

**NEW SPECIES IN THE GENUS SERICOPHANES REUTER**  
(HEMIPTERA: MIRIDAE)

**J. MALDONADO CAPRILES**

*Reprinted from*  
**PROCEEDINGS OF THE ENTOMOLOGICAL SOCIETY OF WASHINGTON**  
**Vol. 72, No. 1, March 1970**  
**pp. 98-106**  
*Made in the United States of America*

NEW SPECIES IN THE GENUS *SERICOPHANES* REUTER  
(HEMIPTERA: MIRIDAE)

J. MALDONADO CAPRILES, *Department of Biology, University of Puerto Rico,  
Mayaguez, Puerto Rico 00708*

ABSTRACT—Five new species of *Sericophanes* are described from northern South America, **fuscus**, **nigripes**, **oscurus**, **pulidoi** and **constrictus**, and comparative notes given.

Five Neotropical species of the Pilophorini genus *Sericophanes* Reuter are described in this paper which increases the number of Neotropical species to 12. Knight (1968) recently described four species from western United States bringing the total number of species in the genus to 20.

I want to acknowledge the assistance given to me by Dr. George Burton, U. S. Public Health Service, during my short stay in Georgetown, British Guiana. Mr. Juan Pulido, División de Malariología,

Maracay, kindly helped me to collect and travel around that area of Venezuela. Thanks are also due to Dr. J. O. Harrison, United Fruit Company, who kindly sent me material for identification from Costa Rica. Prof. J. Moyá, College of Agriculture, Mayagüez, Puerto Rico, made the habitus drawings.

Measurements are given in micrometer units; 10 units are equivalent to 0.38 mm. Types are deposited in the U. S. National Museum, Washington, D. C. and in Dr. H. H. Knight's and my collections. This paper is possible thanks to grant no. GB-7382 from the National Science Foundation.

*Sericophanes ornatus* (Berg)

Previously known from Argentina, Brazil and Chile. A male at hand agrees quite well with Berg's description as modified by Carvalho (1944). Collected at Hope, near Georgetown, British Guiana, from a light trap, July 16-20, 1962, J. Maldonado C. collector.

*Sericophanes fuscus*, n. sp.

(Figs. 1-3)

