

The Genus *Cedusa* in Mexico and Central America

(Hom. Fulg.)

by

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The genus *Cedusa* was erected by Fowler<sup>1</sup> in 1904 for the species *funesta* and *venosa*. Twenty years later McAtee<sup>2</sup> added *medusa* and *pedusa* with *vedusa* "thought to be from Mexico". The present treatment recognize all the species except the doubtful *vedusa* and adds twentytwo species which are apparently undescribed. In addition to these some of the species from southwestern United States probably occur in Mexico.

A clear definition of the genus and its relationship to other genera of the family *Debridae* has been made by Metcalf<sup>3</sup>. It is the only genus with well developed subantennal processes on the cheeks and the relative length of the whole insect is much shorter than species of *Syntames* with which it may be confused.

In this treatment specific placement has been based on the structure of the aedeagus. The male claspers have also been used but are only of help after they have been relaxed in caustic. In dried material the claspers are usually warped and distorted and misleading. For the most part the placement of the females remains in doubt. The key to the species is only applicable for the females that exhibit color characteristics not common to the majority.

## Key to the species

1. Species appearing predominantly white or brown or a combination of both..... 2
  - Species appearing predominantly blue to black..... 7
2. Species maculate ..... 3
  - Species not maculate ..... 4
3. Face with a brown V on the frons ..... *pseudomaculata*.
  - Face with a brown O on the frons ..... *neomaculata*.
4. Elytra white basally, fuscate apically ..... *apicata*.
  - Elytra solid brown, veins may be whitish ..... 5
5. All veins white for full length ..... *venosa*.
  - Longitudinal veins dark, cross veins may be white ..... 6
6. Short, stout species. Apical hook of male clasper acute, abrupt ..... *brunnea*.
  - Elongate species, apical hook stout, scarcely differentiated from clasper, inner margin of clasper not produced ..... *fuscata*.

<sup>1</sup> Fowler, Cannon, *Biol. Centr. Amer.*, Homopt., 1: 112, 1904.

<sup>2</sup> McAtee, W. L., *Ann. Ent. Soc. Amer.*, XVII: 175-187, 1924.

<sup>3</sup> Metcalf, Z. P., *Mus. Comp. Zool.*, LXXXII (5): 324-327, 1938.



- Elongate species with male clasper elongate, narrow, inner margin sharply produced.... *lineata*.
- 7. Inner margin of clasper entire, no tooth or notch present except basally or apically... 8
  - Inner margin with prominent tooth or notch ..... 15
- 8. Inner margin of clasper with basal projection ..... 9
  - Inner margin without basal projection ..... 10
- 9. Basal projection long, recurved, about one-third as long as clasper.....*mexicana*.
  - Basal projection small, inner margin of clasper almost straight, outer margin greatly produced ..... *delongi*.
  - Basal projection small, inner and outer margins of clasper about equally curved..... *carranzensis*.
- 10. Apical hook very short, not over one third as long as widest part of clasper ..... 11
  - Apical hook long, slender, at least three-fourths as long as widest part of clasper ... 13
- 11. Clasper elongate, narrowed in apical third ..... *elongata*.
  - Clasper not narrowed in apical third ..... 12
- 12. Clasper rectangular, apical hook not prominent ..... *zedusa*.
  - Clasper oval, apical hook prominent ..... *furcata*.
- 13. Apical hook obtuse or right angled to axis of clasper.....*dubiata*.
  - Apical hook acute or curved basad ..... 14
- 14. Apical hook slender for full length.....*tincta*.
  - Apical hook heavy, stout ..... *mutilata*.
- 15. Clasper with long thumb-like projection visible in lateral aspect ..... *digitata*.
  - Clasper without thumb-like projection ..... 16
- 16. Clasper with at least one prominent tooth caudal to apical hook ..... 17
  - Clasper without tooth but with a notch on inner margin..... 19
- 17. Apical hook absent or smaller than caudal tooth ..... 18
  - Apical hook and caudal tooth of equal size ..... *serrata*.
  - Apical hook larger than tooth ..... *plummeri*.
- 18. Tooth curved toward base of clasper.....*similis*.
  - Tooth either straight or curved toward apex of clasper..... *nedusa*.
- 19. Apical hook small, notch in inner margin of clasper nearer apex than base....*tropicalis*.
  - Apical hook long, notch in clasper more basad ..... 20
- 20. Clasper very narrow, slender, notch shallow ..... *dampfi*.
  - Clasper broad with deep or broad notch or both..... 21
- 21. Notch in clasper very broad and deep ..... *pedusa*.
  - Notch deep but narrow ..... 22
- 22. Inner margin of clasper much narrowed caudad to apical hook ..... *medusa*.
  - Inner margin scarcely narrowed caudad to apical hook..... *funesta*.



