

VARGAS, L., and A. ^ADIÁZ NÁJERA. 1959. Descripción del macho de Sabethes (Sabethes) belisarioi Neiva, 1908. Nueva especie para México. (Insecta, Diptera). Rev. Inst. Salubr. Enferm. Trop. (Mex.) 18 (3): 299-308.

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Description of the male of Sabethes (Sabethes) belisarioi Neiva, 1908.
A new species for Mexico (Insecta, Diptera).

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This species was described on the basis of male specimens and later Lane and Cerqueira (1912) gave a redescription of the female in their study of the Sabethines of America, citing the larvae and males as unknown. Lane (1953), in referring to the females of this same species, noted also that males, pupae, and larvae were unknown and that the type locality is Brazil, with its distribution including Pará, Amazonas, Mato Grosso, Goiás, São Paulo, Rio de Janeiro, and Paraná, and that its distribution also included the following countries: Brazil, Bolivia, Venezuela, Colombia, Peru, the Guyanas, Trinidad, and the northern part of Argentina.

We have at our disposal 3 specimens (2[♀] and 1[♂]) that we have determined as Sabethes (Sabethes) belisarioi. These were captured on the road to the ruins of Palenque, in the aldea of El Naranjo, State of Chiapas, Mexico, approximately at an elevation of 320 meters above sea-level. At the same locality we also obtained several females of Sab^ethes (Sabethes) cyaneus and a single specimen of Sabethes (Sabethes) tarsopus. We take the opportunity of using this male to furnish a description both of the external characters and those of the genitalia, noting at the same time its presence for the first time in Mexico.

Sabethes (Sabethes) belisarioi Neiva, 1908.

MALE. Same size as female. Antennæ as plumose as those of the female,

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with very fine and short pilosity, silvery, basally black; groups of sparse slender black bristles at the articulations of each segment. Length of antenna little more than proboscis. Palpi shorter than clypeus, covered with wide, brilliant metallic blue scales. Proboscis shorter than forefemur, with dark shining scales. Occiput black, with dull purple scales.

Thorax; Pronotum covered anteriorly and posteriorly with very wide, short, shining dark green scales; anterior pronotum with sparse short bristles only along border. Mesonotum black, with scales as on pronotum, with stiff bristles on the upper side of wing base. Scutellum with a few green scales, and black ones at extreme sides. Postnotum black with covering of gray scales and a group of black bristles; pleura dark brown, also covered with gray scales. Wing as in female in color and shape of scales, but smaller. Legs: Midfemur longer than fore- and hindfemora; forefemur longer than hindfemur. Foreleg: Scales of femur purple with blue reflections, shining; tibia with long scales arranged to resemble a bird feather, along the whole length of one side of the tibia, on the other side only in apical half and continuing along one side of basitarsus; 2nd segment with blue scales and a spot of very white scales on only one side of tarsus, starting at basal 1/3 and continuing to tip; segments III, IV, and V nearly black, but interspersed with a few blue scales; claws simple. Midleg: Femur dark shining blue; tibia with white spot preceded by blue basal spot, the 2 of equal size and together occupying entire basal half, apical half with groups of piliform scales longer than those of foretibia, with irregular narrowings at apices, continuing along entire basitarsus, the whole resembling a feather, the entire median line with very narrow, short, shining scales; 2nd tarsal segment pure white, with long scales only along posterior side; 3rd segment black mixed with white scales in basal 1/3; 4th and 5th segments black; claws simple. Hindleg: Scales brilliant blue, spines short and black; apical 1/3 of basitarsus with long, piliform scales making the tarsus resemble a brush; tarsal segments IV and V with spot of white scales only on one side. Claws ~~simple~~,

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those of midleg longer than those of fore- and hindlegs.

Abdomen: Dorsally black with shining blue scales; venter dark brown with abundant yellow setae and whitish scales; sternite I with conspicuous group of silvery scales. Genitalia: Basistyle twice as high as wide, with 3 very long medial setae; medial plates with outer margins rounded and with 3 short stout setae; surface with fine sparse pilosity. Dististyle of complex shape, as in all species of this group, base very slender and with 3 terminal lobulae, one lateromesal, one medial, and one lateral, mesal one bearing strong vertical arcuate spines along upper margin and other horizontal spines of greater size and with dilated tips, mesal parte of this lobule with group of short slender spines; medial lobule convex, with large spines on entire distal margin; lateral lobule with 2 large tufts of long arcuate filaments. Mesosoma as in Fig. 2. Tergite IX with 2 groups of stout setae, acute and arcuate, 7 in each group, with interspace convex and with opposed side distinctly concave. Sternite X with strongly pigmented, stout apical spines.