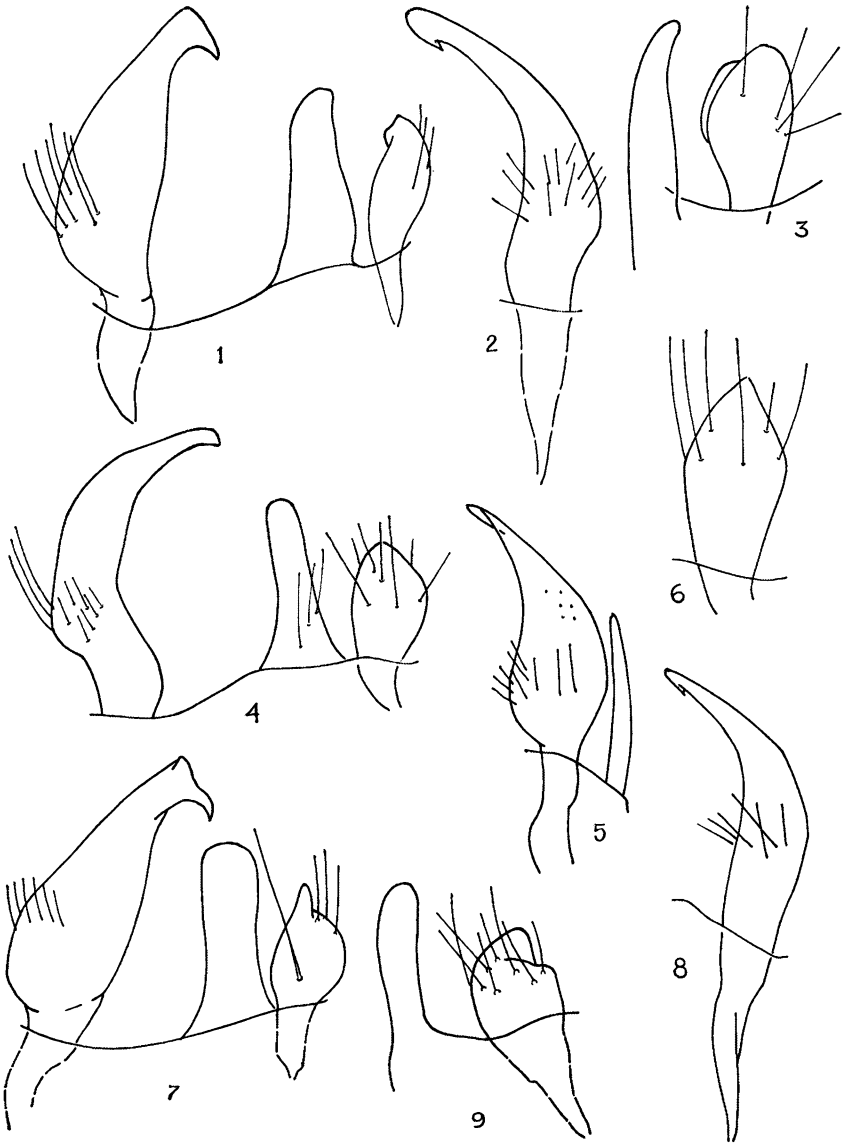
Male.—Overall color dark-brown, with scarce short pilosity. Head above and eyes brown, face lighter; first antennal segment light brown, last three dark brown; beak dark brown. Pronotum, mesoscutum and scutellum brown, slightly darker than head above, laterally lighter. Pleurae, coxae, fore and middle femora brown, as pronotum above. Hind tibiae, tarsi and abdomen blackish brown. Hemelytra basally brown and gradually darkening to blackish-brown at cuneus. Clavi with ivory-yellow spot; silvery tomentose areas as follows: a large triangular area just above yellow spot of clavi reaching from embolar margin to midwidth of clavi and from here to near basal angle of wing; a transverse area below yellow spot of clavi barely discernible; and a small triangular area before cuneus. Coria, between first two tomentose areas lighter than general color of hemelytra; membrane blackish, slightly translucent, with inconspicuous small dark areas near anal ridge, apex of cuneus, and apex.

Head nearly twice as wide as long (17:9); interocular space about twice as wide as width of eye (8:4.5). Antennal segments: 6, 26, 18, 14. Beak reaching to middle coxae. Pronotum short pilose; collar well developed, about as long as thickness of second antennal segment at apex (3:2.8); length of pronotum 18, basal width 23. Mesoscutum half as long as scutellum (3:6); scutellum much wider than long (10:6). Length 3.2 mm.

Genital segments as in figures 1 to 3.

Holotype.—Male, from Tocuyo, Estado Lara, Venezuela, June 30, 1964, J. Maldonado Capriles collector, U. S. Nat. Mus. type no. 70493; swept from an unknown tree. Paratypes.—Three males, same data, in my collection.

Runs to couplet 19 in Carvalho's (1944) key. Differs from *S. floridanus* Knight and *S. heidemanni* Poppius in having the last three antennal segments of the same dark color, the hemelytra and legs much darker, and in genitalic characters.



Figs. 1-3, *Sericophanes fuscus*, n. sp., ♂: 1, claspers, ventral view; 2, left clasper, lateral view; 3, right clasper, lateral view. Figs. 4-6, *S. nigripes*, n. sp., ♂: 4, claspers, ventral view; 5, left clasper, lateral view; 6, right clasper, lateral view. Figs. 7-9, *S. oscurus*, n. sp., ♂: 7, claspers, ventral view; 8, left clasper, lateral view; 9, right clasper, lateral view.