Dr. A. Dampf, who has collected 20 of the reported 27 species, has furnished the following ecological data about some of the collecting places:

"Vergel, Aurora, Santa Isabel, Esmeralda, Victoria and El Zapote are coffee plantations in the State of Chiapas, between 200 and 800 m altitude, situated in the virgin forest which covers the steep slopes of the Sierra Madre del Sur to the Pacific Ocean. Captures were made with the trap lamp in the forest or in the coffee plantation, where plenty of the original tree and shrub vegetation remains. These forests go without interruption thru Guatemala to the Caribbean Sea, cover a part of British Honduras, Yucatán, Campeche, Tabasco, the northern part of the State of Oaxaca and part of the State of Veracruz and form a biogeographic unity, rich in neotropical species. Of the mentioned localities Plancha Piedra (Guat.), Flores (Guat.), San José (Guat.), Payo Obispo, Rio Cajones, Chiltepec, San Pedro Yaneri, Huixtla, belong to this forest zone, whose limits to the north are not fixed".

1. *Cedusa pseudomaculata* n. sp.

Lám. VIII, fig. 2; lám. IX, fig. 1.

Length 4.-5. mm. General color dusky white with fuscous spots on elytra and legs; face with brownish V at junction of frons and clypeus. Face broad with slight bulge at apex of frons. Male claspers rather broad, slightly enlarged at midlength; apical hooks small. Apical sternite of female with a square projection slightly notched on caudal margin.

Holotype male, allotype female, and two male and two female paratypes from Vergel, Chis., M. F. 4399, altitude 700 m, 6-2-35; one male paratype Finca Aurora, Chis., M. F. 4552, 200 m, 6-18-35, and two females paratypes, virgin forest, 15 km from Plancha Piedra, Dpt. Peten, Guat., near the border of British Honduras, M. F. 755, appr. 100 m, 11-29-25, all on light (Dampf). Two male and one female paratypes from Jesus Carranza, Ver., 10-14-41 (DeLong, Plummer, Good & Caldwell)<sup>1</sup>. Apparently a forest species.

2. *Cedusa neomaculata* n. sp.

Lám. VIII, fig. 1; lám. IX, fig. 2.

Length 3.5 -4. mm. Colored and marked similar to *pseudomaculata* except that maculae are less dense. Frons very narrowed between the eyes; base of frons half the width base of clypeus, with a brown O at the junction. Male claspers with parallel margins; apical hooks short. Basal portion of aedeagus extremely short. Apical sternite of female broadly rounded.

Male holotype and female allotype from Rio Cajones, Oax., M. F. 6368, appr. 100 m, 12-14-37, on light at the river, facing on the opposite shore a dense forest; one female paratype from Tolosa, Oax., M. F. 2512, 1-1-32 (station of the Isthmian Railway); one male paratype from S. Pedro Yaneri, Oax., M. F.

<sup>1</sup> For the present all types are retained by the writer.



6205, 6-20-35, appr. 1000 m, mountainous region with deep valleys, forested (Dampf). All captures on light.

3. *Cedusa apicata* n. sp.

Lám. VIII, fig. 3; lám. IX, fig. 3.

Length 4.-4.5 mm. General color whitish with face, thorax, and apex of elytra dusky. Face of even width throughout with high carinate sides. Male claspers bulged on inner margins toward apices; apical hooks small. Apical sternite of female triangular.

Male holotype from Finca Aurora, Chis., M. F. 4552, 6-18-35, female allotype Chiltepec, Oax., M. F. 6338, 12-10-37, appr. 100 m, on light.

4. *Cedusa venosa* Fowler

Length 4.5-5. mm. Dusky winged species with whitish veins in elytra. Thorax with three stripes and colored as in Fowler's illustration. Face with fuscous stripe inside both lateral carinae. These specimens agree in practically every respect with *venosa* Fowler and must be that species.

Unfortunately all are females. Collected from Rio Cajones, Oax., M. F. 6368, 12-14-37, on light (Dampf) (see nº 2).

5. *Cedusa brunnea* n. sp.

Lám. VIII, fig. 4; lám. IX, fig. 4.

Length 4.7-5. mm. Evenly brown except for orange thorax. Face broadest at junction of frons and clypeus. Elytra almost four times as long as broad. Male claspers with long, straight, apical hooks, projecting at right angles from claspers. Apical sternite of female in form of equalateral triangle.

Male holotype and female allotype from 10 km. north of Acapulco, Gro., 11-22-38 (Caldwell).

6. *Cedusa fuscata* n. sp.

