

浙江龙王山真菌蚊属 3新种

(双翅目: 菌蚊科)

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摘 要 本文报道浙江省龙王山双翅目菌蚊科的真菌蚊属 (*Mycomya*) 3新种: 习见真菌蚊 (*M. copicusa*)、缺齿真菌蚊 (*M. edentata*) 及溪边真菌蚊 (*M. rivalisa*)。模式标本保存于浙江林学院昆虫标本室。

关键词 双翅目; 菌蚊科; 真菌蚊属; 新种; 中国

中图分类号 Q949

在整理鉴定浙江省龙王山自然保护区所采的菌蚊科昆虫标本时, 发现有真菌蚊属 (*Mycomya*) 3新种, 现描记如下。模式标本保存在浙江林学院昆虫标本室。

1 习见真菌蚊 *Mycomya copicusa* Wu, sp. nov. 新种 (图 1~ 3)

雄: 翅长 2.6~ 2.9 mm 须和口器淡黄色。头后部深褐色。触角柄节、梗节和第 4 鞭节基部黄色, 其余褐色。第 4 鞭节长约为宽的 3 倍, 第 5 鞭节为 2 倍。前胸背板黄色, 有 3 根较长刚毛。中胸盾片黑褐色, 有 2 条黄色狭纵带。中胸上前侧片褐黄色, 中胸下前侧片上半部褐黄色, 下半部褐色。小盾片褐色, 有 4 根长刚毛。侧背片和中背片褐色。足褐黄色, 中基节无距。胸足比 $bt_1: t_1 = 0.73 \sim 0.77$, $bt_2: t_2 = 0.53 \sim 0.67$, $bt_3: t_3 = 0.53 \sim 0.54$ 。翅 Sc 端部有 5~ 1 根长毛, Sc_1 消失, Sc_2 在小翅室中部或之内终于 R_1 ; 小翅室长约为宽的 1.5~ 2.0 倍。M 脉比 0.73~ 1.07, 1.00~ 1.45; Cu 脉比 0.89~ 1.03, 1.33~ 1.58。长毛: M 主干 0, M_1 0, M_2 0; Cu 主干 0, Cu_1 0, Cu_2 0。平衡棒褐黄色。腹部背板褐色, 腹板黄褐色。外生殖器褐色。

正模♂, 浙江安吉龙王山, 500~ 800 m, 1995-07-18, 吴鸿采, No. 950781。副模, 采地均为浙江安吉龙王山; 1♂, 800~ 1 200 m, 1995-07-20, 吴鸿采, No. 950989; 4♂♂, 500 m, 1995-07-20, 吴鸿采自马氏诱捕器, No. 951086, 951088, 951099, 951107; 1♂, 490 m, 1995-07-20, 吴鸿灯诱, No. 951064; 1♂, 500~ 800 m, 1996-06-14, No. 960203; 1♂, 500~ 600

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m, 1996-07-28, No. 960209

新种与扭突真菌蚊 *M. strombuliforma* Wu et Yang 相似, 但后者小翅室长为宽的 3 倍, 侧背肢仅端半部密生长毛, 生殖刺突的形态及其侧支端部生柔毛等均不同, 容易区别^[1-4]。

