

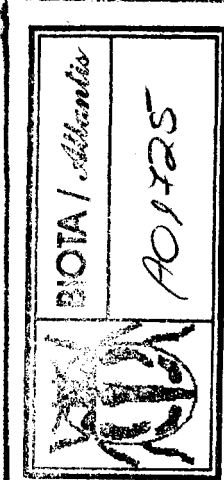
X Stickerberg, B. 1960.

Diptera (Brachycera) Rhagionidae

(1960)

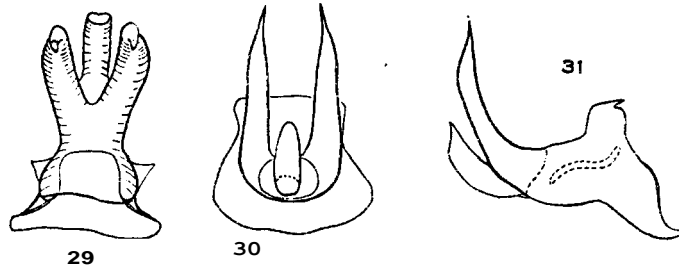
S. Afr. anim. life, 7: 216-308.

Uppsala, Almqvist & Wiksell



DIPTERA: RHAGIONIDAE

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Figs. 29-31. *Lampromyia (L.) flavida*. Aedeagus in dorsal, posterior and lateral view.

longer laterally. Apical tergites and sternites with quite abundant suberect, stiff, black hairs, these quite strong and more erect on 7th sternite.

**S. Rhodesia:** Vumba Mountains, Umtali district, 4 ♂♂, 9 ♀♀, one of the ♂ dated 23.11.1936, the remainder February, March or April 1941, reared or captured by A. CUTHBERTSON. In collection of Department of Agriculture, Salisbury.

The male genitalia of *L. canariensis* MACQ., *L. pallida* MACQ. and *L. cylindrica* (FABR.)

From the structure of the genitalia it is apparent that these three Palearctic species of *Lampromyia* belong to a distinctive group which is related to the *pilosula* group. Typical features are the development of the 9th tergite, the variable development of the accessory processes of the aedeagus, and the simple nature of the transverse bridge of the synsternite. In *L. cylindrica* (FABR.) the 9th tergite is enormously long, the proctiger greatly elongated and prominent, and the aedeagus bears a pair of small, lobe-like, semi-oval accessory processes. *L. pallida* MACQ. likewise has the tergite greatly enlarged and projecting beyond the apex of the dististyles, but the proctiger (in the one specimen examined) is small. The aedeagus is without accessory processes and resembles the type found in *Vermipardus*. In *L. canariensis* MACQ. the 9th tergite is enlarged though not elongated, and the proctiger is of the type found in the *pilosula* group. The aedeagus has a well-developed pair of accessory processes. The genitalia of *canariensis* are unique in one respect; the articulation of the tergal portion is by a pair of sclerotized condyles on the ventral margins of the proctiger, which engage a pair of erect protuberances arising from the dorsal inner margin of the synsternite just anterior to the transverse bridge (figs. 32, 35 cd). In genitalic characters *canariensis* is closest to *pilosula* and *flavida*, while *pallida* and *cylindrica* are more distantly related though close to either.

***Lampromyia* (s. str.) *canariensis* MACQUART, 1838**

(Figs. 32-36;

*Lampromyia canariensis* MACQUART, 1838, in WEBB & BERTHELOT, Hist. Nat. d'iles Canaries, Entom.. Dipt. 105, Pl. 4, fig.

which the articulating surfaces of the proctiger engage. Aedeagus with a stout basal portion on which arise a pair of well-developed accessory processes, these dark and prominent, upcurved, the lower inner surface flattened, with a pronounced "head" when seen in front or back view. The aedeagal tube is strongly flattened laterally, in shape as in fig. 36. There is a weak, semicircular keel on the underside of the base.

**Canary Islands:** 1 ♂, Orotava, Teneriffe, 1909, GRAHAM-SMITH leg. (B.M.)

***Lampromyia* (s. str.) *pallida* MACQUART, 1835**

(Figs. 35-41)

*Lampromyia pallida* MACQUART, 1833, Suit. & BUFFON, 1, 662, pl. 24, fig. 18.

*Lampromyia mikii* MARCHAL, 1897, Mem. Soc. zool. Fr., 10, pp. 5-25, pi. 1.

Tergite 9 (figs. 37-38) exceptionally large and elongate, exceeding the apex of the dististyles and about twice as long as greatest width; width almost equal throughout, apex truncated. Over a little more than basal third the tergite is very deep and strongly arched, but thereafter it decreases rapidly in depth and is only half as deep over the apical third, the outer margin being strongly sinuous in profile. Near the middle on the dorsum is a slight depression. Proctiger in the specimen examined is very weak and of about the same size as in *canariensis*, the details difficult to discern but probably similar structurally to that species. Transverse bridge a narrow, strong, chitinous bow, not strongly arched, inclined obliquely and unlike *cylindrica*, concave basally; at each end the bridge expands into a triangular terminal portion applied to the synsternite. Dististyles simple, finger-like, with a slight basal swelling, curved very slightly towards median line. Synsternite narrowly trough-shaped, elongated, with a slight constriction at middle, ventral aperture short, narrowly U-shaped, occupying only about  $\frac{1}{2}$  of total length. At apex of synsternite on inner surface is a curious structure, shown in fig. 39, formed by folding in and over of the integument bordering the ventral aperture; this structure continues apically in a short, pointed protuberance on each side of the ventral aperture; it is deeply grooved in median line, the concavity being as wide as, and continuous with, the ventral aperture. Aedeagus (figs. 40, 41) a simple tube shaped in side view rather like a saxophone, i.e. with a stout, short, flaring basal piece leading into a dorsoventrally flattened tube via a sharp bend of more than a right-angle. At the mid-point of its length this tube is curved again a little in the opposite direction, after which it becomes more strongly flattened. The apex, seen in posterior view, is rounded. There is a weak, semicircular, median keel on ventral surface of base. The position of the aedeagus in fig. 38 is possibly unnatural, and it is likely that it normally lies in repose between the dististyles.

**Spain:** Barcelona, reared from larva in 1928, det. D. AUBERTIN, 1 ♂ (B.M.).

***Lampromyia* (s. str.) *cylindrica* (FABRICIUS), 1794**

(Figs. 42-45)

*Empis cylindrica* FABRICIUS, 1794, Entomol. System., 4, p. 403.

*Lampromyia funebris* DUFOUR, 1850, Ann. Soc. ent. Fr., (2) 8, p. 152, pl. VI, fig. 14.