



### C18.1: *S. flammeus* ♂

#### 18. Genus *Sirotremex* Smith

Fig. C18.1 (male lateral habitus)

*Sirotremex* Smith, 1988: 244. Type species: *Sirotremex flammeus* Smith; monotypic.

#### Diagnostic combination

**Both sexes** of *Sirotremex* probably (female unknown) are recognized by the fore wing with a broadly rounded apex and a short 3R1 cell (2.2 times as wide as long), and the flagellum with 10 or 11 short flagellomeres (middle flagellomeres 1.5 times as long as wide).

#### Description

**Color.** Surfaces dark brown and without metallic reflections.

**Head.** Antennal sockets with distance between their inner edges 2.5 times distance between inner edge of eye and outer socket edge (Fig. C18.2, in black). Distance between inner edges of lateral ocelli 1.1 times as long as distance between outer edge of lateral ocellus and nearest edge of eye (Fig. C18.2, in white). Maximum distance between outer edges of eyes longer than maximum width of head (thus, in frontal view, genal edge intersected by outer edges of eyes) or slightly shorter (Figs. C1.18, C18.2). Minimum distance between inner edges of eyes 1.6 times maximum eye height (Fig. C18.2, in red). Gena without ridge behind eye and without white spot, with large pits, each pit not elevated along posterior edge as

low tooth. Head with setae sharp at apex. Antenna with 10 or 11 flagellomeres, and middle flagellomeres in dorsal view 1.5 times as long as high; middle flagellomeres with sensory pits on ventral surface, and apical 5 or 6 flagellomeres each with sensory pits on inner surface only, but without oval impression on inner dorsal and inner ventral surfaces.

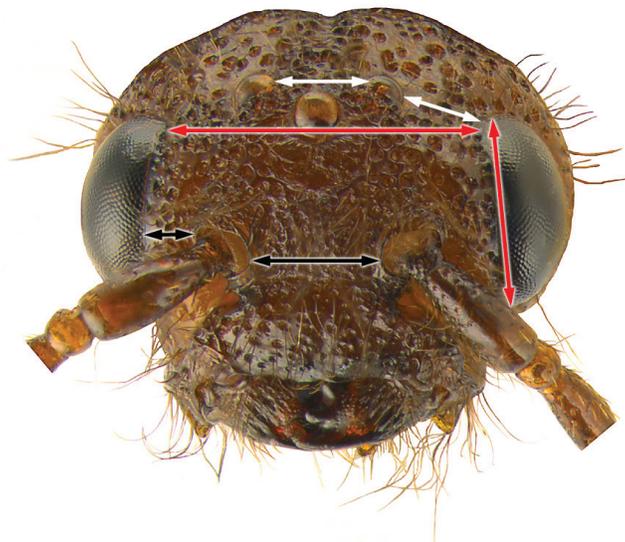
**Thorax.** Pronotum smooth or pitted over less than 0.5 of anterior vertical surface. Mesoscutum densely pitted over median 0.5–0.7 only. Mesotarsomere 1 in lateral view enlarged, its dorsal and ventral edges quite divergent in basal half and base of tarsomere about 0.5 times its maximum width. Metatibia with two apical spurs, in **male** in lateral view metatibia 3.7–4.1 times as long as maximum width. Metatarsomere 2 length and height not described as female unknown. Metatarsomere 5 shorter than metatarsomeres 2 + 3. Fore wing with apex broadly rounded (Fig. B1.49), with vein 2r–m joined to cell 2M (as in Fig. B1.51), with vein 2r–m present, with cell 1Rs2

about as wide as long (as in Fig. B1.71), with cell 3R1 2.2 times as long as wide (Fig. B1.53), with vein 2r–rs joining stigma near middle, with stigma gradually attenuated even distal to junction with vein 2r–rs (as in Fig. B1.25), with vein Cu1 usually present, with vein 1cu–a joining vein Cu about mid way between veins 1m–cu and M, with vein 2A extending along posterior edge of wing for 0.4 times length of cell 1A length (as in Fig. A3.30), and with vein 3A absent. Hind wing with anal cell.

**Abdomen.** Cornus, median basin, sheath, and ovipositor not described as female unknown.

### Diversity and distribution

One species, known only from two males, is recorded from northwestern Mexico (Smith 1978; Taeger and Blank 2011, Taeger *et al.* 2010).



C18.2: *S. flammeus* ♂

### 19. *Sirotrex flammeus* Smith

Fig. C18.1 (male lateral habitus)

Fig. C19.1 (male dorsal habitus)

Fig. C32.3 (map)

*Sirotrex flammeus* Smith, 1988:244. Holotype male (CNC), with right flagellomeres 6–11 and left metatibia and metatarsus missing, labeled [White] “8 mi.E.El Salto Dgo.MEX. 8,200’ 25 June 1964 L.A. Kelton”; [White red border] “HOLOTYPE *Sirotrex flammeus* D. R. Smith”; [Red] “HOLOTYPE *Sirotrex flammeus* Smith CNC No 20266”. Type locality: Mexico, Durango, 8 miles E. El Salto.

#### Diagnostic combination

Both sexes probably (female unknown) are recognized by the broadly rounded apex of the fore wing.

**FEMALE.** Unknown.

#### MALE. Description

Most character states except color of body and microsculpture of sternum 9 should apply to both sexes.

**Color.** Body, antenna, palps, mandible and legs dark brown and without metallic reflections. Both wings yellow tinted, with extreme apex tinted black (Fig. B1.49).

**Head.** Median furrow behind ocelli well outlined. Flagellum with 10–11 flagellomeres, and in lateral view middle flagellomeres about 1.5 times as long as high (Fig. B1.55). Head smooth between pits. Gena and lateral area of vertex with pits 0.3–0.5 diameter of lateral ocellus and usually 1.0 pit diameter apart; frons, median section of vertex, and lateral 0.3 of mesoscutellum with pits 0.2–0.3 diameter of lateral ocellus and mainly touching; clypeus with pits 0.2–0.3 diameter of lateral ocellus, generally

shallow, and small. Head with long setae.

**Thorax.** Thorax smooth between pits. Pits about 0.3 diameter of lateral ocellus and less than one pit apart on mesepisternum and metepisternum, net-like on median section of mesoscutum and all of mesoscutellum, and denser laterally on tergum 1. Pronotum with long setae.

**Abdomen.** Abdomen with pits 0.2–0.3 diameter of lateral ocellus, shallow, and small. Setae on tergum 1 long medially and laterally, on tergum 2 long laterally, on terga 3–8 short and scattered laterally, and on disc of terga 2–8 and sterna 2–9 less dense than elsewhere. Meshes of microsculpture outlined over all terga and sterna of abdomen; posterior 0.5 excluding lateral area of terga 2–8 with pitted sculpticells, followed by clearly raised scale-like sculpticells on most of posterior 0.5 of terga 2–7 and less of tergum 8; terga 1, 2–8 laterally and extreme apex, and sterna 2–9 with flat sculpticells forming weak scales.

#### Taxonomic notes

It is not clear what a female of this species will look like, but the following characters should help to recognize it when it is eventually discovered: the fore wing shape and the proportion of cell 3R1, and the narrow gena intersected or almost intersected by the outer eye edge in frontal view.

#### Host and phenology.

The host of *S. flammeus* is unknown. The species may be close to *Sirex* and likely is associated with conifers.

#### Range.

Mexico: Durango (Fig. C32.3).

Specimens studied and included for the distribution map: 2 males from CNC.



C19.1: *S. flammeus* ♂