

中国尖尾蚁属 (膜翅目: 蚁科) 一新种

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摘 要

本文记述了3种分布于中国的尖尾蚁,其中一种为新种: *Acropyga (Atopodon) jiangxiensis* Sp. nov. 文后附有中国尖尾蚁属种检索表。

关键词 膜翅目; 蚁科; 尖尾蚁属; 分类

尖尾蚁属 *Acropyga* 隶属于蚁科、切叶蚁亚科,分布于世界的温带和热带区,本属蚂蚁生活于地下洞穴中^[1],因此身体柔软,颜色呈现浅白黄色,至多雌蚁为较深的褐红色,雄蚁最深为褐色。个体小至微型。触角7—11节,下颚须1—2节,下唇须3节。复眼很小,无单眼。Emery(1925)^[2]将该属分成4个亚属: *Acropyga* S. str., *Rhizomyrma* Forel(1893), *Atopodon* Forel(1912)和 *Malacomyrma* Emery(1922)。其中 *Rhizomyrma* 分布于东南亚、大洋洲及中美洲、南美洲。*Atopodon* 和 *Acropyga* 仅分布于东南亚和大洋洲。*Malacomyrma* 仅限于热带非洲。Emery(1925)记录了尖尾蚁属24种,9亚种(变种)。此后又增加了25种(亚种),加上本文记述的1新种,则全世界共有尖尾蚁属昆虫59种(亚种),其中 *Acropyga* 12种(亚种)、*Rhizomyrma* 36种(亚种)、*Atopodon* 9种、*malacomyrma* 2种。

尖尾蚁属蚂蚁常饲养根蚧(root-coccids)和根部蚜虫,影响植物生长。带病介壳虫有时被蚂蚁携带给健康植物,使植物感病。Silvestri(1926)^[3]在澳门发现一种独特的介壳虫 *Xenococcus* sp. 与索氏尖尾蚁共生,以后在上海又发现此蚁和史氏竹蚧 *Eumyrmoecus schmithi* Silvestri 共生。

我国已知有两种尖尾蚁: 索氏尖尾蚁^[4-6] *Acropyga (Rhizomyrma) sauteri* Forel 分布于上海、福建、台湾和澳门地区; 台湾尖尾蚁^[7] *Acropyga (Atopodon) baodaoensis* Terayama 分布于台湾。本文增记一新种。

江西尖尾蚁 *Acropyga (Atopodon) jiangxiensis* sp. nov. (图1)

工蚁(正模数据在前): 体长(TL)2.0mm, 2.0—2.1mm; 头长(HL)0.58mm, 0.57—0.61mm; 头宽(HW)0.47mm, 0.46—0.49mm; 柄节长(SL)0.37mm, 0.37—0.42mm; 头比(HI)81mm, 79—83mm; 柄节比(SI:SL×100/HW)79mm, 76—91mm; 并腹胸长(WL)0.51mm, 0.49—0.54mm。(测量5个个体)。

头长略大于宽,侧缘微凸,后头缘浅凹。上颚5齿,前3齿尖,从端齿起逐渐变小;第4齿较钝,大于第3齿,但比第1、2齿小;第5齿大,平截状。复眼很小,最大直径0.03

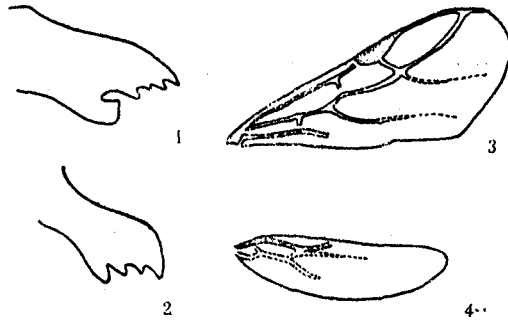


图1 江西尖尾蚁 *Acropyga (Atopodon) jiangxiensis* 新种
1. 工蚁上颚；2. 雄蚁上颚；3. 雄蚁前翅；4. 雄蚁后翅。

mm, 位于后头角至头前侧角 3/4 处。触角 11 节, 柄节末端几乎达到后头缘中央; 第 10 节长宽相等, 末节长为宽的 2.1—2.9 倍。唇基凸, 但无中脊, 前缘微凸, 额区明显, 近三角形, 下颚须 2 节, 下唇须 3 节。

