

NEW SPECIES OF THE GENUS  
SPHINGONOTUS FIEBER (ORTH., ACRID.)  
FROM THE CANARY ISLANDS.

By Leo Mistshenko.  
(Leningrad).

(With 2 figs.).

In the spring of 1936 the author of the present paper received from Dr. B. P. Uvarov a small series of *Sphingonotus* from the Canary Islands, for determination. The series included two specimens from the collection of Dr. C. Willemsse.

The investigation of the above-mentioned series has shown that it consisted of one species un-

of the eye a little larger than its horizontal diameter and somewhat less than the interocular space. Face vertical. Frontal ridge hardly depressed, between antennae slightly dilated, constricted under the median ocellum and obsolescent towards the clypeus; seen in profile flat, not prominent to the antennal bases; margins thick; its surface somewhat rugulose. Fastigium of the vertex strongly sloping, almost vertical, vertex slightly depressed, smooth; margins distinct; median keel slight; the maximum width of the vertex a little larger than the width of the frontal ridge between antennae. Temporal foveolae rather distinct, punctured. Antennae thin, almost equal to head and pronotum together.

Pronotum in the frontal part slightly constricted;

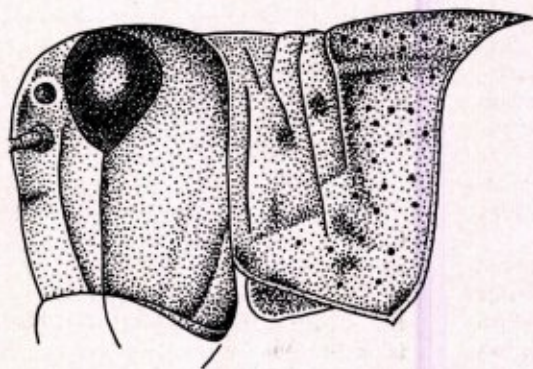


Fig. 1.

*Sphingonotus willemssei* sp. n.

Fig. 1. Lateral view of the head and pronotum of ♀ (type); × 8.

Fig. 2. Dorsal view of the head and pronotum of ♀ (type); × 7,5

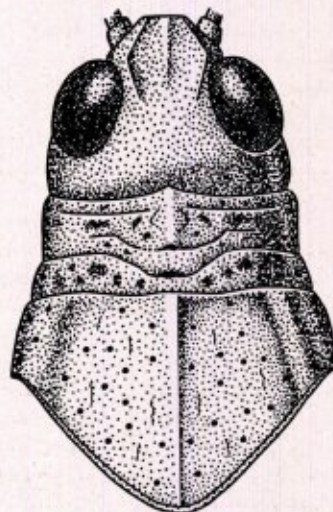


Fig. 2.

known to science. The type and allotype of this species are preserved at the Zoological Institute of the Academy of Sciences in the U. S. S. R., Leningrad, paratypes are in the British Museum of Natural History and Dr. Willemsse's collection.

The author wishes to express his thanks to Dr. C. Willemsse (Eygelshoven, Holland) for kindly placing at his disposal his own valuable material; to Dr. B. P. Uvarov (London) for entrusting him with the determination of the collection; and to Dr. E. F. Miram, curator of Orthoptera at the Zoological Institute of the Academy of Sciences in Leningrad for her valuable assistance in the present work.

*Sphingonotus willemssei* sp. n. (Figs. 1 and 2).

♀ (type). Body of medium size, robust, with short hairs.

Head slightly elevated above the level of the pronotum, finely punctured. Eyes small, oval, very slightly prominent sideways; the vertical diameter

transverse sulci distinct, interspace between second and third transverse sulci with slightly callous platform; metazone slightly convex, finely and densely punctured and slightly rugulose, almost twice as long as the prozona; posterior angle somewhat larger than 90°, broadly rounded; shoulders rounded; median keel scarcely visible before first sulcus, between sulci absent and thin, linear in the metazona. Lateral lobes of the pronotum vertical, in the posterior part densely punctured; anterior margin wavy, anterior lower angle obtuse, rounded; posterior margin straight, posterior lower angle rounded, somewhat dented; lower margin nearly straight, obliquely-ascending. Lower parts of meso-episternum densely and coarsely punctured.

Elytra slightly narrowed towards the apex, reaching to the apex of the hind tibia (if the latter is extended straight backwards); their length 5.40 (in some paratypes 6.66) times as great as their maximum width; venation rather sparse; apical part of second branch of the median vein with

4 branches (in some paratypes with 3 branches); intercalary vein in the discoidal area straight, in its whole length parallel to the discoidal vein, smooth. Wings triangular with sparse venation; their length 1,69 (in some paratypes 1,86) times as great as their maximum width.

