海南島发現的一种新种庫蚊——琼中庫蚊

徐啓丰

1960年 4 月作者在海南島工作时,曾捞获庫蚊幼虫数条,其中一部分經飼养羽化分別 得雌蚊 2 个,雄蚊 3 个,現經鉴定証明系一新种。茲将其形态描述于下:

琼中庫蚊 Culex (Lophoceratomyia) chiungchungensis 新种

一、成虫 小形棕黑色品种。翅长雄蚊約2.5毫米; 雌蚊約3毫米。

雌性——**头** 頂部被以黑色竪立窄鱗,前部及二側眼綠有白色扁平鱗片若生。头部的鬃均为黑色。触角、触鬚及喙均为黑色;触鬚长約喙的 1/8。

胸 中胸背板棕黑色,复有狹长的棕黑色鱗片;小盾板复有同样的鱗片。側板綠色,沒有鱗片;中胸后側板下鬃一根。翅鱗黑色,除翅端較多外很稀疏。足黑色;股节下面較淡;跗节无白环。

腹 背面及腹面均为棕黑色。

雄性——般形态与雌蚁相似。触角多毛;梗节內側有一突起;第6节(以梗节算作第一节)有5个长度不同的鱗片,第7一9节有扭曲和纏結的毛簇,第10节有一丛較长的毛(图1)。触鬚細长,比喙长約其末节的长度;最后二节略弯曲,有少数黑色竖立的毛;触鬚基部外面有一級列小的,黑色的,刺样的鬃(每一触鬚上約有6根)。喙基部下面有一横排細鬃。

生殖器 侧片頂下叶有三个棒状突起,其中之一頂端成鈎状,一个頂端扩展的叶片及 二根鬃; 侧片背緣有一列毛, 六根长一根短(图 2)。抱器弯曲,頂端有很多微小的毛形成 冠状。阴茎侧片光滑,沒有齿或結节(图 3)。

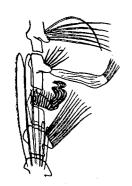


图1 雄蚊触角第6-10节



图 2 雄性外生殖器侧片

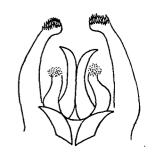


图 3 雄性外生殖器,抱器及阴茎

二、幼虫 色素很淡,肉眼看无何特殊。

头 头大,宽大于长。唇基前刺粗壮,几无弯曲。額毛 A, B, C 很长,远远超过头的前面,具有小的羽状分支, A 毛分 5—7 支, B 毛及 C 毛各分 2 支; d 毛及 c 毛短小,均有二分叉。触角略弯曲,除末端外有很多刺;触角毛分 10—20 支,羽状,着生于离触角基部3/5处;触角頂端有三个突起及一根长而簡单的毛,亚頂毛二支,长而簡单(图 4)。額片中間一个齿較大,两侧各有 7 个較小的齿。

胸 侧毛长, 羽状。前胸毛羽状, 很长, 超过头的前端。

腹 第 I, II 节的側毛很长,以后各节均較短。第 VIII 腹节有很多排列成行的微刺, 須放大較大倍数才能看清。櫛鱗約 40, 成为一区,鱗的頂端有綫。 Pentad 毛一支簡单, 四支羽状分支,分支数分別为 2, 4, 4, 6。呼吸管細长,长度約为基部寬度的 7 倍,基部 1/4 較寬,其余 3/4 几乎等寬;呼吸管毛 5 对,短小,各分 2—3 支,长度約等于呼吸管的直 径。呼吸管梳齿每边約 10 校,其一边光滑,一边有細小的鋸齿;末端 2 个齿較之近呼吸管 基部的齿更为分开。 肛节围以完整的几丁质环,环上有类似第 VIII 腹节的微刺;后緣全 被以更大的刺;內中側尾毛分 4 支, 1 支較长, 3 支較短;外中側尾毛长而不分支。尾鰓約 与肛节等长(图 5)。

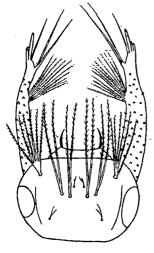


图 4 幼虫头部

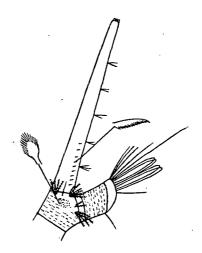


图 5 幼虫尾部

孳生地 山林中的溪床石穴积水。

共生蚊种:埃肯按蚊孟加拉变种,白踝按蚊,麦氏蓝带蚊。

模式标本 广东省海南島琼中县。

模式标本保存于作者处。

本种庫蚊与 Lophoceratomyia 亚属已知的种类有如下几点主要区别:

- 1. 雄蚊触角第6—10 节的毛及鱗片的形状。
- 2. 雄蚊触角梗节內側有突起,喙基部又有鬃。据 Barraud 氏(1934)将本亚属的蚊种 分为三羣,一羣梗节有突起,喙基部无鬃;一羣梗节无突起,喙基部有鬃;一羣梗节无突起, 喙基部亦无鬃。如此則本种应列为第四羣。

- 3. 雄蚊外生殖器的形态, 特別是側片背緣的毛列。
- 4. 幼虫第八腹节及肛板的微刺。

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A NEW SPECIES OF CULEX FROM HAINAN ISLAND

Hsü Chi-feng

Culex (Lophoceratomyia) chiungchungensis sp. n.

ADULTS—Small species, brownish black in colour. Wing length about 2.5 mm in male and 3 mm in female.

FEMALE—Head: vertex covered with dark narrow upright scales, with numerous whitish flat scales in front and at each side towards eye-margins. The bristles on head are all dark. Antenna, palpi and proboscis are dark. Palpi about 1/8 length of proboscis.

Thorax: mesonotum dark brown, covered with narrow dark brown scales; scutellum covered with same scales. Pleurae greenish in colour, without scales, one lower mesepimeral bristle. Wing-scales dark and very scanty, except towards tip of wing. Legs dark, undersides of femora are paler, tarsi without any white mark.

Abdomen: brownish-black on both dorsal and ventral sides.

MALE—General size as in female. Antennae plumose; torus with a projection on inner side; segment 6 (torus counted as first segment) with five scales of varying lengths, segments 7—9 with twisted and matted tufts and segment 10 with a tuft of hairs. Palpi slender, longer than proboscis by about the length of apical segment; the last two segments a little curved and with some dark outstanding hairs; a row of small, dark spine-like bristles on outer side of each palp near base (about six in number on each palp). Proboscis with a row of stiff bristles beneath at base.

Hypopygium: coxite with 3 rod-like processes on subapical lobe, one with hooked tip; also a leaflet expanded near tip and two bristles. Dorsal border of coxite with a row of six long and one short hairs. Style curved, with minute hairs forming a crest near tip. Lateral plate of phallosome smooth, without teeth or tubercles.

LARVA—Mainly pale in colour. Head large, broader than long. Preclypeal spines stout and nearly straight. Frontal hairs A, B, and C very long, reaching far beyond front of head, with subplumose branches, the number of which is 5—7, 2, and 2 respectively; hair d and e bifid, small and short. Antennae slightly curved; with many spines except on the slender terminal portion; tuft very large, with 10—20 plumose branches, placed at about 3/5 of length from base; preapical bristles two in number, placed a short

distance from the tip, both simple and very long; 3 processes and 1 bristle at tip, the latter also simple and long but shorter than the preapical pair. Mentum with a moderately large median tooth and 7 smaller teeth on each side. Thorax with the lateral tufts large and plumose; prothoracic hairs plumose and very long, extending forwards beyond front of head. Abdomen with long lateral hairs on segments I and II, those on following segments smaller. Segment VIII with many minute spines arranged in rows. Comb, a patch of about 40 scales, with fringed apex. Pentad hairs one simple and four plumose, with 2, 4, 4, and 6 branches respectively. Siphon long and narrow, about 7 times length of diameter at base, slightly broader at basal 1/4, then almost parallel-sided to tip; siphonal tufts 5 pairs, small, length about the diameter of siphon, each with 2-3 branches. Pecten of about 10 slender teeth which are fringed along one side with fine denticles, the 2 teeth furthest from base of siphon more widely spaced than those nearer the base. Anal segment completely enclosed in chitinous ring, upon which there are rows of minute spines as those on segment VIII; posterior border fringed with still larger spines; inner submedian caudal hair 4 branches, one very long, three short; outer submedian caudal hair single and long. Papillae about the same length of anal segment.

Type locality—Chiungchung siang, Hainan Island, Kwangtung province. Breeding place—rock-pools by sides of hill stream in forest.