***Sericophanes nigripes*, n. sp.**

(Figs. 4-6)

Male.—Overall color blackish-brown, with outstanding ivory-white spots on clavi, and covered with long fine pilosity. Eyes short pilose. Lighter brown areas as follows: front of head, collar and pronotum laterally. Pronotum dorsally and scutellum the darkest areas; thorax laterally shiny blackish brown. First antennal segment grayish, reddish-brown on basal third; second blackish; third grayish-brown, blackish basally; fourth blackish. Beak with first three segments brown; fourth blackish-brown. Coxae dark brown; trochanters grayish; fore femora brown, middle and hind femora blackish-brown; tibiae blackish-brown on basal two-thirds, fading to brown at apex; tarsi with first segment brown, last two blackish brown. Abdomen shiny blackish-brown, basally shiny brown. Hemelytra brown on basal half, apical half blackish-brown; clavi with conspicuous ivory-white or ivory-yellow spot; silvery tomentose areas as follows: large triangular area basad to ivory spot, reaching from embolar margin to inner margin of clavi and from here to base of wing; below yellow spot of clavi with a transverse area from embolar margin to claval suture and then curved to apex of clavi; and a rhomboid area on apical margin of coria. Membrane blackish.

Head much wider across eyes than long (19:6); interocular space flat, inconspicuously transversely corrugate, nearly twice as wide as width of eye (9:5). Beak reaching to middle coxae. Antennal segments: 5, 21, 15, 11. Pronotum length 15, width at base 24; convex and shiny. Mesoscutum about half as long as scutellum (3:7), shiny. Scutellum wider than long (10:7). Length 3.3 mm.

Genitalia as in figures 4 to 6.

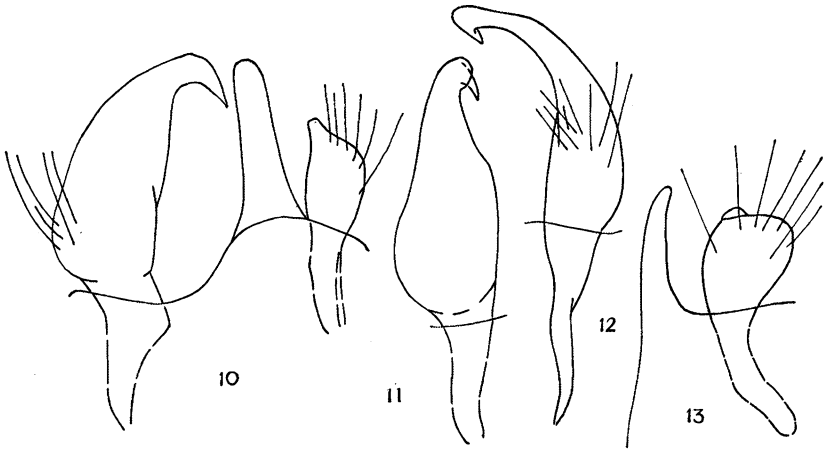
Female.—Brachypterous, ant-mimic. Blackish-brown, much as in male. First antennal segment and apex of head brownish; apex of posterior coxae yellowish-brown; ivory-yellow spot of wing-pad small, close to apex of scutellum. Head wider than long (17:9); interocular space over twice as wide as width of eye (9:4). Antennal segments: 6, 27, 19, 13. Pronotum short, subquadrangular, all margins slightly convex, as wide as long (15:15). Scutellum flat, slightly wider than long (12:10). Abdomen short, oval, wider than thorax; slightly shorter than from collar to tip of wing-pads (34:36). Length 2.9 mm.

Holotype.—Male, from Tinaco, Estado Cojedes, Venezuela, July 1968, J. Maldonado C. and Juan Pulido collectors, at light over a white sheet on the ground, U. S. Nat. Mus. type no. 70494. Allotype.—Female, same data, in the U. S. Nat. Mus. Paratypes.—Three males, same data, in my collection; one male in Dr. H. H. Knight's collection.

