

THE EARLY STAGES OF *Aedes lophoventralis* (THEOBALD).

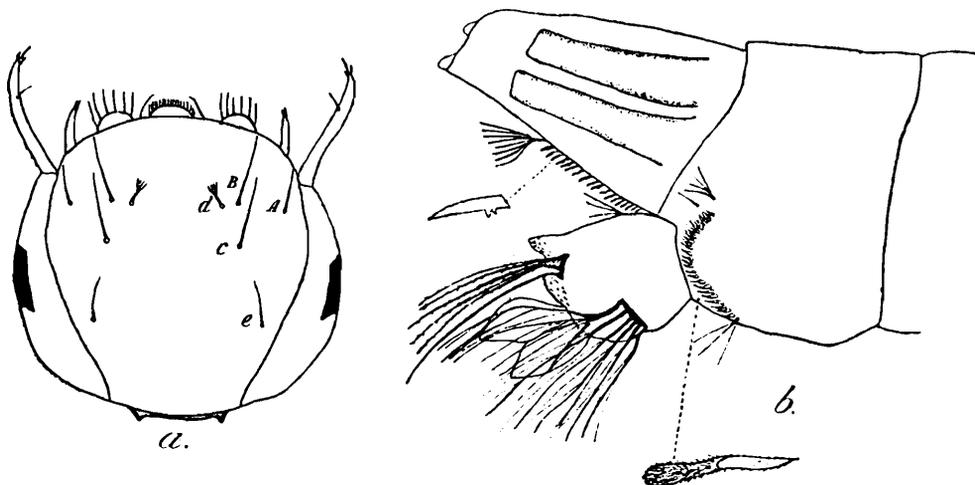
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The early stages of *Aedes lophoventralis* (Theobald) have so far been unknown. Barraud¹ had "no specimens available for description" The species was found breeding intensively in the village Madhyamgram near Barasat (24-Parganas, Bengal) in tree-holes, and this finding afforded me ample opportunities of studying its early stages. In Bengal the species was previously recorded from Chittagong, Eastern Bengal, only (*vide* Barraud, *op. cit.*, p. 168).

LARVA.

Larva large, dark in colour when living. Length of mature larva about 8 mm.

Head.—Head dark brown, nearly as broad as long, length 0.9 mm., breadth 1.0 mm. (text-fig. 1a). Antenna (0.5 mm. long), about half



TEXT-FIG. 1.—Larva of *Aedes lophoventralis* (Theobald).
a. Head (dorsal view); b. terminal segments of abdomen.

the length of head, somewhat tapering towards the tip and pale in colour, not covered with spines at base. Antennal tuft small consisting of a single hair or branch situated at nearly $\frac{2}{3}$ rds from base of the shaft; bristles short, consisting of five simple terminally placed branches. Clypeal spines long, slender, bent inwards. Clypeal tufts A simple; B and C also simple, but stout, long and approximated, arising almost from the same plane; *d* 4 or 5-branched, inconspicuous; *e* also simple or rarely bifid, of about same size as A. Mentum triangular, with about 15 or 16 subequal, strong teeth.

Thorax.—Thorax 1.1 mm. long, 1.7 mm. broad. Lateral tufts of moderate size, simple in case of prothorax, plumose or branched on

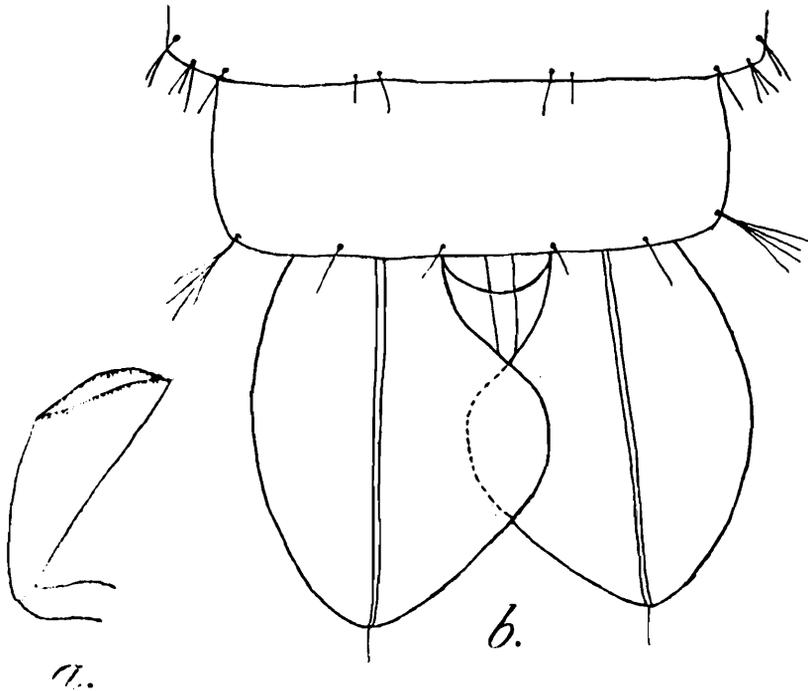
¹ Barraud, P. J., *Fauna of British India, Diptera V., Culicidae (Megarhinini & Culicini)*. London (1934).

meso- and meta-thorax. All the tufts show fine frayings. The tufts of metathorax arise from well-developed chitinous plates. Very small spines present at the base of tufts in meso- and meta-thorax.

Abdomen.—Body distinctly dark. Abdominal third segment 0.9 mm. broad, 0.6 mm. long. Abdominal tufts of considerable size, eighth segment with the uppermost tuft four-rayed and stout. The comb consists of about 28 broad, obtuse scales on either side (text-fig. 1*b*); the scales are delicately fringed. Anal segment well chitinised on dorsum and sides, with narrow dark basal rings. The inner dorsal hair forms a strong tuft of about five simple branches with slender frayings on either side. The outer dorsal hair long, stout and simple. The lateral hair also simple, with fine frayings and situated close to the margin of the segment. The ventral brush with six pairs of many-branched tufts. Towards the hind end the surface bears numerous small teeth or spines, best developed dorsally. Anal gills short, about $\frac{2}{3}$ rds the length of anal segment. Siphon nearly 0.7 mm. long, tapering slightly towards the tip, darker than body. Pecten extends nearly half-way along the siphon and consists of about 22 (as few as 18 and a maximum of 26 noted) sharply pointed, strong teeth almost equidistantly placed; each with 2 or 3 blunt serrations on the lower margin. The tuft well developed, having eight to ten branches with frayings, situated just beyond the pecten.

PUPA.

Pupa large and dark in colour. Respiratory trumpets dark, of moderate length; orifice at 45° to axis of trumpet which is slightly dis-



TEXT-FIG. 2.—Pupa of *Aedes lophoventralis* (Theobald).

a. pupal trumpet; b. terminal segments of abdomen (dorsal view).

tended apically (text-fig. 2*a*). Tuft on first abdominal segment fairly well developed and composed of dendritic hairs. Sub-lateral hair or

seta simple and long up to segment VI, on segment VII this is considerably reduced in length. The lateral tuft of segment VIII with about four strong plumose branches, the inner seta simple and delicate (text-fig. 2*b*). Paddles at their widest parts about two-thirds of their length, colourless, margin without teeth; midrib distinct, ending in a rather long, slender seta. Outer buttress distinct but narrow.

Habitat.—Breeding in tree-holes.

Locality.—Madhyamgram (24-Parganas, Bengal).