

*FULGENTICAPSUS* NEW GENUS, WITH DESCRIPTIONS  
OF TWO NEW SPECIES FROM MEXICO  
(HETEROPTERA, MIRIDAE)

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The two species of *Fulgenticapsus* described herein were collected in the states of Oaxaca and Puebla, Mexico. Both of the species occurred together in the Puebla locality.

All of the specimens were collected from shaded herbaceous vegetation growing along the beds of intermittent streams. Most of the specimens were taken from relatively dense vegetation and the individuals moved rather quickly from plant to plant making it difficult to ascertain which species of plant was the actual host. No immature forms were observed.

### **Fulgenticapsus n. gen.**

Orthotylinae, Orthotylini. Characterized by being smooth or indistinctly punctate above; with only a single type of pubescence sparsely scattered over the head, thorax and hemelytra; with eyes situated at the rear of the head, and by having a prominent carina on the vertex of the head which lacks setae.

Body shining; head sharply declivous, smooth, vestiture consisting of scattered semierect hairs; eyes located at posterior margin of head, almost touching pronotum, inner margin emarginate, contiguous with antennal socket, with short scattered inconspicuous hairs arising from between facets; vertex strongly declivous, posterior margin sharply carinate and lacking erect bristle-like setae; frons vertical, rounded anteriorly; clypeus weakly delimited from frons, slightly recurved; jugum and lorum somewhat flattened; height of gena about equal to width of eye as seen from above; gula shining, length about equal to diameter of first rostral segment; buccula clearly delimited; rostrum reaching midcoxae; antennal segment I slender, shorter than width of vertex, vestiture sparse, and with 3 or 4 erect hairs about as long as diameter of segment, diameter of apex of second antennal segment about twice that of basal region, longer than head width, vestiture semierect, diameters of III and IV about 1/3 less than apex of II, hairs semierect and about as long as diameter of segment.

Pronotum trapezoidal, smooth to very faintly and indistinctly punctate (would be treated as smooth in existing keys), rather strongly inclined anteriorly, vestiture similar to that on head; calli clearly delimited, some-

what flat; lateral margins angulate, posterior margin almost straight; posterior corners rounded. Mesoscutum covered. Scutellum somewhat flattened. Hemelytron very finely punctate, turned downward along costal margin; embolium narrow, widening apically; cuneus moderately deflected, longer than wide. Femora not incrassate; hind tibia with semierect hairs and with semierect spine-like setae as long as diameter of segment. Genital capsule of male with tergal process.

Type species of genus, *Fulgenticapsus reyesi* n. sp.

In Carvalho's (1955) key to the mirid genera of the world, *Fulgenticapsus* will key to the genus *Ficinus* Distant. The general body form of *Ficinus* is elongate and narrow whereas the body proportions of *Fulgenticapsus* are relatively shorter and broader. In addition, the integument of the head, thorax and hemelytra of *Ficinus* are distinctly minutely reticulate which is not the case of *Fulgenticapsus*. The genus also appears to be similar to *Rhinocapsidea* Reuter. However, the hemelytra lack the fine sculpturing of the latter. All three of these genera are sympatric in distribution.

The two species assigned to this genus are quite similar in general color and form. Both are brown to black in color, with pale legs and a broad dark fuscous band running along the margin of the wing membrane. The right paramere of each form is distinctive, however, the aedeagi of the two forms are quite similar.

***Fulgenticapsus reyesi* n. sp.**

(Figs. 1-2)

Characterized by the dark fuscous to black scutellum and the more or less uniformly brown pronotum; also, in the case of the male, by the shape of the right paramere.

*Male* (measurements taken from 20 specimens; those of holotype given first followed in parenthesis by average and ranges): Length, 3.90 mm (3.75 mm, 3.50 – 3.96 mm); width, 1.72 mm (1.64 mm, 1.52 – 1.72 mm). Head length, 0.18 mm (0.15 mm, 0.12 – 0.18 mm); width through eyes, 0.82 mm (0.80 mm, 0.78 – 0.82 mm); vertex width, 0.36 mm (0.35 mm, 0.34 – 0.36 mm). Length of antennal segment I, 0.24 mm (0.24 mm, 0.22 – 0.26 mm); II, 1.06 mm (1.05 mm, 1.00 – 1.10 mm); III, 0.86 mm (0.83 mm, 0.74 – 0.92 mm); IV, 0.44 mm (0.44 mm, 0.42 – 0.48 mm). Pronotal length 0.66 mm (0.65 mm, 0.60 – 0.68 mm); width, 1.32 mm (1.29 mm, 1.22 – 1.34 mm). Cuneal length, 0.68 mm (0.66 mm, 0.58 – 0.76 mm); width, 0.62 mm (0.56 mm, 0.52 – 0.62 mm).