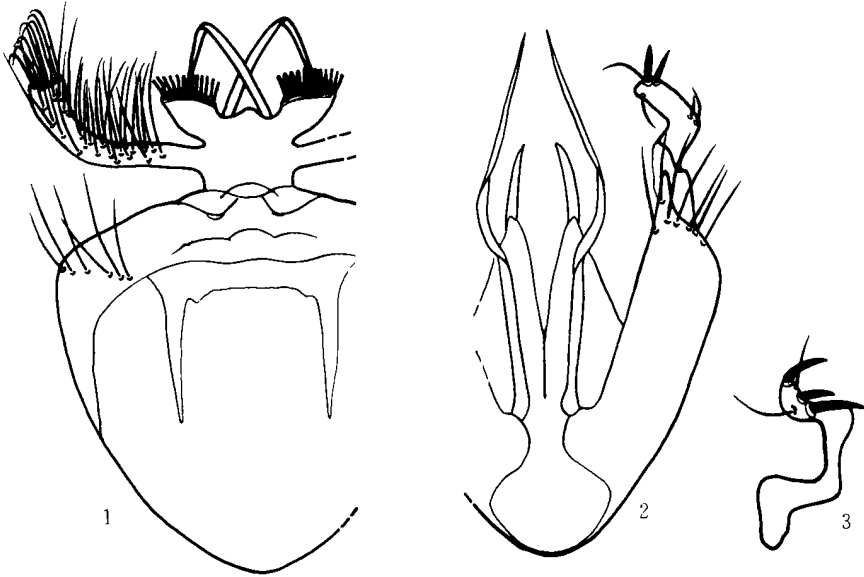


图 1~3 习见真菌蚊, 新种

雄外生殖器: 1. 背视; 2. 腹视; 3. 生殖刺突

Figures 1~3 *Mycomya apicosa* Wu, sp. nov.

Male hypopygium 1. dorsal view; 2. ventral view; 3. gonostylus

2 缺齿真菌蚊 *Mycomya edentata* Wu, sp. nov. 新种 (图 4~5)

雄: 翅长 3.1 mm 须和口器黄色。头后部深褐色, 触角淡褐色, 第 1 鞭节长约为宽的 2.0 倍, 第 2 鞭节为 1.5 倍。前胸背板黄色, 有 4 根较长刚毛。中胸盾片黑褐色, 有 1 黄色宽中纵带, 肩角黄色。中胸上前侧片和下前侧片褐黄色。小盾片褐黄色, 有 4 根长刚毛。侧背片深褐色; 中背片褐色。足黄色, 中基节无距。胸足比 $bt1:t1=0.76$, $bt2:t2=0.60$, $bt3:t3=0.47$ 。翅 Sc 端半部有 1 根长毛, Sc_1 和 Sc_2 分别在小翅室外角处和中部终于 C 和 R_1 ; 小翅室长约为宽的 2.0 倍。M 脉比 0.51, 0.66; Cu 脉比 0.76, 1.01。长毛: M 主干 0, M_{1+} , M_{2+} ; Cu_{1+} , Cu_{2+} 。平衡棒黄白色。腹部背板褐色, 第 1~5 节前侧角黄色; 腹板黄至淡褐色。外生殖器淡褐色。

正模♂, 浙江安吉龙王山, 400~500 m, 1995-07-14, 吴鸿采, No. 950311

新种雄外生殖器的侧背肢具多数极长刚毛, 无突起, 生殖刺突无齿等特征比较特殊, 可区别于本属其他已知种^[1-8]。

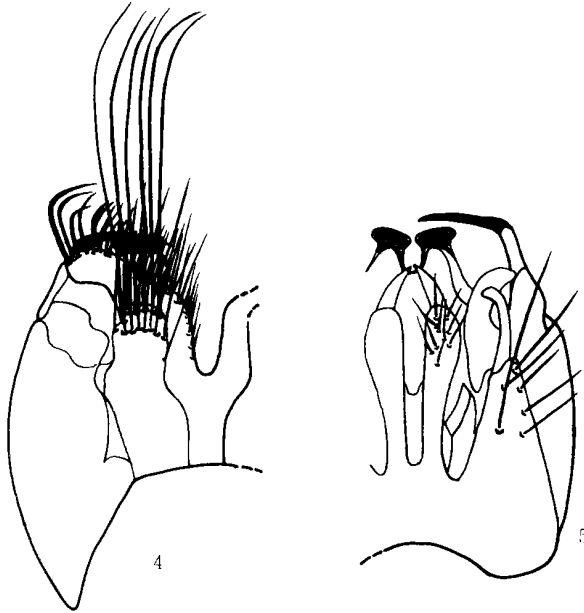


图 4-5 缺齿真菌蚊, 新种

雄外生殖器: 4. 背视; 5. 腹视

Figures 4-5 *Mycomya edentata* Wu, sp. nov.

