

越南蜉属一新种

(蜉蝣目:小蜉科)

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越南蜉属 *Vietnamella* 是1972年苏联切尔诺娃博士(Чернова)创立的,当时她从越南采得三只稚虫定名为 *V. thani*,并将稚虫的形态结构予以描述。1982年6月10—13日我们在福建三港采到越南蜉属 7♂♂11♀♀,1983年6月在大别山诸佛庵,7月在大化坪、七邻、斑竹园等地采到无数个成虫和稚虫,经研究系该属一新种。现将成虫和稚虫分别描述如下:

大别山越南蜉,新种 *Vietnamella dabieshanensis* sp. nov. (图1—27)

雄成虫(酒精保存) 成虫与小蜉属 *Ephemerellina* 非常相似,尾铗第1、2节相等。体长16 mm,展翅34 mm,两复眼间在背中央相接触(图1),前端有三只单眼,中间一只较小,单眼前方为一对较短的触角。胸部淡棕色,前翅透明,横脉较多,在翅顶端亚前缘脉区,横脉分成两行,MA脉分叉,1MP脉有3根(图2)。后翅较小,圆形,C区和Sc区的横脉较明显,MA脉不分叉,Cu₁ Cu₂ 1A脉平行前进(图3),胸足棕黄色,前足腿节、胫节、跗节之比为3.16:4.67:3.90,跗节长度的排列顺序为2、3、4、5、1(图4)。后足的腿节、胫节、跗节之比为3.79:2.76:0.82,跗节长度的排列顺序为4:1=2=3(图5)。腹部淡棕色,尾铗3节,第1、2节几乎相等,第3节短小,阳茎合并,顶端分开,并几丁质化(图6)。尾须3根,长16 mm。

雌成虫(酒精保存) 体长17 mm,展翅38 mm,两复眼远离,两复眼间距离=1复眼直径的 $1\frac{3}{4}$ 倍(图7)。胸腹部的颜色有浅有深,较深的种类前翅的前缘脉、前缘区和亚前缘脉均呈咖啡色。前足的腿节、胫节、跗节之比为4.04:4.06:1.51,跗节长度的排列顺序为4:1=2:3(图8)。后足腿节、胫节、跗节之比为5.28:3.96:1.10,跗节长度的排列顺序为4:1=3:2(图9)。第9、10两腹节两侧有成对纵脊,体节后角向后延伸极尖(图10),第10腹板椭圆形,末端略弯曲(图11),卵小,椭圆形,前端有一个三角形的壳盖(图12)。

雄亚成虫(酒精保存) 个体较小,体长13 mm,展翅22 mm,两复眼在背中央相接触,前翅淡灰色,翅脉明显,脉相与成虫同。中胸乳白色,上有三块灰色斑块,前方一块,两侧一对。前足的腿节、胫节、跗节之比为2.48:2.75:1.40,跗节长度的排列顺序为5、2、3、4、1

