* new species

4. Elytra with red markings near apices. North and Central America ..... *A. flavomarginata* (Gray)

— Elytra without red markings 5

5. Lateral margins of pronotum with a yellow stripe or spot. North and Central America ..... *A. scalaris* Mannerheim

— Lateral margins of pronotum without markings 6

6. Larger species, length greater than 9 mm 7

— Smaller species, length 8 mm or less 9

7. Elytra marked by yellow fascia near middle and near posterior ⅓. Nicaragua ..... *A. gratiosa* Thery

— Elytra without yellow markings or if present in the form of scattered small, irregular spots or flecks 8

8. Elytra strongly cuneiform, widest at humeral angle. Costa Rica ..... *A. regularis* Waterhouse

— Elytra sinuate and subparallel to beyond middle. Central America and Mexico ..... *A. impluviata* Mannerheim

9. Dorsal surface brown, usually without markings; if marked, with only a single dorsal yellow vitta, either entire or interrupted (Fig. 23). Central America and Mexico ..... *A. unicolor* Fisher

— Dorsal surface black, usually with yellow markings consisting of one to three sets of spots or bars on dorsal and lateral surfaces (Figs. 17, 18) 10

10. Anterior margin of prosternum broadly rounded and smooth. Honduras ..... *A. loei,* new species

— Anterior margin of prosternum broadly rounded and with distinct, rather large, obtusely rounded produced lobe on either side in front of procoxae. Mexico and Central America ..... *A. setosa* Waterhouse

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