

directly posterior to this group. Tubercle III shows two long central setae, two minute posterior ones and three longer anterior ones; tubercle IV has four long central hairs and six or seven shorter ones arranged in a crescent around the edge; three short hairs are present on a level with the abdominal spiracle. On the abdominal segments tubercle I bears one long, shiny, smooth, central seta, three anterior shorter ones and one posterior one, very minute; tubercle II is represented by a central, long hair, two shorter posterior ones, pointing backward, and one very short anterior hair; tubercle III bears the same number of setae as tubercle I; tubercle IV+V shows four long central hairs and about seven shorter ones, arranged in a semicircle around the ventral portion of the tubercle; posterior to this group two short hairs, pointing backward, probably represent tubercle IIIb; tubercle VI is a large one with about twelve hairs of which several are long; several hairs at the base of the prolegs represent tubercle VII. Length 14 mm.

Pupa (Fig. 3).—Very similar to that of *homodactylus*, green with the same pale ochreous markings; the white hairs from the tubercles are, however, shorter and more numerous, the abdominal segments contain a short white centrodorsal hair, midway between tubercles I, and the wing cases, besides the lateral fringe of fine hair, bear several additional rows of still shorter hair; the sheaths of the two posterior pairs of legs are also of equal length. On the first three abdominal segments tubercle I is preceded by a patch of small, white secondary hair, and on these same segments it bears one long central white hair, one anterior shorter hair and a single very short posterior one; on the remaining abdominal segments both the secondary hairs and the anterior tubercular hair are absent. Tubercle II is distinctly laterad to I, is large and bears a long, central, white hair, and five shorter hairs arranged around the circumference; dorsad to tubercle II is a single short hair and laterad to same tubercle, situated in the downward angle of the first pale lateral line, are two small white hairs, one directed forward, the other backward; below these again are two further short hairs on a line with tubercle III; this tubercle is situated on the second lateral line and bears one long hair pointing forward and one short hair directed backward; anterior to III on the first three abdominal segments are two short hairs. Below the spiracle and slightly posterior to same is a small tubercle with three short white hairs (?IIIb) and below this on the flange IV+V appears as a large crescentic tubercle with about eight long white hairs. Three short hairs, well below the flange, apparently represent tubercle VI. The thoracic segments show the usual modifications as well as considerable secondary hair on the posterior dorsal portion of each segment.

***Pterophorus eupatorii* Fern.**

Larva (full-grown).—Head pale reddish ochre. Body pale green, becoming dorsally broadly suffused with purple-red when fully developed; a narrow ochreous dorsal stripe slightly broken centrally on each segment by a triangular green dot; traces of a broad pale subdorsal band crossing tubercles I and II; a narrow lateral line midway between tubercles I and III, bent downward posteriorly; a broken spiracular line. The principal setae from tubercles I-III are blackish, very slightly spiculate, long and subequal. On the abdominal segments tubercles I and II are in line, contiguous, each with two long black setae, the former in addition bearing two shorter anterior hairs, the latter with