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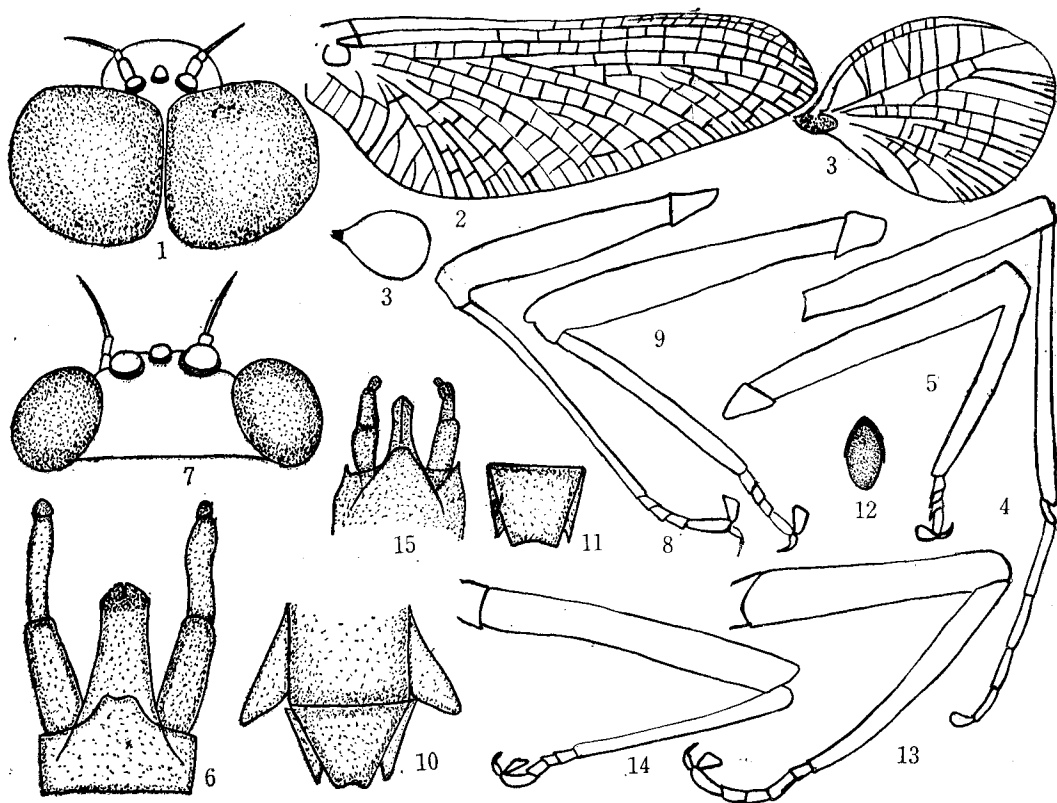


图 1—15 大别山越南蜉, 新种 *Vietnamella dabieshanensis* sp. nov.

雄成虫 (male imago): 1. 头部背面 (head, dorsal view) 2. 前翅 (fore wing) 3. 后翅放大 (detail of hind wing) 4. 前足 (fore leg) 5. 后足 (hind leg) 6. 外生殖器 (genitalia)

雌成虫 (female imago): 7. 头部背面 (head, dorsal view) 8. 前足 (fore leg) 9. 后足 (hind leg) 10. 第 9、10 腹节的腹板 (9th, 10th abd. sternite) 11. 第 10 腹节的腹板 (10th abd. sternite) 12. 卵 (egg)

雄亚成虫 (male subimago): 13. 前足 (fore leg) 14. 后足 (hind leg) 15. 外生殖器 (genitalia)

(图 13)。后足腿节、胫节、跗节之比为 3.10:2.20:0.58, 跗节长度的排列顺序为 4:1=2:3 (图 14)。腹部深灰色, 两侧较背中央略深, 外生殖器的尾铗短直, 共三节, 两个阳茎尚未完全愈合, 中间有一条长沟 (图 15), 尾丝 12 mm。

稚虫 (酒精保存) 头上有三对额颊背突起, 两触角外侧长有一对大而直 的角 (图 16), 口器与 *V. thani* 相似。上唇有一排横向排列的微刺 (图 17), 左右上颚不对称, 右颚锐边伸展成簸箕型, 臼齿边缘有柱状表面 (图 18)。下颚须由三节组成, 下颚内缘有两根刀型刚毛 (图 19)。舌三叶, 中间叶宽 (图 20)。下唇须很短, 一般不超过侧唇舌的边缘 (图 21)。前胸背板的前角呈尖型。前肢腿节很宽, 其前缘有一排 5—6 或 7—8 个利齿 (图 22), 胫节的前缘无突起, 足单爪。中后足正常, 前缘无利齿 (图 23、24)。以上特点与 *V. thani* 完全相似。沿第 1—10 腹节背面的中线两侧有不高的成对纵脊, 体节后角向后延伸极尖, 三对足的腿节上有 2—3 对横向斑纹, 从第 2—7 节腹节共有 6 对鳃叶, 前面 5 对的

