

Contribution to the Study of Hepialidae (9th Note):¹
The Genus *Phassodes* Bethune-Baker (Lepidoptera)

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The genus *Phassodes* was described by Bethune-Baker in 1906 (Pr. Zool. Soc. London, p. 89) for six species from the Fiji Islands. Earlier, Rothschild (Novit. Zool., 2:482, 1895) had described a species from Fiji, *vitiensis*, which he placed in the genus *Leto* Hübner. Later, Tams (Ins. of Samoa, 3, Lepidoptera, fasc. 4:289, 1935) refers specimens collected by Buxton and Hopkins to *Phassodes vitiensis* (Rothschild), indicating that Rothschild's species does not belong in *Leto*.

Through the kindness of Mr. Riley and Mr. Tams, we have been able to see in the British Museum (Natural History) the specimens cited in the literature. Here follow a few remarks based on the examination of that material.

In the first place *Phassodes nausori* Bethune-Baker is a synonym of *P. vitiensis* (Rothschild). Then, in spite of the signs "♂" placed by Bethune-Baker before each of his descriptions, only his *Phassodes odore-valvula* is a male; the other descriptions are based on females. It is likely that these descriptions are those of females belonging to a very variable species, but we have not sufficient material to synonymize any of Bethune-Baker's names, except *P. nausori*.

The genus *Phassodes* is valid, and we shall complete here Bethune-Baker's original diagnosis by a description of the male genitalia and a few words on the scent gland.

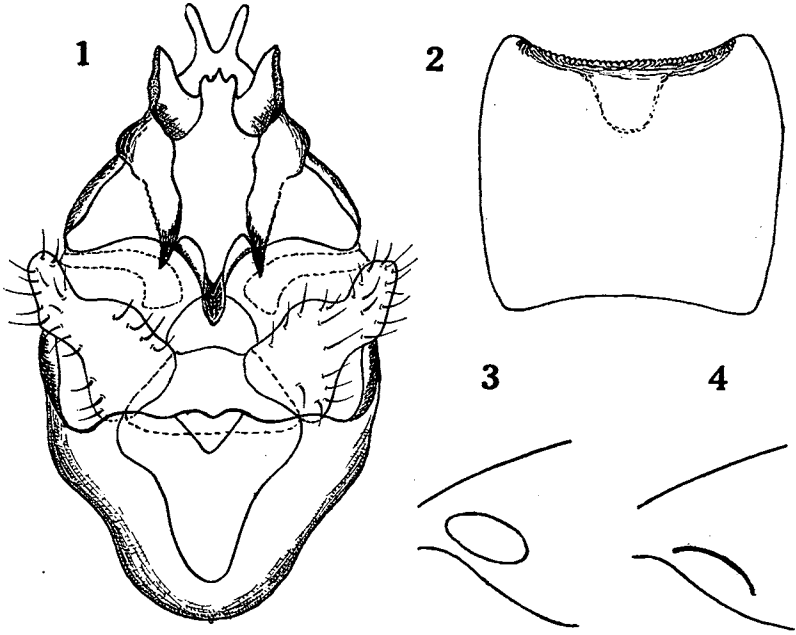
The antennae are filiform, short, reaching one-tenth the length of the costa; the labial palpi are porrect, with three joints, they are little developed but nevertheless visible from above the head; the eyes are very broad. The metathoracic legs are short. But, in the male, more characteristic is the presence, at the base of the forewings, of a scent gland, placed in the thickening of the wing. On the ventral side is a broad, oval, yellowish plate (fig. 3), without scales, although the remainder of the base of the wing is covered with them. On the dorsal side, the gland is open in a bow-shaped slit (fig. 4) through which is seen an area abundantly covered with very slender, short and blackish hairs. This area corresponds to the yellowish plate on the ventral side. Between the slit and the Sc, the base of the wing is strongly swollen. This case is interesting because it is the only one known to exist in the Hepialidae, and is unrecorded in the literature, in spite of a brief allusion to it by a line in Bethune-

¹ Seventh note: Bull. Soc. Ent. France, 1949, pp. 72-73. Eighth note: Bull. Soc. Zool. France, 74: 47-49, 1949.

Baker's description. In the Hepialidae the scent glands are usually on the metathoracic tibiae, generally in the shape of long, specialized hairs (for example, *Hepialus humuli* L., *Charagia daphnandrae* Lucas, *Phassus trojesa* Schaus), but sometimes altering the whole shape of the tibiae (*Hepialus hectus* L.).

Male genitalia. The eighth sternite is in the shape of a subrectangular plate, with the caudal edge better sclerotized, and with pads (fig. 2). The dorsal parts of the genitalia (fig. 1) have two points that may represent an uncus; the processes of the tegumen are well developed, pointed at their apex, the whole of the apical parts being bounded to a medial plate in the form of a gutter; this structure is connected with the suspensorium; the juxta is subtriangular; the valves are upturned, broad at their bases and suddenly narrowed at their distal third.

The genus is known now only from Fiji and Samoa, but serious research might show that it exists in other islands of the South Pacific.



Phassodes odorevalvula Bethune-Baker. Fig. 1, male genitalia; fig. 2, 8th sternite of male; fig. 3, base of anterior wing, male (ventral side); fig. 4, same, dorsal side (showing scent gland).