As *S. nigripes* n. sp. is covered with long abundant pilosity and has a yellow spot on the clavus it is close to *S. ornatus* (Berg); however the latter is a much lighter species and it differs in genitalic characters, especially in the shape of the right clasper.

***Sericophanes obscurus*, n. sp.**

Male.—General coloration blackish-brown, with yellow spot on clavi and short pilosity on pronotum. Above, excepting the usual silvery tomentose areas on hemelytra that stand out against the dark background, and appendages blackish-brown. Face ventrally, pronotum laterally, first antennal segment and fore femora brown. Hind coxae yellowish brown. Abdomen shiny, almost black. Hemelytra



Figs. 10–13, *Sericophanes pulidoi*, n. sp., ♂: 10, claspers, ventral view; 11, left clasper, ventral view; 12, left clasper, lateral view; 13, right clasper, lateral view.

with short yellowish-white spot on clavi well removed from apex of scutellum. The shape of the three tomentose areas much as in the previous species, the one above the cuneus subquadrate; cuneus slightly paler on inner longitudinal half.

Head length 10, width 17; interocular space slightly over twice as wide as width of eye (9:4). Antennal segments; 6, 28, 23, ?. Beak reaching to middle coxae. Pronotum short pilose. Length of pronotum 15, width at base 20. Scutellum much wider than long (10:6). Length 3.0 mm.

Genital segments as in figures 7 to 9.

**Holotype.**—Male, from El Palmar, Costa Rica, January 1962, J. O. Harrison collector, U. S. Nat. Mus. type no. 70495.

This species is close to *S. parviceps* Poppius, but *S. obscurus* n. sp. is much darker, the yellow spot is shorter and smaller, the last three antennal segments are blackish-brown, the front legs are darker and the genitalia, especially the right clasper, are different.

***Sericophanes pulidoi*, n. sp.**

(Figs. 10–14)

**Male.**—Overall color light brown, with yellowish spot on clavi, dark appendages and scarce short pilosity. Head uniformly light brown, eyes dark reddish-brown; beak brown, last segment blackish-brown; first antennal segment light brown, as head, last three segments blackish-brown. Pronotum, thorax ventrally, mesoscutum, scutellum and coxae light brown. Osteolar peritreme brownish. Fore femora brownish, darker than pronotum; middle and hind femora darker than fore femora; tibiae dark brown; tarsi dark brown basally darkening to black apically. Hemelytra as in fig. 14, mostly darker than pronotum; clavi with yellowish transverse spot; silvery tomentose areas as follows: a triangular area above yellow spot of clavi reaching from embolar margin to midwidth of clavi and from here to below basal angle of wing; a transverse band, between yellow spot and apex of clavi,