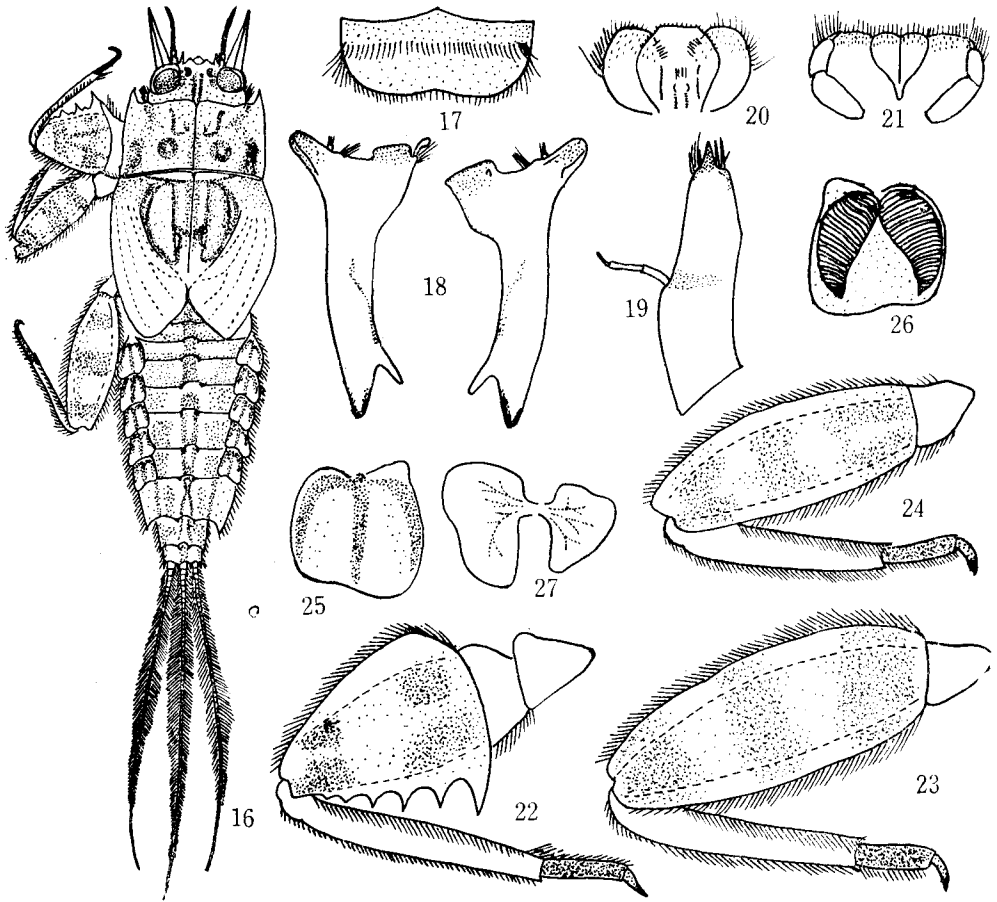


图 16—27 大别山越南蜉, 新种 *Vietnamella dabieshanensis* sp. nov.

稚虫 (nymph): 16. 全身背面 (entire body, dorsal view) 17. 上唇背面 (labrum, dorsal view) 18. 上顎腹面 (mandible, ventral view) 19. 下顎腹面 (maxilla, ventral view) 20. 舌腹面 (lingula, ventral view) 21. 下唇腹面 (labium, ventral view) 22. 前足 (fore leg) 23. 中足 (middle leg) 24. 后足 (hind leg) 25. 鳃背面 (abd. gill, dorsal view) 26. 鳃腹面 (abd. gill, ventral view) 27. 第六对鳃叶 (6th abd. gill)

背面有三条黄纹(图 25), 腹面有两行鳃片(图 26), 第 6 对鳃叶只有背腹各两叶(图 27), 这些又与 *V. thani* 不同, 中尾丝略长于尾须, 黑色, 体长 1.5 mm。尾丝长 8 mm。

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A NEW SPECIES OF VIETNAMELLA FROM CHINA (EPHEMEROPTERA: EPHEMERELLIDAE)

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The genus *Vietnamella* was first erected by Russian Ephemerologist Tshernova (1972) who described 3 nymph specimens from Vier nam and designated as *Vietnamella thani*. Recently we found 7♂♂ 11♀♀ from Sangang of Fujian Province on June 1982 and many males and nymphs from Zhu Fo An of Dabieshan Mountains on June 1983, from Da Hua Ping, Qi Lin, Banzhu Yuan of Dabieshan Mountains on July 1983. These specimens belong to be a new species, and we describe male and female and nymph as follows:

Vietnamella dabieshanensis sp. nov.