Hind femur slender; their length 4,06 (in some paratypes 3,76—4,11) times as great as their maximum width. Hind tibia a little shorter than the hind femur, with 8—9 spines on the outer side and 10 spines on the inner side.

Sternum very finely and densely punctured; its width a little greater than its length; width of the interspaces between lobes of the meso- and metasternum nearly 2,25 times as great as their length.

Valvae of the ovipositor with short, somewhat subobtusate points; basal parts of the lower valvae very slightly rugulose, nearly smooth.

General coloration greyish-brownish-ochreous. Ocelli dark yellow. Elytra slightly pellucid; basal third, indistinct median fascia and some rather larger spots in the apical part — brownish-greyish; veins pale. Wings in the basal part blue; veins in the apical part darkened. Hind femur on the inside, in the greater part, black-bluish with two complete pale fasciae; lower margin blue-blackish. Hind tibiae dark bluish with a pale fascia before the black base.

♂ (allotype). Like the female, smaller. Vertical diameter of the eye nearly equal to the interocular space. Frontal ridge more strongly depressed than in the female. Vertex more strongly depressed than in the female. Antennae larger than head and pronotum together. Median keel before first sulcus more strongly elevated than in the female. Length of the elytra 5,10 (in some paratypes 5,44) times as great as the maximum width; apical part of the second branch of the median vein with 3 branches. Length of the wings nearly 1,80 times as great as the maximum width. Length of the hind femur nearly 3,5 times as great as the maximum width.

Coloration like that of the female.

author from Bulgaria, but differs from it by the following characters:

*Sph. willemsei* s. p. n.

♀ ♀. Head finely punctured.

Maximum width of the vertex a little greater than width of the frontal ridge between antennae.

Length of the lateral lobes of the pronotum considerably less than the median height.

Sternum coarsely punctured; width of the interspaces between lobes of the meso- and metasternum 2,25 times as great as the length.

Hind tibiae dark bluish.

*Sph. coeruleans exornatus* N e d.

♀ ♀. Head finely punctured.

Maximum width of the vertex 1,5 times as great as the width of the frontal ridge between antennae.

Length of the lateral lobes of the pronotum scarcely less than the median height.

Sternum coarsely punctured; width of the interspaces between lobes of the meso- and metasternum 1,5—2,0 times as great as the length.

Hind tibiae dark bluish.

The discovery of this endemic species in the Canary Islands is a very interesting fact, especially as *Sphingonotus willemsei* belongs to the group *Coeruleans*<sup>2)</sup> the representatives of which, up to the present time, have not been found in these islands. Moreover the discovery of this species supplies the missing link in the distribution of this group, connecting the areas of the West Indian species with those of the species occurring in the Palearctic region. This once more emphasizes that the *Sphingonotus* found in Mexico, the Galapagos Islands, the Antilles and the Canary Islands occupy fragments of a formerly continuous area of the genus.

The writer dedicates this species to Dr. C. Willemse, author of numerous works on *Orthoptera*.

|                            | type ♀  | allotype ♂ | paratypes ♀ ♀ | paratypes ♂ ♂ |
|----------------------------|---------|------------|---------------|---------------|
| Length of the body         | 27,6 mm | 21,2 mm    | 25,4—29,5 mm  | 19,8—20,4 mm  |
| "    "    "    pronotum    | 5,4 "   | 3,6 "      | 4,6—5,2 "     | 3,4—3,5 "     |
| "    "    "    elytra      | 27,4 "  | 20,2 "     | 24,9—27,2 "   | 18,8—19,6 "   |
| "    "    "    hind femora | 13,0 "  | 10,4 "     | 11,4—12,6 "   | 9,2—10,0 "    |
| "    "    "    hind tibiae | 11,5 "  | 9,2 "      | 10,0—11,2 "   | 8,0—8,8 "     |

**Patria.** Canary Islands: Teneriffe, Montaña Blanca, 9.000 ft., IX, 1931, 5 ♀ ♀, 2 ♂ ♂ (H. B. Cott); Teneriffe, Las Cañadas, 2.200 met., 21, IX, 1 ♀ (type), 1 ♂ (Coll. C. Willemse).

This species is near to the *Sphingonotus coeruleans exornatus* N e d e l k o v<sup>1)</sup>, described by that

<sup>1)</sup> Nedelkov, N. Vtor pri nos k'm entomologitshnata fauna na B'lgarije. Perioditsh. Spisanie na B'lgar. Knizh. Druzh. v Sofija. Tom. LXVIII (68), N. 5—6, Sofija, 1907, pp. 422—423.

<sup>2)</sup> Mistshenko, L. Revision of palaeartic species of the genus *Sphingonotus* Fieber (*Orth., Acrid.*) Eos, vol. XII, Nos. 1—2, 1936.