Lám. VIII, fig. 5; lám. IX, fig. 5.

Length 4. mm. Face and thorax light brown, elytra dusky. Face narrow, scarcely carinate. Elytra little over two times as long as broad; apical cross veins ivory. Male claspers elongate oval with very heavy, broad, apical hooks. Aedeagus one of the least ornate in this genus.

Holotype male from Tamazunchale, S. L. P., 11-15-38 (Caldwell).

7. *Cedusa lineata* n. sp.

Lám. VIII, fig. 6; lám. IX, fig. 6.

Length 6.1 mm. Face and elytra golden, thorax orange; veins of elytra on either side of cross veins whitish. Frons broad. Elytra about three times as long



as broad. Male claspers very long, narrow, inner margins sharply produced; apical hooks scarcely differentiated from claspers.

Male holotype from Taxco, Gro., 9-9-39 (DeLong & Plummer).

8. *Cedusa mexicana* n. sp.

Lám. VIII, fig. 7; lám. IX, fig. 7.

Length 3.2-3.5 mm. General color black covered with bluish prunosity; lateral carinae and stripe down center of face brown. Face broadest at junction of frons and clypeus. Male claspers with very large basal projection on inner margins fully one-third as long as claspers; apical hooks longer than basal projections.

Male holotype and paratype from Finca Aurora, Chis., M.F. 4552, 6-18-35, 200 m, and one paratype from Huixtla, Chis., M.F. 2640, 11-8-32, 40 m, railwaystation situated in the coastal plain, on light (Dampf).

9. *Cedusa carranzensis* n. sp.

Lám. VIII, fig. 8; lám. IX, fig. 8.

Length 3.7-4. mm. Jet black species with carinae of face light yellow. Frons narrowed between the eyes. Male claspers broadly oval in outline with small basal projections on inner margins; apical hooks long, slender, not suddenly narrowed to an acute apex as in *mexicana*. Aedeagus with apex bearing only two large and two small spurs. Apical sternite of female broadly rounded caudad.

Male holotype, female allotype, and many paratypes of both sexes from Jesus Carranza, Ver., 10-14-41, and three male paratypes from Suchilapa, Oax., 10-14-41 (De Long, Plummer, Good, and Caldwell). One male paratype from La Forestal, Ver., M.F. 1093, 10-28-26, near sea level, on light, facing dense coastal bush on ancient dunes, a bulrush swamp and open coconut groves (Dampf).

10. *Cedusa delongi* n. sp.

Lám. VIII, fig. 9; lám. IX, fig. 9.

Length 3.5-4 mm. General color black with legs and carinae of face orange. Frons narrowed between the eyes. Male claspers extremely broad; inner margins straight with a small protuberance at base; outer margins greatly roundedly produced; apical hooks very long, angulate. Aedeagus of simplified type. Apical sternite of female very broadly rounded caudad.

Male holotype, female allotype, and male and female paratypes from Buena Vista, Gro., 10-23-41 (DeLong & Good). Male and female paratypes from Republic of Panama & Canal Zone, May 20-28 (Osborn). One male paratype near Flores, Dept. Peten, Guat., M.B. 145, 11-23-25, swept on grass in open savannah, appr. 100 m (Dampf).

The writer names this species in honor of Dr. Dwight M. DeLong.



11. *Cedusa elongata* n. sp.

Lám. VIII, fig. 10; lám. IX, fig. 10.

Length 5 mm. Large dusky species with a brownish cast. Frons narrowed just below the eyes. Elytra almost three times as long as broad. Male claspers narrowed and elongate in apical third; apical hooks small, acute.

Male holotype from Coatepec, Ver., 1250 m, M. F. 3617, 8-14-34, on light in an open valley, surrounded by tropical vegetation (Dampf).

12. *Cedusa zedusa* n. sp.

Lám. VIII, fig. 11; lám. IX, fig. 11.

Length 4.8-5 mm. Elongate dusky species covered with bluish prunosity; head dark brown to dusky, pronotum darker. Facial carinae prominent. Frons scarcely narrowed. Male claspers broadly oval, slightly offset and narrowing in apical third of inner margins; apical hooks small, appressed. Apical sternite of female broadly triangular.

Male holotype, female allotype and paratype from Santa Isabel, Chis., 815 m, M. F. 1906, 11-17-30, and one male paratype from Vergel, Chis., M. F. 4416, 700 m, 6-3-35 (Dampf), on light.

13. *Cedusa furcata* n. sp.

Lám. VIII, fig. 12; lám. IX, fig. 12.

Length 3.8-4 mm. General color black with legs, lateral carinae and stripe down center of face brown. Elytra about two and a half times as long as broad. Male claspers short, broad, gradually narrowed apically. Apex of aedeagus bearing three forked processes or spines.