Male imago (in alc.) Male specimen being very similar to EphemereLLina. Length of body 16 mm, wing expansion 34 mm. 2 compound eyes contact at the middorsal line. Fore thorax light brownish in color. Fore wing transparent and glistening, with many cross veins. In the front angle of area the cross vein divided into 2 lines, MA forked, Imp with 3 veins Hind wing comparatively smaller, round in shape, MA not forked, Cu₁, Cu₂, 1A parallel progressed. Fore leg brownish yellow in color, the proportion of femur, tibia and tarsus of fore leg being 3.16:4.67:3.90. Tarsal joints rank 2, 3, 4, 5, 1 The proportion of femur, tibia and tarsus of hind leg being 3.79:2.76:0.82 The tarsal joints rank 4:1=2=3. Forceps 3 segmented, the first and second segments almost equal in length, the 3rd segment rather small, penial lobes fused, with its apical portion separate and chitinized.

Female imago (in alc.) Length of body 17mm wing expansion 38 mm. Two compound eyes far apart. The distance between 2 eyes = $1\frac{3}{4}$ times the diameter of a single compound eye, Thorax and abdominal segments having 2 different colors, deeper or lighter. In the deeper type the costal vein, costal area and subcostal veins are coffee color. Both tarsal joints rank 4:1=2:3. The lateral side of both 9th and 10th abdominal segments produced a longitudinal ridge, getting sharp at the rear end. Eggs small, elliptical, with a triangular lip at the ant. end.

Male subimago (in alc.) Smaller, length of body 13 mm., wing expansion 22 mm. Compound eyes and wing venation similar to adult male. The middle thorax pale white in color, with 3 pieces of gray markings. Tibia of fore leg longer than femur and tarsus. The tarsal joints rank 5, 2, 3, 4, 1 The femur of the hind leg longer than tibia tarsus. The tarsal joints rank 4:1=2:3. Forceps 3 segmented, penial lobes short and straight, 2 penial lobes not entirely fused with a longitudinal groove in between.

Nymph (in alc.) There are 3 pairs of occipital-genal ridges on the head. On the outer side of antennae is a pair of straight angle. Mouth parts similar to *V. thani*. There is a transverse row of minute setae on the labrum, right and left mandible not similar. maxillary palpus 3 segmented, its inner margin with 2 knife-shaped setae, lingula 3 pieces, the middle one broader,

labial palpus short, generally not exceed the lateral edge of paraglossa. The femur of fore leg broader, its ant. edge with a line of 5—6 or 7—8 sharp teeth. Middle and hind legs normal. Along the lateral line of 1—10 abdominal segments is a pair of longitudinal ridge being sharp at its rear end. The foregoing characters similar to *V. thani*. From 2—7 abdominal segments there are 6 abd. lobes, each lobe with 3 yellow markings on the dorsal surface and 2 parallel lines of gills on the ventral side, the 6th abd. lobe with 2 dorsoventral lobe. These characters are different from *V. thani*. Middle caudal filament longer than the cerci. Length of body 15 mm., length of caudal filament 8 mm, black in color.

中国局限蚊属一新纪录

A NEW RECORD OF *TOPOMYIA* FROM CHINA

1984年10月采自西双版纳勐腊原始森林中。该蚊成虫中跗节2—5基端腹面白色,或背面也为白色而成一白环。雄蚊尾器与屈端局限蚊 *Topomyia inclinata* Thurman, 1959 近似,但抱肢端节末段略弯,基半向内明显膨胀;抱肢基节背中区的扁刚毛9—10根,比后者多一倍以上。此外,阴茎和小抱器腹叶也有明显不同。

国外分布 泰国。

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