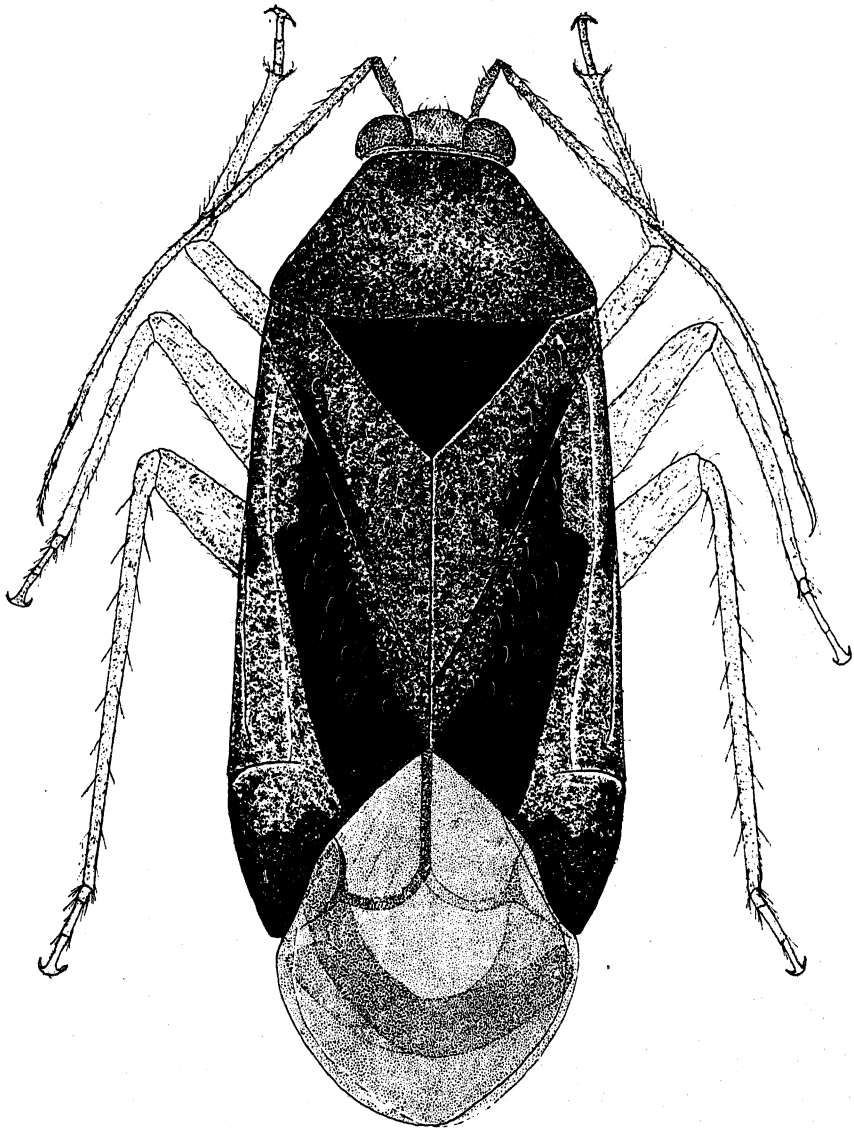


Fig. 1. *Fulgenticapsus reyesi* n. sp.

General coloration brown ranging to black; head brown with reddish areas on vertex, black areas include apex of jugum, apex of clypeus, entire

lorum, gena and gular area; antennal segments I and II light brown, III and IV dark brown; base of rostral segment I and apex of IV dark brown to black, remainder pale light brown; pronotum pale brown to brown above, sides dark fuscous to black; mesoscutum and scutellum dark fuscous to black; hemelytron brown with variable dark fuscous to black markings; cuneus darker apically; membrane with broad fuscous band curving with but not touching apical margin, veins and area immediately adjacent dark fuscous; underside uniformly dark fuscous to black; coxae pale except at base, remainder of legs pale, apical tarsal segment darker.

Morphological characters as given for genus. Male genitalia as figured (Fig. 2); tergal process spinelike or bifurcate at apex.