Allotype. Male mounted on pin, but with legs and genitalia mounted on 2 *slides* catalogued in the Laboratorio del Instituto de Salubridad y Enfermedades Tropicales (Laboratory of the Institute of Health and Tropical Diseases) under numbers 6465 and 6465a. Locality of allotype: Road to Palenque ruins, aldea of El Naranjo, State of Chiapas, Mexico, March 26, 1958 (A. Diaz Nájera).

Sabethes (Sabethes) tarsopus Dyar and Knab, 1908.

This species is very similar to Sabethes belisarioi, but of lesser size. It was originally collected in Paraiso, Boca del Toro, Panama Canal Zone. It has been found subsequently in Venezuela, Surinam, Brazil, Colombia, and Peru. According to Martini (1935), Dyar also recorded it from Córdoba, Veracruz, *Mexico*, March 16, 1908 (Knab). More recently Galindo, Carpenter, and Trapido (1951) described the previously unknown male genitalia on the basis of the *study* of 32 specimens obtained in La Victoria, Cerro Azul, Province of Panama;

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Buena Vista, Province of Colón; Tucue, Province of Coclé; and Cerro Tute, Santa Fe, Province of Veraguas; all in the Republic of Panama. We have identified as this species 2 male specimens, one taken at the same time and place as the S. belisarioi and the other in the El Paval aldea, Mapastepec, Chiapas, 1.VI.58 (B. Liévano). The former locality is on the slope toward the Gulf of Mexico and the other is on the slope toward the Pacific Ocean.

Sabethes (Sabethes) cyaneus (Fabricius, 1805)

This species has South America as its type locality and it has been found in St. Vincent, Panama, Surinam, Honduras, Trinidad, Venezuela, Colombia, Brazil, and northeastern Argentina. We here record its presence in Mexico. Females have been captured and males have been reared in the following places: Samuro, Teapa, Tab., 25.XI.51 (M. Figueroa); Teapa, Tab., reared males, 3.IV.55; Galeana, Teapa, Tab., 21.I.58 (M. Luna B.); road to Palenque ruins, El Naranjo aldea, Chiapas, Mexico, 26.III.58 (A. Diaz Nájera).

DISCUSSION

According to Lane and Cerqueira (1942), the subgenus Sabethes comprises species which have legs bearing long piliform scales in compact groups, prominent or not, in the form of an oar. These include the following 9 species:

- S. (S.) amazonicus Gordon and Evans, 1922.
- S. (S.) belisarioi Neiva, 1908.
- S. (S.) tarsopus Dyar and Knab, 1908.
- S. (S.) cyaneus Fabricius, 1805.
- S. (S.) albiprivus Lutz, 1903.
- S. (S.) quasicyaneus Peryassó, 1922.
- S. (S.) batesi Lane and Cerqueira, 1942.
- S. (S.) bipartipes Dyar and Knab, 1906.
- S. (S.) purpureus Theobald, 1907.

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Out of this list there remains only 1 species whose males are not known, viz. amazonicus, and which we cannot relate to those of belisarioi here described; we can, however, state that the females are easily separable from belisarioi by the larger size of the latter. In tarsopus the tufts of piliform scales on the tip of basitarsus II are lacking, although they have a few of this type on ~~one~~ side of the apical 1/3 of the tibia and the basitarsus is also covered on one side of the apical 1/3, but not forming a tuft. In S. tarsopus the outer face of the tip of the hindfemur has a well defined spot of shining white scales, absent in S. belisarioi or if present confused.

The 2nd foretarsal segment of S. belisarioi has a white spot covering only part of one of its faces; in S. tarsopus this spot is larger and extends over the entire segments III and IV. There is, thus, a great difference between tarsopus and belisarioi. The males of the other species cited in the list are separated from those here described mainly by the number of setae in the 9th tergite and other significant characters in the basistyle and dististyle. As far as S. cyaneus is concerned, which we collected in larger numbers in Mexico than S. belisarioi and S. tarsopus and have obtained males, we do not find it taxonomically related to the former species, differing in coloration of the legs and distinct shape of the male genitalia, characters which greatly facilitate its separation.