Male hypopygium 4. dorsal view; 5. ventral view

3 溪边真菌蚊 *Mycomya rivalisa* Wu, sp. nov. 新种 (图 6-9)

雄: 翅长 3.1 mm 须和口器淡黄色, 头后部深褐色。触角柄节、梗节和第 1 鞭节基部褐黄色, 其余褐色。第 1 鞭节长约为宽的 4 倍, 第 2 鞭节为 2 倍。前胸背板黄色, 有 3 根较长刚毛。中胸盾片黑褐色, 前缘及两侧黄色。中胸上前侧片和下前侧片黄色。小盾片褐色, 有 4 根长刚毛。侧背片和中背片褐色。足褐黄色, 中基节无距。胸足比 $bt1:t1=0.83$, $bt2:t2=0.65$, $bt3:t3=0.59$ 。翅 Sc 端有 1 根长毛, Sc_1 消失, Sc_2 在小翅室中部之内终于 R_1 , 小翅室长约为宽的近 2 倍。M 脉比 1.02, 1.35; Cu 脉比 1.00, 1.71。长毛: M 主干 0, M_1 0, M_2 0; Cu 主干 0, Cu_1 0, Cu_2 0。平衡棒褐色。腹部背板褐色; 腹板褐黄色。外生殖器褐黄色。

雌: 翅长 3.1-3.6 mm, 色型及特征与雄虫相同。 $bt1:t1=0.91$, $bt2:t2=0.70$, $bt3:t3=0.63$ 。

正模♂, 浙江安吉龙王山, 490 m, 1996-07-25, 吴鸿灯诱, No. 960204。配模♀, 采地同正模, 1996-07-29, 吴鸿灯诱, No. 960214。副模 1♂ 2♀, 采地同正模, 800-1200 m, 1995-07-20, No. 950982, 951087, 951095; 1♂ 3♀, 采地同正模, 1996-07-29, No. 960212, 950205, 960219, 960222; 1♀, 采地同正模, 1995-07-12, No. 950001; 1♀, 采地同正模, 1995-07-18, No. 950873; 1♀, 采地同正模, 1995-10-19, No. 960403。

新种的侧背枝狭长, 端渐尖并具极长宽毛; 生殖刺突具 3 端齿及 1 宽大侧支; 亚中腹丝短等外生殖器特征, 可区别于 *Mcomyopsis* 亚属的所有已知种^[7,8]。