Male holotype from Vergel, Chis., 700 m, M. F. 4399, 6-2-35; three paratypes from Finca Aurora, Chis., 200 m, M. F. 4552, 6-18-35; one male paratype, La Forestal, Ver., sea level, M. F. 1093, 10-28-26, all on light (Dampf).

14. *Cedusa dubiata* n. sp.

Lám. VIII, fig. 13; lám. X, fig. 13.

Length 4.-4.3 mm. Polished black species with carinae and median stripe of face light. Frons slightly narrowed between the eyes. Male claspers produced on inner margins; apical hooks long, straight, perpendicular to axes of claspers. Aedeagus with variable trifurcate spur on the right side; the individual spines of this spur vary in length, breadth, and proximity to each other in different specimens. Apical sternite of female small, broadly rounded.

Male holotype, female allotype, and male and female paratypes from Tamazunchale, S. L. P., 8-29-39 (DeLong). One male paratype from same locality 9-25-41 (DeLong, Plummer, Good & Caldwell). One male paratype from Finca



Aurora, Chis., M. F. 4552, 6-18-35, on light and one from Chetla, Pue., SE from Matamoros Izucar, altitude appr. 1300 m. M. F. 1708, 7-26-30, swept from *Taxodium* and shrubs along the Nexapa river (Dampf).

15. *Cedusa tineta* n. sp.

Lám. VIII, fig. 14; lám. X, fig. 14.

Length 3.5 mm. General color dusky with facial carinae light. Male claspers broadly oval; apical hooks long, slender, curved. Aedeagus with only three apical processes.

Male holotype and paratype from Veracruz, Ver., M. F. 1067, 10-14-26, on light in the coastal region (see nº 9) (Dampf).

16. *Cedusa mutilata* n. sp.

Lám. VIII, fig. 15; lám. X, fig. 15.

Length 4.5 mm. General color dark, carinae of face light. Frons much narrowed between the eyes. Male claspers elongate oval; broken on inner margins at base; apical hooks stout, curved.

Male holotype, Frontera, Tabasco, M. B. 259, 6-7-28, sea level, swept on grass along the Grijalva river.

17. *Cedusa digitata* n. sp.

Lám. VIII, fig. 17 y 17 A; lám. X, fig. 16.

Length 3.5-4. mm. Dark over all except yellow legs. Frons broad, not narrowed. Male claspers with very long caudal projecting spines visible in lateral aspect. (These spines are in addition to the small basal processes that are present in all the species). Claspers in ventral aspect slightly notched on inner margins; apical hooks short, appressed. Aedeagus with subbasal forked process.

Holotype male and two paratypes "M. F. 667" (Dampf), Payo Obispo, Quintana Roo, 8-31-25, on light, sea level.

18. *Cedusa serrata* n. sp.

Lám. VIII, fig. 16; lám. X, fig. 17.

Length 4.8-5 mm. General color jet black with lateral carinae of face and median stripe lightly browned. Face broad, not narrowed. Male claspers very large with very long, acute tooth on center of median margins followed by a smaller tooth just basad.

Male holotype, female allotype, and paratypes from Fortin, Ver., 10-9-41; male and female paratypes from Orizaba, Ver., 10-8-41, and one male paratype from Jesus Carranza, Ver., 10-14-41 (DeLong, Plummer, Good, & Caldwell).



One male paratype from Manzanillo, Ver., near the railway station Potrero, appr. 800 m, M. B. 104, 12-2-24, swept from weeds and shrubs, marshy clearing in a mountain forest (Dampf).

19. *Cedusa nedusa* n. sp.

Lám. VIII, fig. 20; lám. X, fig. 20.

Length 4.-4.5 mm. General color black with facial carinae very broadly light yellow; median stripe yellow. Frons not narrowed. Male claspers elongate, each with a large rounded tooth on inner margin near the apex; apical hooks blunt in ventral aspect. Aedeagus similar in structure to *serrata*.

Male holotype and two paratypes from Tamazunchale, S. L. P., 11-15-38 (Caldwell).

20. *Cedusa plummeri* n. sp.

Lám. VIII, fig. 18; lám. X, fig. 18.

Length 3.5-3.8 mm. General color jet black over all with legs dusky. Face broad, narrowed between the eyes. Male claspers convex on outer margins with a short median tooth on inner margins; apical hooks longer than median teeth.

Male holotype and three paratypes from 18 Km. west of Mexico, D. F., 9-1-39 (Plummer).

The writer names this species in honor of Dr. Charles C. Plummer.

21. *Cedusa similis* n. sp.

Lám. VIII, fig. 19; lám. X, fig. 19.