SUMMARY

(Provided in both Spanish and English in the original).

REFERENCES

Galindo, P., S. J. Carpenter, and H. Trapido. 1951. (etc.) *etc.*

(as in original).

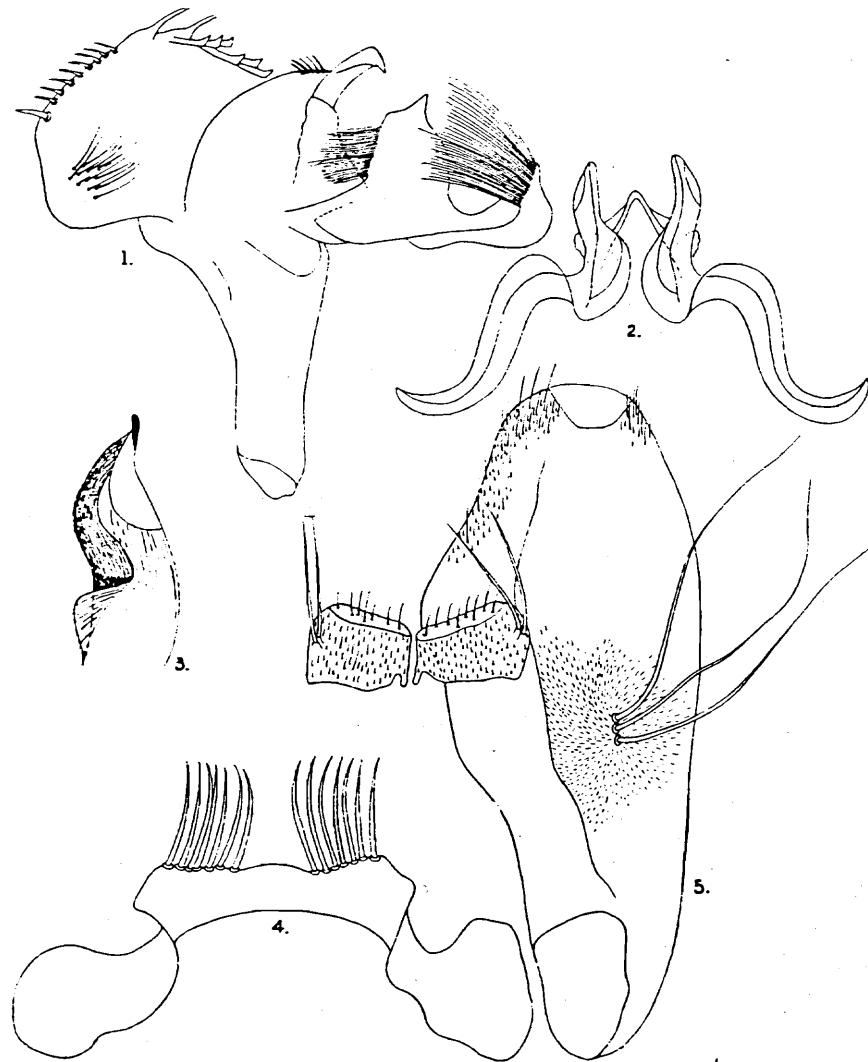
Sabethes (Sabethes)

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Sabethes (sabethes) ~~boliviana~~ ortizi n. sp.

- | | |
|----------------------|---------------------|
| 1 - Dististilo | 2 - Mesosoma |
| 3 - Décimo esternito | 4 - Noveno tergito. |
| 5 - Basistilo | |

- | | |
|----------------|----------------|
| 1 - Dististyle | 2 - Mesosoma |
| 3 - Sternite X | 4 - Tergite IX |
| 5 - Basistyle | |

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I

II

III

11.8 mm.

12.6 mm.

14.5 mm.

PATAS

Sabethes (♂) ~~bertoni~~ ortizi ♂

I. 10 | . 1 | CH

I

II

III

90 mm.

100 mm.

120 mm.

PATAS

Sabethes (♂) tarsopus ♀