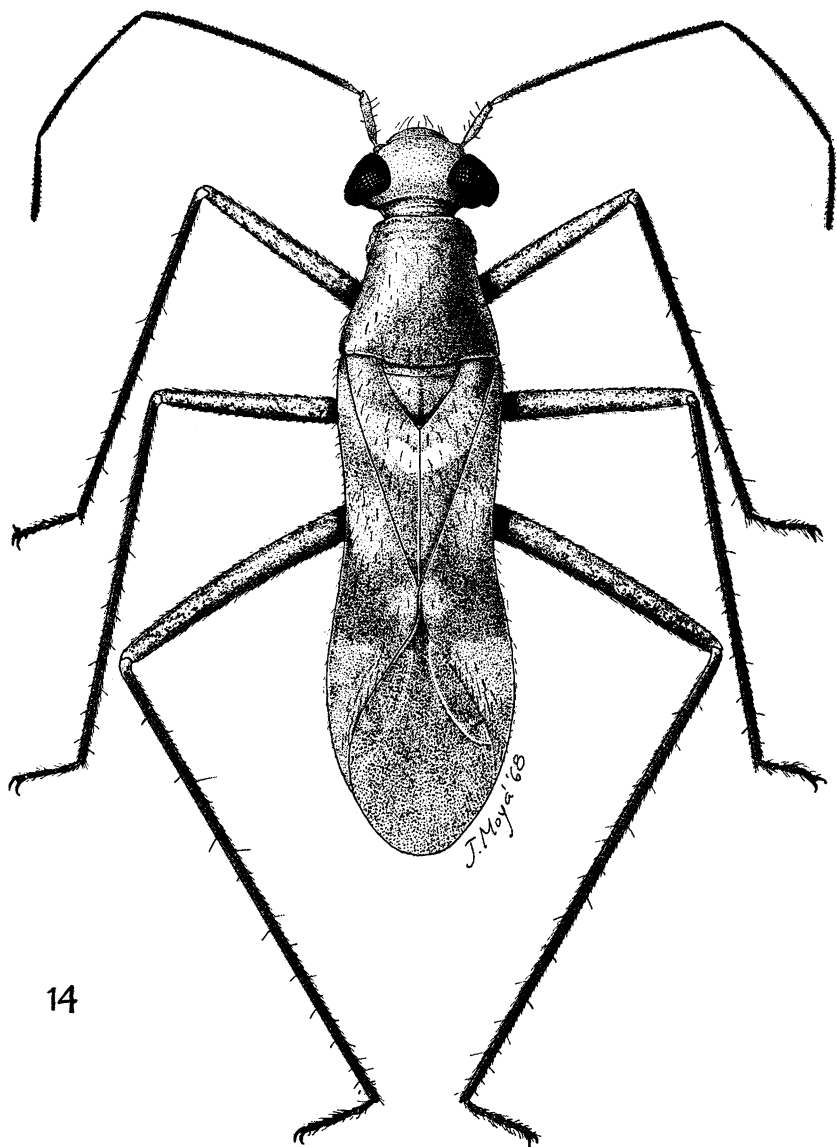


Fig. 14, *Sericophanes pulidoi*, n. sp., ♂.

from embolar margin and not quite reaching inner margin of clavi; a triangular spot above cuneus shorter across than width of cuneus. Cuneus and area between first two tomentose spots lighter than other brownish areas of forewing; membrane dark brown, slightly lighter on basal half.

Head much wider across eyes than long (16:7); interocular space smooth, twice as wide as width of eye (8:4). Beak slightly surpassing apex of middle coxae. Antennal segments: 7, 26, 21, 14. Pronotum about three-fifths as long as wide (16:22); convex, somewhat dull. Mesoscutum about half as long as scutellum (3:7); scutellum wider than long (9:7). Length 3.0 mm.

Genitalic structures as in figures 10 to 13.

Female.—Brachypterous, ant-mimic. Brownish, slightly darker than male; with darker appendages. First antennal segment and fore femora brownish, other segments of the respective appendages blackish-brown. Wing-pad with diagonal silvery tomentose stripe; clavi without yellowish spot; inner margin of wing pad after scutellum lighter brown. Abdomen thickly covered with short appressed pilosity that looks silvery in reflected light. Head twice as wide as long (18:9); interocular space two and one-half times as wide as width of eye (10:4). Antennal segments: 5, 26, 19, 13. Pronotum slightly humped, subquadrangular, all margins convex, as wide as long (15:15). Scutellum slightly convex, wider than long (12:10). Abdomen short, oval, longer than wide (32:27); shorter than length from collar to apex of wing pad (32:36). Length 2.8 mm.

Holotype.—Male, from the outskirts of Puerto Cabello, near the Naval Base, Estado Carabobo, Venezuela, July 13, 1968, J. Maldonado C. and Juan Pulido collectors, U. S. Nat. Mus. type no. 70496. Allotype.—Female, in the U. S. Nat. Mus., same data as holotype. Paratypes.—Four females and six males, in my collection, one male in Dr. H. H. Knight's collection. All specimens collected by sweeping from *Tephrosia cinerea*. I take great pleasure in naming this new species after señor Juan Pulido.