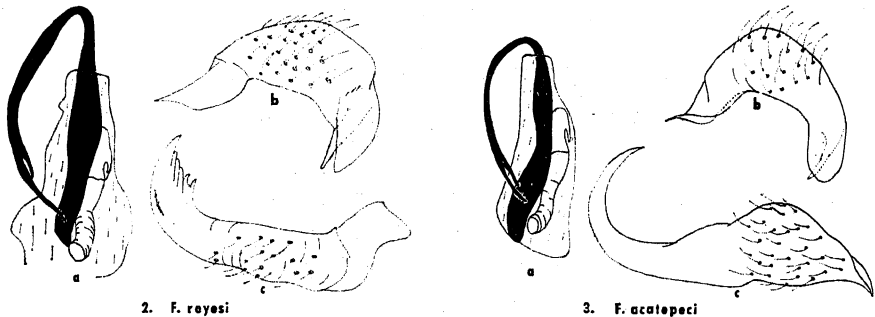


Fig. 2-5. Genital structures of males: a. aedeagus, b. left paramere, c. right paramere.

*Female* (measurements taken from 20 specimens; those of allotype given first followed in parenthesis by average and ranges): Length, 3.54 mm (3.45 mm, 3.22 – 3.74 mm); width, 1.70 mm (1.71 mm, 1.50 – 1.84 mm). Head length, 0.20 mm (0.17 mm, 0.12 – 0.20 mm); width through eyes, 0.82 mm (0.82 mm, 0.80 – 0.84 mm); vertex width, 0.42 mm (0.41 mm, 0.40 – 0.42 mm). Length of antennal segment I, 0.24 mm (0.24 mm, 0.20 – 0.28 mm); II, 1.06 mm (1.01 mm, 0.92 – 1.06 mm); III, 0.72 mm (0.75 mm, 0.62 – 0.84 mm); IV, 0.48 mm (0.42 mm, 0.38 – 0.48 mm). Pronotal length, 0.68 mm (0.66 mm, 0.60 – 0.68 mm); width at base, 1.34 mm (1.30 mm, 1.20 – 1.34 mm). Cuneal length, 0.58 mm (0.55 mm, 0.48 – 0.60 mm); width at base, 0.58 mm (0.58 mm, 0.50 – 0.64 mm).

Coloration similar to that of male but usually darker, dark coloration on hemelytron covering larger area; shorter in length, broader in width than male.

*Holotype*: Male, MEXICO: OAXACA, 10 mi. n. Miltepec, July 26, 1974, Clark, Murray, Ashe, Schaffner. Deposited in the National Museum of Natural History, Washington, D.C. *Allotype*: Female, same data as holotype. Deposited in the National Museum of Natural History. *Paratypes*: 29 males, 16 females, same data as holotype: 6 males, 6 females, MEXICO: PUEBLA, 4.4 mi. sw. Acatepec, July 26, 1974. Clark, Murray, Ashe, Schaffner; male, 9 females, same locality as holotype except taken August 4, 1976, Peigler, Gruetzmacher, R&M Murray, Schaffner. Deposited in the collection of the Department of Entomology, Texas A&M University, College Station, Texas; in the Museo de Historia Natural de la Ciudad de Mexico, Mexico; in the J.C.M. Carvalho collection, Rio de Janeiro, Brazil; and in the Canadian National Collection, Ottawa, Ontario.

All male specimens collected near Miltepec had the tergal process of the genital capsule spinelike, whereas those specimens taken near Acatepec possessed a bifurcate tergal process. No other significant differences in the genitalia could be discerned.

This species is named in honor of Pedro Reyes-Castillo of the Instituto de Ecologia, Museo de Historia Natural de la Ciudad de Mexico, who has been of invaluable assistance concerning my interest in the Miridae of Mexico.

***Fulgenticapsus acatepeci* n. sp.**

(Fig. 3)

Characterized by the light brown to brown scutellum; also, in the case of the male, by the bifurcate tergal process and by the shape of the right paramere.

*Male* (measurements taken from 4 specimens, those of holotype given first followed in parenthesis by average and ranges): Length, 3.80 mm (3.86 mm, 3.80 – 3.92 mm); width, 1.54 mm (1.56 mm, 1.52 – 1.60 mm). Head length 0.14 mm (0.15 mm, 0.14 – 0.16 mm); width through eyes, 0.80 mm (0.81 mm, 0.80 – 0.82 mm); width, 0.36 mm (0.35 mm, 0.34 – 0.36 mm). Length of antennal segment I, 0.26 mm (0.25 mm, 0.22 – 0.26 mm); II, 1.10 mm (1.08 mm, 1.04 – 1.10 mm); III, 0.84 mm (0.88 mm [one specimen]); IV, 0.38 mm (0.34 mm [one specimen]). Pronotal length, 0.66 mm (all specimens); width at base, 1.30 mm (1.31 mm, 1.30 – 1.34 mm). Cuneal length, 0.64 mm (0.68 mm, 0.61 – 0.70 mm); width at base, 0.52 mm (0.54 mm, 0.50 – 0.56 mm).