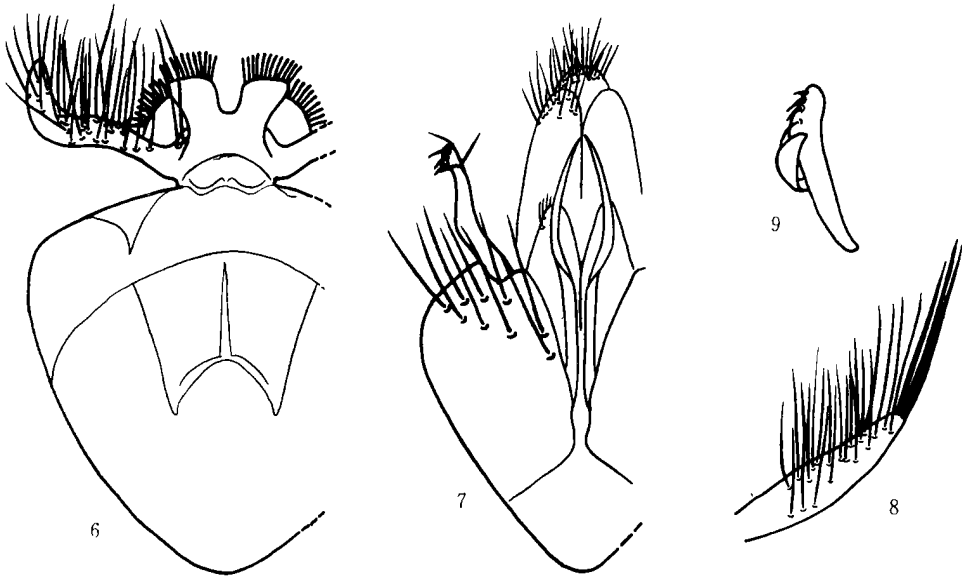


图 6-9 溪边真菌蚊, 新种

雄外生殖器: 6.背视; 7.腹视; 8.侧背肢端部; 9.生殖刺突

Figures 6-9 *Mycomya rivalisa* Wu, sp. nov.

Male hypopygium 6. dorsal view; 7. ventral view; 8. apical part of tergal lateral appendage; 9. gonostylus

参 考 文 献

- 1 吴鸿, 杨集昆. 内蒙古菌蚊二新种及一中国新记录种 (双翅目: 菌蚊科). 昆虫分类学报, 1990, 12(3-4): 275-278
- 2 吴鸿, 杨集昆. 山西真菌蚊属二新种记述 (双翅目: 菌蚊科). 昆虫分类学报, 1995, 17(1): 47-50
- 3 吴鸿, 杨集昆. 四川省菌蚊一新种记述 (双翅目: 菌蚊科). 动物分类学报, 1995, 20(2): 232-233
- 4 吴鸿, 杨集昆. 北京真菌蚊属一新种记述 (双翅目: 菌蚊科). 昆虫学报, 1996, 39(3): 310-311
- 5 Lastovka P, Matile L. Mycetophilidae (Diptera) de Mongolie. *Acta Zool Hung*, 1974, 20: 93-135
- 6 Plassmann E. Neun neue Pilzmücken aus der Westpalaarktis. *Spixiana*, 1986, 9(2): 143-150
- 7 Vaisanen R. A monograph of the genus *Mycomya* Rondani in the Holarctic region (Diptera, Mycetophilidae). *Acta Zool Fenn*, 1984, 177: 1-346
- 8 Wu H, Yang D. The Chinese *Mycomya* (Diptera, Mycetophilidae). *Jpn J Ent*, 1994, 62(1): 65-77

Wu Hong (Zhejiang Forestry College, Lin'an 311300, PRC). **Three new species of *Mycomya* from Longwangshan Nature Reserve of Zhejiang (Diptera: Mycetophilidae)**. *Journal of Zhejiang Forestry College*, 1998, 15(2): 170-175

Abstract In the present paper, three species of the genus *Mycomya*, collected by the author from Longwangshan Nature Reserve (30.4°N, 119.4°E), Zhejiang Province, are described as new to science. They are *M. copicusa*, *M. edentata* and *M. rivalisa*. The type specimens are

deposited in the Insect Collections of Zhejiang Forestry College.

New Species

1 *Mycomya opicusa* Wu, sp. nov. (Figs. 1-3)

Wing length 2.6-2.9 mm. Antenna brown with scape, pedicel and basal of 1st flagellum yellow, 1st flagellum 3.0 times, 2nd 2.0 times as long as wide. Pronotum yellow, with 3 longer setae. Mesoscutum black brown, with 2 yellow narrow longitudinal strips. Scutellum brown, 4 long scutellars. Legs brownish yellow. Coxa 2 without spur. Leg ratios $bt1:t1=0.73\sim 0.77$, $bt2:t2=0.53\sim 0.67$, $bt3:t3=0.53\sim 0.54$. Sc bears 5-11 setulae. Cell R₁ about 1.5-2.0 times as long as wide. M ratios 0.73-1.07, 1.00-1.45. Cu ratios 0.89-1.03, 1.33-1.58. Macrotrichia M petiole 0, M₁ 0, M₂ 0; Cu petiole 0, Cu 0, Cu₂ 0. Abdominal tergites brown. Sternites yellowish brown. The male genitalia are shown in Figs. 1-3.