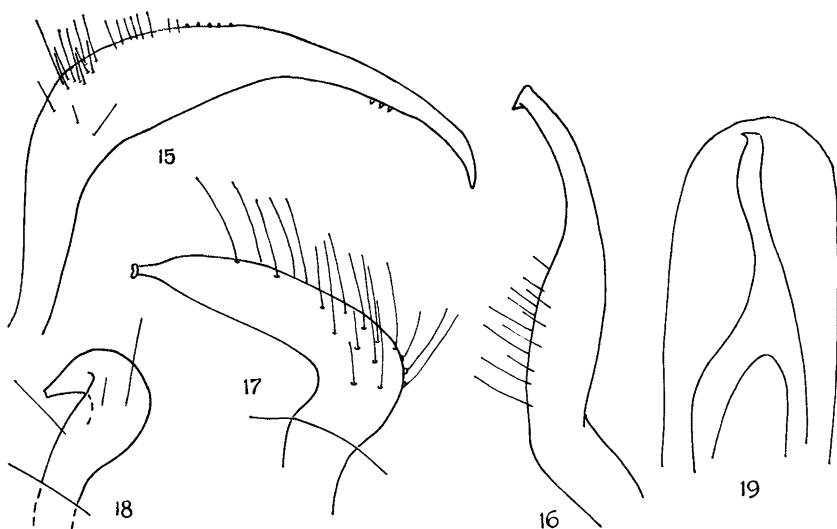
Because *S. pulidoi* has scarce short pilosity and a light brown color, it is close to *S. ocellatus* Reuter, but can be distinguished from the latter by its yellowish legs which are lighter than the body, the second antennal segment being subequal to the width of the pronotal base, and the right clasper lacking the thumb-like lateral projection.

#### ***Sericophanes constrictus*, n. sp.**

(Figs. 15–20)

Male.—Overall color yellow-orange, without yellow spot on clavi, and with long pilosity on pronotum. Head above and below yellow-orange; eyes reddish-brown. First three antennal segments yellowish; second, in front, blackish on basal half; fourth blackish. Beak with first three segments yellow-orange, fourth blackish. Long brownish semierect pilosity on head, eyes pronotum and hemielytra except on membrane. Pronotum yellow-orange to behind calli, posteriorly blackish; thorax laterally yellow-orange, a silvery tomentose triangular area above osteolar peritreme. Coxae yellowish. Fore and middle femora yellow-orange, same as thorax laterally; hind femora brownish; fore and middle tibiae brownish, hind tibiae reddish-brown; first tarsal segment yellowish, last two blackish. Mesoscutum and scutellum yellow-orange, apex of scutellum yellow. Hemielytra as in fig. 20, yellow-orange; clavi brownish before white of extreme tip; basal angle of corium to well beyond apex of scutellum translucent, after translucent area narrowly margined with brown along claval and embolar margins; a triangular translucent area margined with brown just above cuneus; embolium hyaline, a short brown





Figs. 15–19, *Sericophanes constrictus*, n. sp., ♂: 15, left clasper, dorsal view; 16, left clasper, lateral view; 17, right clasper, dorsal view; 18, right clasper, lateral view; 19, tip of aedeagus, ventral view.