Length 5. mm. General color black; face with carinae and median stripe brown; notum with brownish median stripe. Frons very broad, not narrowed. Male claspers with prominent tooth on inner margins near apex; apical hooks either absent or modified to form the teeth. Aedeagus bears some resemblance to *medusa* McA.

Holotype male Tolosa, Oax., M. F. 2512, on light (Dampf).

22. *Cedusa tropicalis* n. sp.

Lám. VIII, fig. 21; lám. X, fig. 21.

Length 3.8 mm. Dusky with facial carinae light brown; medial facial stripe very faint. Frons slightly narrowed between the eyes. Male forceps notched on inner margins near apex with margin between notch and apical hook broadly rounded; apical hooks short, acute, appressed. Aedeagus somewhat resembling *serrata* type.

Male holotype from San Jose, Guatemala, Lake Peten, M. F. 797, 11-13-25, on light at the shores of the lake (Dampf).



23. *Cedusa dampfi* n. sp.

Lám. VIII, fig. 22; lám. X, fig. 22.

Length 5.1 mm. General color black with facial carinae and median stripe brown. Face broad, not narrowed. Male claspers elongate, slender, notched somewhat basad; apical hooks long, slender, not recurved. Aedeagus very complicated with many spurs and hooks.

Male holotype from Tierra Blanca, Ver., station of the Isthmian railway, dense coastal bush, M.F. 2655, 7-29-32, on light (Dampf).

The writer names this species in honor of Dr. Alfons Dampf.

24. *Cedusa pedusa* McAtee

Lám. VIII, fig. 23; lám. X, fig. 23.

Length 3.5-4 mm. This is definitely a dusky and not a jet-black species. Venter of thorax and abdomen deep red. Frons narrowed between the eyes. Male claspers with very large notch in center of inner margins. Aedeagus of more simplified type.

The description is based on a specimen compared with the type by Mr. P. W. Oman of the U. S. National Museum. Specimens from Vergel (6-2-35, M.F. 4399), Victoria (M.F. 4391, 6-1-35), Finca Aurora (M.F. 4552, 6-18-35) and Esmeralda (M.F. 1937, 11-18-30), all localities situated in the virgin forest of the Sierra Madre del Sur, Chis., at altitudes varying from 200 to 800 m (Dampf).

25. *Cedusa medusa* McAtee

Lám. VIII, fig. 24; lám. X, fig. 24.

Length 4 mm. General color black with lateral carinae of face light yellow. Frons narrowed between the eyes. Male claspers narrowed on inner margins just before the apical hooks.

One male from Tamazunchale, S. L. P., 11-15-38 (Caldwell) compared with the type by Mr. P. W. Oman of the U. S. National Museum.

26. *Cedusa funesta* Fowler

Lám. VIII, fig. 25; lám. X, fig. 25.

Length 4.2-4.5 mm. Black species with facial carinae and median stripe yellow. Frons not narrowed between the eyes. Male claspers with deep, narrow notch on inner margins; not narrowed on inner margins prior to the apical hooks. Aedeagus of complicated type.

Compared with a paratype male by Mr. P. W. Oman of the U. S. National Museum.

Specimens from Fortin, Orizaba, Tierra Blanca, and Jesus Carranza, Ver. (DeLong, Plummer, Good, & Caldwell). Potrero, Ver., 500 m, M. B. 287, 10-12-29,



swept in the sugarcane plantations from weeds, mostly *Bidens tetragonum*; El Zapote, Chis., 430 m, M. F. 1835, 11-13-30, and Esmeralda, Chis., 545 m, M. F. 1924 B, 11-18-30, on lighth (Dampf).

Los Amates and Pt. Barrios, Guat. (Osborn).

#### 27. *Cedusa vedusa* McAtee

This species would run to *mexicana* in the key. According to Mr. Oman it has less clearly defined basal projections on the male claspers and also differs in the size and shape of the spines on the aedeagus.

"Thought to be from Mexico".

#### RESUMEN

El género, creado en 1904 por Fowler para las especies funesta y venosa, fue ampliado más tarde con tres nuevas formas por McAtee, y a ellas vienen a sumarse 22 especies más que se describen en este trabajo, y que proceden todas de México o de América Central.

Se da una nota sobre las características geográficas y ecológicas de las localidades donde han sido colectadas la mayor parte de las especies estudiadas, remitida al autor por el Dr. A. Dampf, y una clave de todas las formas que el género comprende, salvo una dudosa (vedusa), seguida de las diagnósis de las nuevas especies, complementadas por 51 figuras (en tres láminas) de los aparatos y piezas genitales.

