

高翔蜉属一新种

(蜉蝣目:扁蜉蝣科)

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摘要 本文记述采自湖南省大庸市高翔蜉属一新种。该种以其阳茎叶外侧面具有一向前弯曲的钩状突起为显著特征,可区别于本属其他种类。

关键词 蜉蝣目 扁蜉蝣科 高翔蜉属 新种

高翔蜉属 *Epeorus* 广泛分布于全世界,包括三个亚属:拟蜉亚属 *Iron*、高翔蜉亚属 *Epeorus* 及刺拟蜉亚属 *Ironopsis*。我国高翔蜉属已记载的有6种(拟蜉亚属4种、高翔蜉亚属2种)。从1986年6月在湖南省大庸市采集的蜉蝣目标本中,发现高翔蜉属拟蜉亚属一新种,现报道如下。

大庸高翔蜉,新种 *Epeorus (Iron) dayongensis* sp. nov. (图1—6)

雄成虫(酒精保存) 体长14—15mm;前翅长14—15mm。复眼大,灰黑色,在头部背面相连;头额缘向腹面适当伸展;中单眼圆形,侧单眼肾形,比中单眼大且同复眼相连。头部前面观如图I-1。中胸背板黄色,小盾片上有1对黄棕色纵纹。前翅(图I-2),膜质透明,但C脉与Sc脉区为乳白色,半透明;C脉区基部横脉特别发达,翅痣区的横脉略为倾斜;C脉、Sc脉以及 R_1 脉区的横脉边缘有深色色素;纵脉和横脉均为棕色。后翅(图I-3、4),膜质透明,C脉前缘突钝状;Cu脉区有2根闰脉,后翅仅为前翅长的0.30—0.33。前足比体略长,胫节为腿节长的1.1—1.2倍,跗节长为腿节长的1.9—2.0倍,是胫节长的1.5—1.6倍。跗节各节长度的排列顺序为1,2=3,4,5。后足,胫节长为腿节长的0.7—0.8倍,跗节长为胫节长的0.5—0.6倍,是腿节长的0.4—0.5倍,跗节各节长度的排列顺序为5=1,2,3,4。所有各足爪均不相似,一钝状,一钩状。腹部黄白色,背板第3—9节有1对浅棕色横纹,在中部向后成纵纹,此外,背板第3—9节还有1对非常发达斜向前的斑纹;腹板第1—9节具有深棕色的纵纹。外生殖器,亚生殖板在中间略为凸出,阳茎叶(图I-5、6)为棒状,具阳茎突;在外侧面上有一非常发达的钩状突起,突起弯向前方。中尾丝退化,尾须约为体长的4倍。