General coloration light brown above, dark fuscous to black beneath; head light brown with reddish areas on apex of jugum and sometimes on

base of clypeus and vertex, black areas include apex of clypeus, entire lorum, gena and gular area; antennal segments pale; base of rostral segment I and apex of IV dark brown to black, remainder pale; pronotum light brown above, sides dark fuscous to black; mesoscutum ranging from brown with dark fuscous areas to completely dark; scutellum brown, dark fuscous at base and along sides; hemelytron light brown with fuscous to dark fuscous markings, dark coloration limited to area immediately along claval suture, a spot on inner angle of cuneus and adjacent area of corium, another spot towards apex of cuneus, sometimes with a medial, elongate spot along area of radial vein; membrane with broad fuscous band along outer margin, veins and immediately adjacent area dark fuscous; underside uniformly dark fuscous to black; meso- and metathoracic coxae dark fuscous at base, remainder of legs pale, apical tarsal segment darker.

Morphological characters as given for genus. Male genitalia is figured (Fig. 3); tergal process bifurcate at apex.

*Female* (measurements taken from 3 specimens, those of allotype given first followed in parenthesis by those of 2 paratypes): Length, 3.26 mm (3.22 and 3.24 mm); width, 1.64 mm (1.66 and 1.72 mm). Head length, 0.18 mm (0.16 mm, both); width through eyes, 0.84 mm (0.82 and 0.84 mm); vertex width, 0.40 mm (0.38 and 0.40 mm). Length of antennal segment I, 0.24 mm (0.26 and 0.24 mm); II, 1.02 mm (0.98 mm, both); III, 0.78 mm (0.68 and 0.70 mm); IV, 0.36 mm (0.38 and 0.36 mm). Pronotal length, 0.66 mm (0.66 and 0.62 mm); width at base, 1.28 mm (1.32 and 1.26 mm). Cuneal length, 0.56 mm (0.54 and 0.52 mm); width at base, 0.56 mm (0.56 and 0.58 mm).

Coloration similar to that of male but slightly darker; shorter in length and broader in width than male.

*Holotype*: Male, MEXICO: Puebla, 4.4 mi. sw. Acatepec, July 26, 1974. Clark, Murray, Ashe, Schaffner. Deposited in the National Museum of Natural History, Washington, D.C. *Allotype*: Female, same data as holotype. Deposited in the National Museum of Natural History. *Paratypes*: 3 males, 2 females, same data as holotype; female, 10 mi. ne. Huajuapán de Leon, Oax. MEXICO: VI-27-1965, Burke, Meyer, Schaffner. Deposited in the collection of the Department of Entomology, Texas A&M University, College Station, Texas, and in the Museo de Historia Natural de la Ciudad de Mexico, Mexico.

A single individual which may be attributable to this species was taken 7.3 miles southwest of Izucar de Matamoros in the state of Puebla. No significant differences in the genitalia were noted, however the speci-



men was smaller in size and had a much more extensive dark fuscous color pattern. For these reasons it is not being assigned to this species at this time.

This species is named after the small town of Acatepec which is located approximately 45 kilometers southwest of Tehuacan, Puebla.

#### Key to the species of *Fulgenticapsus*

Scutellum dark fuscous to black ..... *reyesi* n. sp.  
Scutellum, except along margins, light brown to brown .. *acatepecci* n. sp.

#### ABSTRACT

The genus *Fulgenticapsus* and the species *reyesi* and *acatepecci* from Mexico are described as new. The material was collected in northern Oaxaca and the adjacent area of the state of Puebla. The male genitalia of the species are illustrated.

#### RESUMEN

El género *Fulgenticapsus* y las especies *reyesi* y *acatepecci* de México son descritas como nuevas. El material fue colectado al norte de Oaxaca y el área adyacente del Estado de Puebla. Las genitalias de los machos de las especies son ilustradas.

#### LITERATURE CITED

CARVALHO, JOSÉ C. M., 1955. Keys to the genera of Miridae of the world (Hemiptera). *Bol. Mus. Goeldi*, 11: (2):1-151.