Muchas de las especies han sido recolectadas por el Dr. A. Dampf, y otras por los entomólogos, Sres. DeLong, Plummer, Good, Osborn y por el autor mismo.

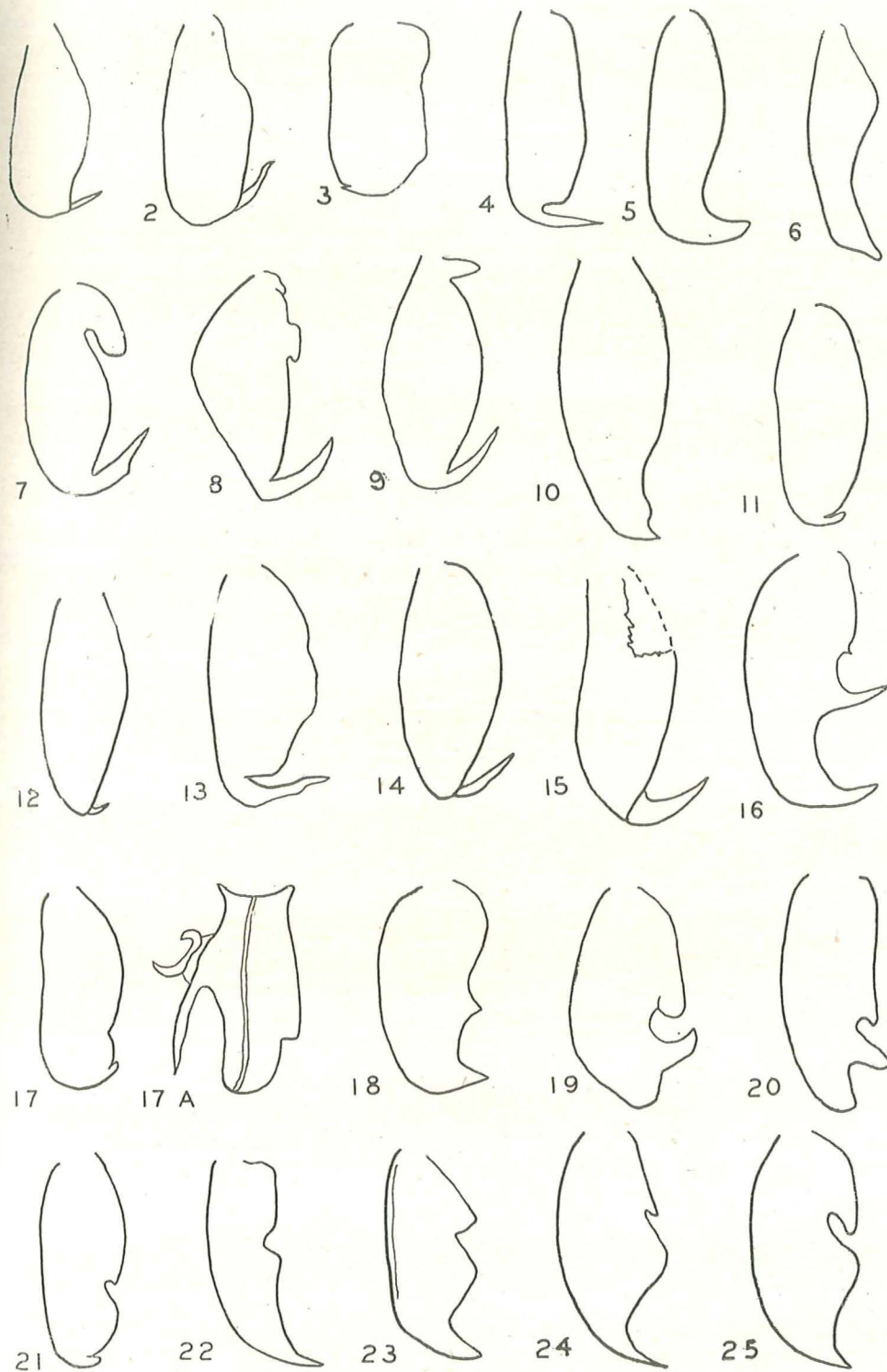


EXPLANATION OF PLATE VIII

*Ventral aspect of right male clasper*

1. *Neomaculata* n. sp.
2. *Pseudomaculata* n. sp.
3. *Apicata* n. sp.
4. *Brunnea* n. sp.
5. *Fuscata* n. sp.
6. *Lineata* n. sp.
7. *Mexicana* n. sp.
8. *Delongi* n. sp.
9. *Carranzensis* n. sp.
10. *Elongata* n. sp.
11. *Zedusa* n. sp.
12. *Furcata* n. sp.
13. *Dubiata* n. sp.
14. *Tincta* n. sp.
15. *Mutilata* n. sp.
16. *Serrata* n. sp.
17. *Digitata*, n. sp. A. Lateral aspect of *digitata* n. sp.
18. *Plummeri* n. sp.
19. *Similis* n. sp.
20. *Nedusa* n. sp.
21. *Tropicalis* n. sp.
22. *Dampfji* n. sp.
23. *Pedusa* McAtee.
24. *Medusa* McAtee.
25. *Funesta* Fowler.