雄亚成虫(酒精保存)形态特征同雄成虫,而颜色略深,翅不透明。

正模♂成虫,副模2♂成虫,1♂亚成虫,湖南省大庸市(张家界金鞭溪),1986.19—20,余书生、张俊采。模式标本保存于南京师范大学生物系动物学教研室。

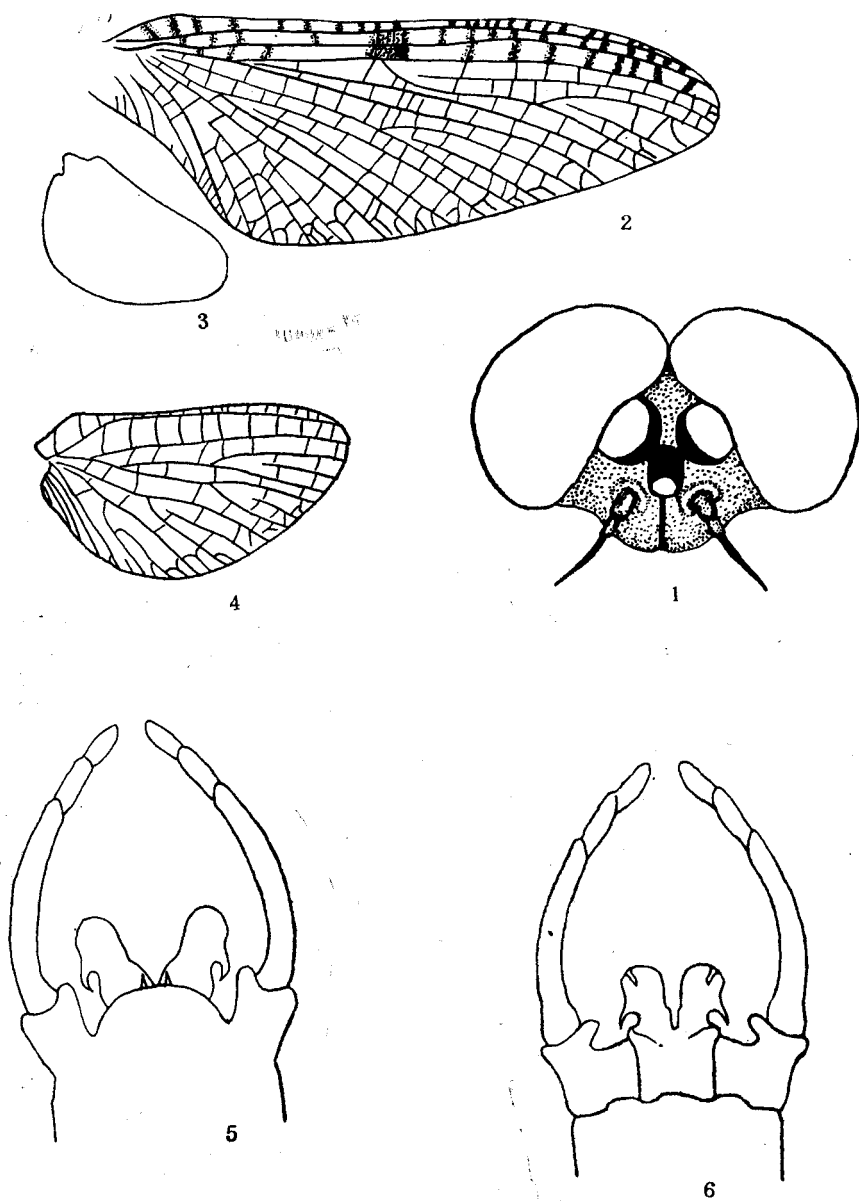


图 I 大庸高翔蜉, 新种 *Epeorus (Iron) dayongensis* sp. nov.

1—6 雄成虫 (σ^7 imago): 1. 头部, 前面观 (head, front view) 2. 前翅 (fore wing) 3. 后翅示与前翅的比例 (hind wing, proportional to fore wing) 4. 后翅 (hind wing, magnified) 5 外生殖器, 腹面观 (genitalia, ventral view) 6 外生殖器, 背面观 (genitalia, dorsal view)

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A NEW SPECIES OF GENUS *EPEORUS* EATON (EPHEMEROPTERA: HEPTAGENIIDAE)

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The present treatise treats of a new species of the genus *Epeorus* Eaton, subgenus *Iron* collected in Dayong City, Hunan Province, China. With a hooky projection at lateral margin of penis as its striking feature, the said species is distinguishable from the rest of its congeners.

Epeorus (Iron) dayongensis sp. nov (figs. 1—6)

Male imago (in alc.): Length of body and forewing: equally 14—15 mm. Compound eyes, large, greyish-black and contiguous dorsally. The margin of forehead extending moderately toward the ventral side. Median ocellus round; lateral ocelli, kidney-shaped and connected with compound eyes. (the frontal view of head as shown in Figure 1) Mesonotum yellowish; scutum with a pair of yellowish-brown median longitudinal stripes. Forewing (as shown in Figure 2): membrane transparent, the costal and subcostal areas, opalescent and translucent; basal costal area cross veins well developed; stigmatic cross veins slightly oblique; cross veins in the costal, subcostal and first radius areas, margined with dark pigmentation; longitudinal and cross veins, brown in color. Hindwing (as shown in Figures 3—4): membrane transparent; the frontal margin of costal area with obtuse projection; two intercalary veins in cubital region; length: 0.3—0.33 as long as forewings. Forelegs, slightly longer than body, foretibiae 1.1—1.2 times longer than femora, tarsi 1.9—2.0 times longer than femora and 1.5—1.6 times longer than foretibiae; descending length of tarsal segments in sequential order: 1,2=3, 4,5. Hindlegs with tibia 0.7—0.8 times longer than femora; tarsi 0.5—0.6 times longer than tibia and 0.4—0.5 longer than femora; descending length of tarsal segments in sequential order: 5=1,2,3,4. Claws of all legs dissimilar with one blunt and the other hooky. Abdomen yellowish-white; terga 3—9 with a pair of brownish transversal stripes and with longitudinal stripes starting from its median site toward the right. Besides, terga 3—9 with a pair of well-developed, forward-inclining stripes; sterna 1—9 with dark brown longitudinal stripes. Genitalia: median site of subgenital plate evenly convex; penial lobes (as shown in Figures 5—6), rod-shaped with well-developed, forward-incurvating hooky projection at the outer lateral margin; terminal filament, degenerate with cerci about 4 times longer than body.

Male subimago (in alc.): Identical with male imago in morphological characteristics but darker than male imago and opaque in wings.

Holotype ♂ imago, Dayong (29°18'N, 110°26'E), Hunan Province, 19. VI, 1986; paratypes 2♂♂ imagoes, 1♂ subimago, locality, same as holotype, 19—20, VI, 1986. All type specimens were collected by She Shusheng and Zhang Jun and deposited in the Department of Biology, Nanjing Normal University.

Key words Ephemeroptera Heptageniidae *Epeorus* new species