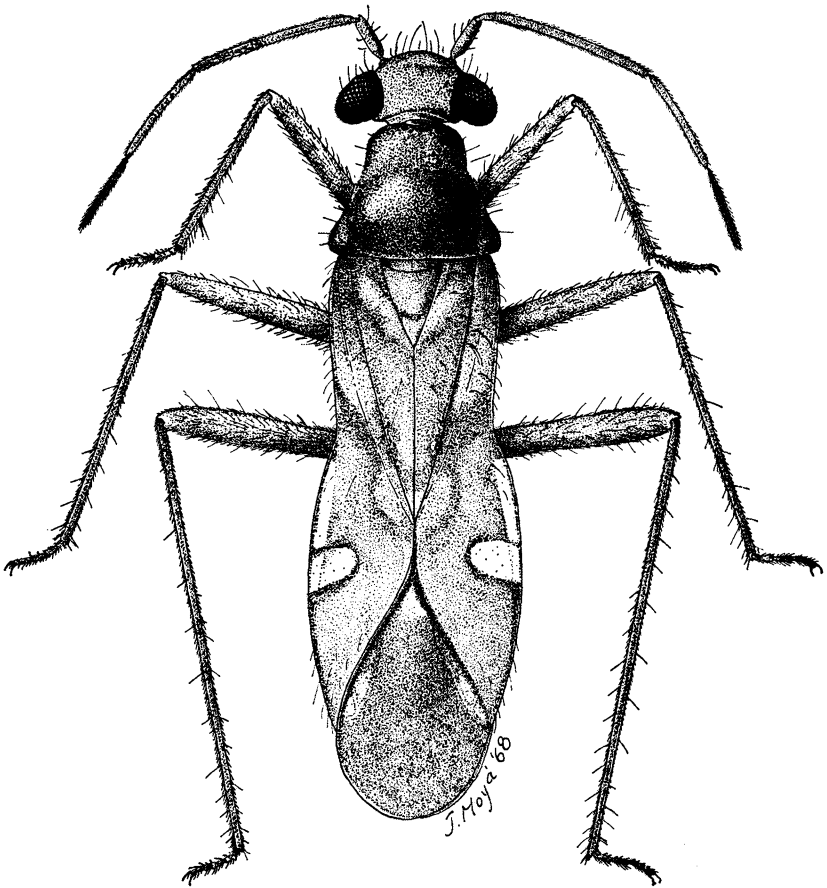
spot before triangular translucent area before cuneus; cuneus with outer margin brownish; membrane mostly blackish, from anal ridge to near apex narrowly margined with blackish; lighter grayish areas below anal ridge, inward of blackish margin, and after apex of cuneus. Abdomen shiny brownish-yellow from base to widest part, thence blackish to apex; some small reddish areas on lateral margins of lighter segments.

Head nearly three times as wide as long (20:7); interocular space less than twice as wide as width of eye (9:5.5); inner margin of eye concave to receive base of antennae; posterior margin of head slightly concave. Antennal segments: 7, 29, 17, 15. Pronotum clearly constricted; anterior lobe nearly parallel-sided; posterior margin convex; collar shorter than thickness of second antennal segment (1.6:2); length 20, width 26. Mesoscutum relatively short, about a third as long as scutellum (2:7); scutellum about as long as wide (7:8). Hemelytra conspicuously constricted about midlength of embolium; finely punctate. Length 3.6 mm.

Genitalic structures as in figures 15 to 19.

**Holotype.**—Male, from Hope, near Georgetown, British Guiana, July 16–20, 1962, from a light-trap, J. Maldonado C. collector, U. S. Nat. Mus. type no. 70497. **Paratype.**—Male, same data, in my collection.

This species is close to *S. disperus* Carvalho but differs from the latter in having the beak reaching only to the middle coxae, in having the head and anterior lobe of the pronotum yellow-orange and the posterior lobe of the pronotum blackish, and in not having a silvery area along the clavo-corial suture. There are also minor differences in



20

Fig. 20, *Sericophanes constrictus*, n. sp., ♂.

the claspers of these two species and the tips of the aedeagi are different. The genitalic structures clearly indicate a close relationship between these species and that both share a separate position within the genus.

#### REFERENCES

- Carvalho, J. C. M.** 1944. Mirídeos neotropicais: sobre o gênero "Sericophanes" Reuter, com descrição de uma nova espécie (Hemiptera). *Rev. Brasil. Biol.* 4(4):517-530.
- Knight, H. H.** 1968. Taxonomic review: Miridae of the Nevada Test Site and the Western United States. *Brigham Young Univ. Sci. Bull. (Biol. ser.)* 9(3):1-282.