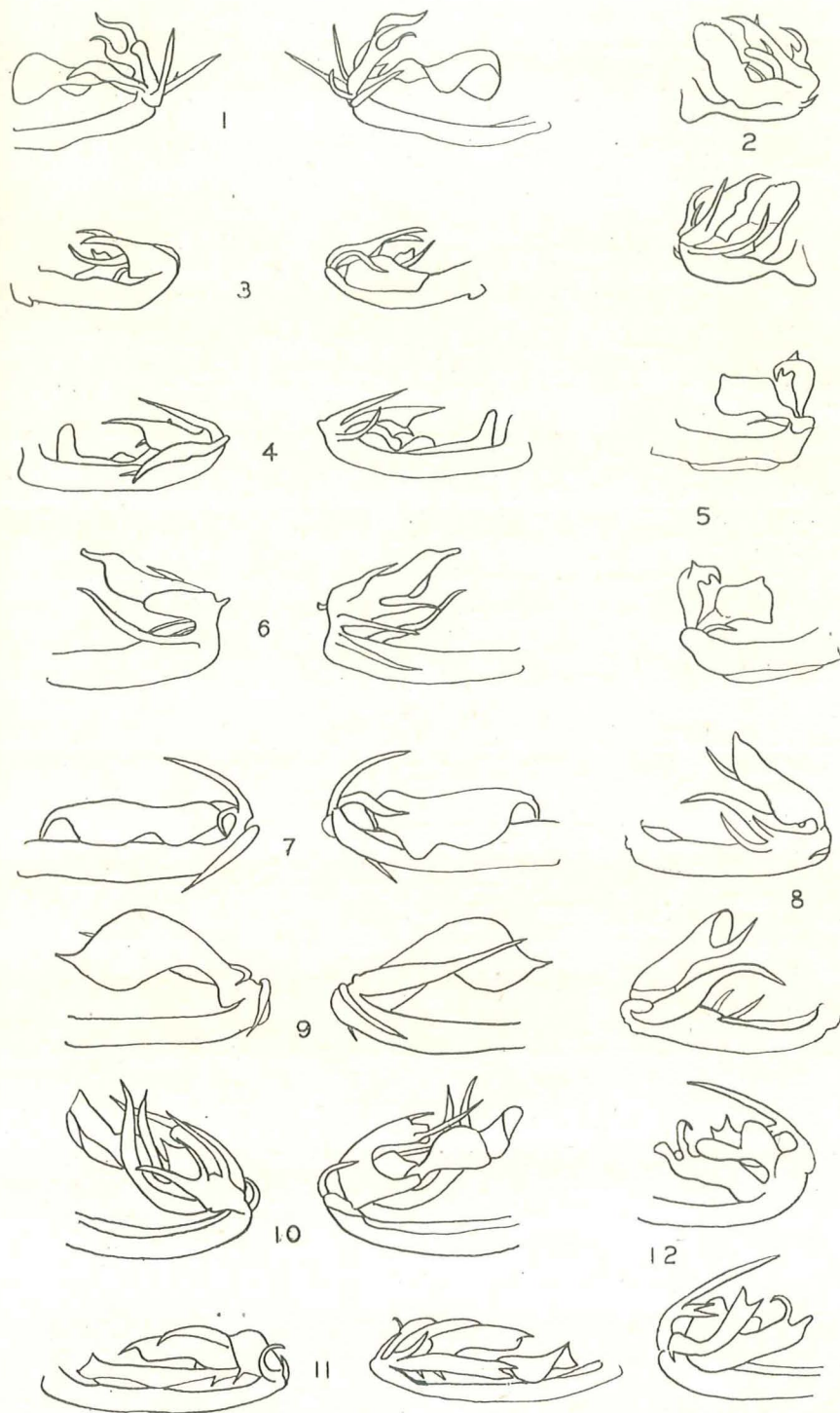


EXPLANATION OF PLATE IX

*Left and right aspect of aedeagus of male*

1. *Pseudomaculata* n. sp.
2. *Neomaculata* n. sp.
3. *Apicata* n. sp.
4. *Brunnea* n. sp.
5. *Fuscata* n. sp.
6. *Lineata* n. sp.
7. *Mexicana* n. sp.
8. *DeLongi* n. sp.
9. *Carranzensis* n. sp.
10. *Elongata* n. sp.
11. *Zedusa* n. sp.
12. *Furcata* n. sp.