Holotype ♂, 500-800 m, 1995-07-18. Paratypes 1♂, 800-1200 m, 1995-07-20; 4♂♂, 500 m, 1995-07-20, from Malaise trap; 1♂, 490 m, 1995-07-20, from light trap; 1♂, 500-800 m, 1996-06-14; 1♂, 500-600 m, 1996-07-28. All were collected from Longwangshan Nature Reserve, Zhejiang Province by Wu Hong.

This new species is similar to *M. strombuliforma* Wu et Yang, but cell R₁ about 1.5-2.0 times as long as wide, tergal lateral appendage with long setae, and the structure of gonostylus.

2 *Mycomya edentata* Wu, sp. nov. (Figs. 4-5)

Wing length 3.1 mm. Antenna brownish, 1st flagellomere 2.0 times, 2nd 1.5 times as long as wide, Pronotum yellow, with 4 longer setae. Mesoscutum black brown, with humeral yellow and 1 yellow broad longitudinal strip. Scutellum brownish yellow, 4 long scutellars. Legs yellow. Coxa 2 without spur. Leg ratios $bt1:t1=0.76$, $bt2:t2=0.60$, $bt3:t3=0.47$. Sc bears 18 setulae. Cell R₁ about 2.0 times as long as wide. M ratios 0.51, 0.66. Cu ratios 0.76, 1.01. Macrotrichia M petiole 0, M₁₊, M₂₊; Cu petiole+, Cu₁₊, Cu₂₊. Abdominal tergites brown, with humeral parts of tergites 1-5 yellow. Sternites yellow to brownish. The male genitalia are shown in Figs. 4-5.

Holotype ♂, Longwangshan, 400-500 m, Zhejiang, 1995-07-14, Wu Hong.

This new species can be separated from the known species of the genus by male genitalia, especially the tergal lateral appendage with many very long setae, without processus, gonostylus without tooth.

3 *Myconya rivalisa* Wu, sp. nov. (Figs. 6-9)

Wing length 3.1 mm. Antenna brown with scape, pedicel and basal of 1st flagellomere brownish yellow, 1st flagellomers 4.0 times, 2nd 2.0 times as long as wide. Pronotum yellow, with 3 longer setae. Mesoscutum black brown, anterior margin and lateral sides yellow. Scutellum brown, 4 long scutellars. Legs brownish yellow. Coxa 2 without spur. Leg ratios $bt1:t1=0.83$, $bt2:t2=0.65$, $bt3:t3=0.59$. Sc bears 12 setulae. Cell R₁ about 2.0 times

as long as wide. M ratios 1.02, 1.35. Cu ratios 1.00, 1.71. Macrotrichia M petiole 0, M₁0, M₂0; Cu petiole 0, Cu₁0, Cu₂0. Abdominal tergites brown. Sternites brownish yellow. The male genitalia are shown in Figs. 6–9.

Holotype ♂, 490 m, 1996-07-25, from light trap. Allotype ♂, 1996-07-29. Paratypes 1♂ 2♀♀, 800–1200m, 1995-07-20; 1♂ 3♀♀, 1996-07-29; 1♂, 1995-10-19; 1♂, 1995-07-12; 1♀, 1995-07-18. All were collected from Longwangshan Nature Reserve, Zhejiang Province by Wu Hong.

The new species is easily separated from the known species of the genus by tergal lateral appendage slender, pointed apically and with extremely broad long setae; gonostylus with 3 apical teeth and 1 broad lateral branch; sternal submedial filament short.

Key words Diptera; Mycetophilidae; *Mycomya*; new species; China