J. S. CALDWELL, The Genus *Cedusa* in México and Central America

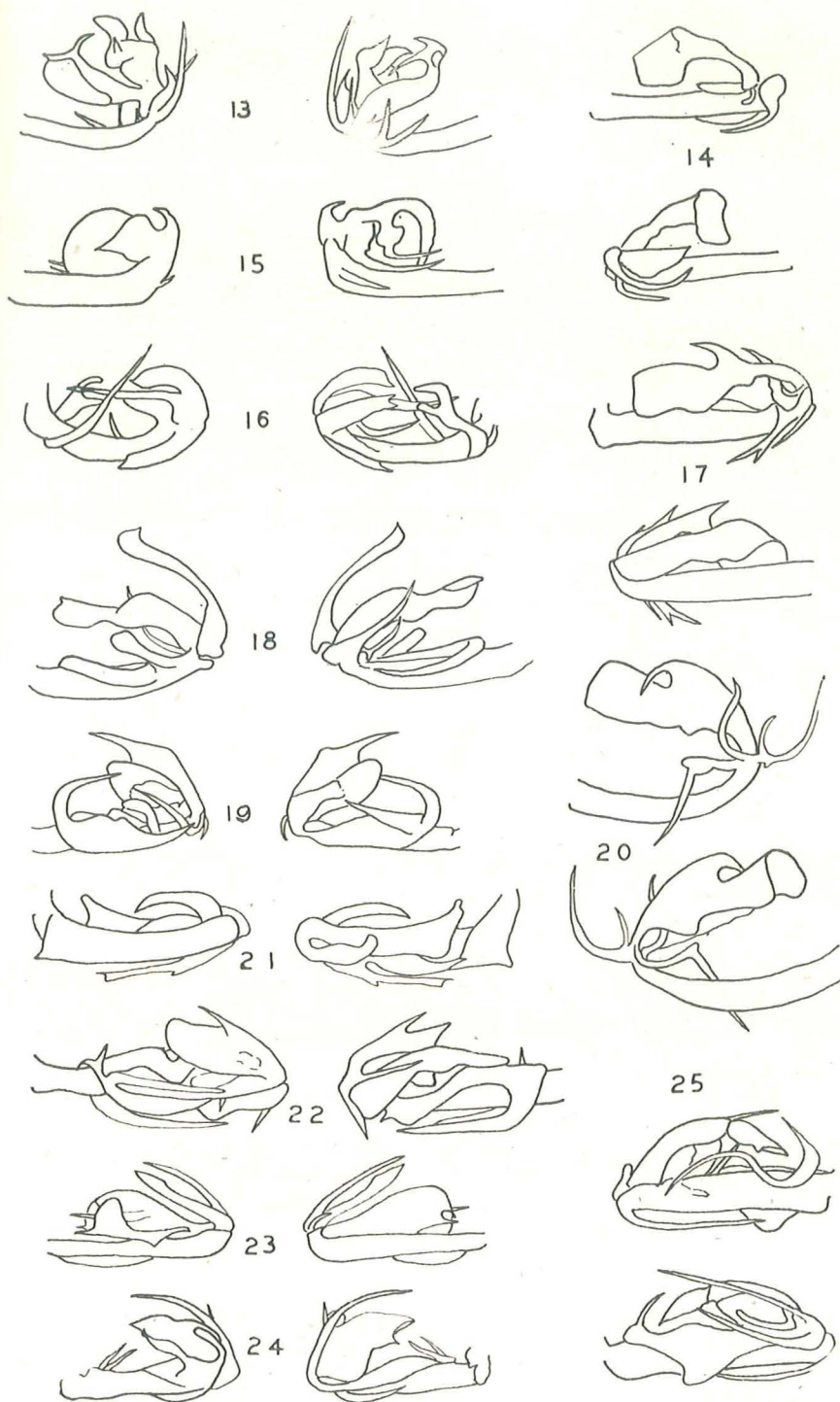


EXPLANATION OF PLATE X

*Left and right aspect of aedeagus of male.*

13. *Dubiata* n. sp.
14. *Tincta* n. sp.
15. *Mutilata* n. sp.
16. *Digitata* n. sp.
17. *Serrata* n. sp.
18. *Plummeri* n. sp.
19. *Similis* n. sp.
20. *Nedusa* n. sp.
21. *Tropicalis* n. sp.
22. *Dampfi* n. sp.
23. *Pedusa* McAtee.
24. *Medusa* McAtee.
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