并腹胸侧面观弓形, 并胸腹节背板斜面陡, 前一中胸缝和中一并胸腹节缝明显。前胸背板宽是长的 1.5—2.0 倍。腹柄结一般形状。

体呈皮革状, 上颚亮, 具一些刻点, 唇基具稀疏刻点。头仅前部具稀疏立毛, 唇基前缘不具长毛, 或具 1—3 根长毛; 腹柄结上缘具 1—2 根长毛或不具毛。并腹胸背板有稀疏立毛, 后腹前半部立毛稀, 向后逐渐丰富。

体浅黄色, 一些个体白色; 足附节、触角和上颚带红色; 上颚齿红褐色。

雄蚁: TL2.4mm, HL0.37—0.41mm, HW0.25—0.33mm, HI68—80mm, SL0.28—0.29mm, SI89—110mm, WL0.75—0.76mm。(测量 2 个个体)

头长略大于宽, 复眼大而凸, 直径 0.16—0.18mm。上颚 4 齿, 前 3 齿三角形, 末齿较圆, 大于第 2、3 齿。触角 12 节, 第 2 节长 2.3—2.7 倍于宽, 3—11 节长略大于宽或长宽近似相等, 第 10、11、12 节长度之比为 4:5:14。下颚须 2 节, 细。下唇须 3 节。

并腹胸背面弓形, 腹柄结薄, 翅脉如图所示。体较暗, 具稀疏刻点, 全身具丰富的倒状柔毛被, 上颚有几根长毛, 后腹部有稀疏的立毛。

体浅黄色略呈褐色, 单眼周围黑褐色, 触角各节色一致或末节较深。上颚齿红褐色, 足浅黄色。

正模 ♀, 江西分宜县大岗山, 1989-IX-11, 王常禄采。副模: 14 ♀♀, 2 ♂♂, 记载同正模。

模式标本保存于中国林业科学研究院林业研究所昆虫标本室。

本新种与台湾尖尾蚁十分相似, 区别是新种工蚁触角与头不具丰富的倾斜毛, 唇基前缘不具长毛或具 1—3 根长毛; 腹柄结上缘毛少于口根。唇基不具中脊。头顶无矩形暗斑。雄蚁触角第 2 节长为宽的 2.3—2.7 倍, 上颚最后 1 齿三角形。

中国尖尾蚁属种检索表(工蚁)

- 1. 上颚 4 齿, 齿大小相似.....索氏尖尾蚁 *A. sauteri* Forel
- 上颚 5 齿, 基齿明显大于其余 4 齿..... 2
- 2. 触角不具直立或倾斜毛, 头顶无矩形暗斑, 上颚第 4 齿不比第 1、2 齿大, 唇基无中脊
 江西尖尾蚁 *A. jiangxiensis* sp. n.

触角具丰富的倾斜毛,头顶有矩形暗斑,上颚第3齿大于1、2齿,唇基有中脊……………
 ………………台湾尖尾蚁 *A. baodaensis* Terayama

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A NEW SPECIES OF THE ANT GENUS *ACROPYGA* ROGER (HYMENOPTERA:FORMICIDAE) OF CHINA

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Abstract

Three species of the ant genus *Acropyga* (Hymenoptera: Formicidae) are found in China. Among them one is new to science. A key to the Chinese species of *Acropyga* is presented. The type specimens are kept in Insect Collection, The Forest Research Institute, The Chinese Academy of Forestry.

Acropyga (*Atopodon*) *jiangxiensis* n. sp. (figs. 1—4)

Worker (Holotype cited first); total length (TL) 2.0, 2.0—2.1; head length (HL) 0.58, 0.57—0.61; head width (HW) 0.47, 0.46—0.49; scape length (SL) 0.37, 0.37—0.42; head index (HI) 81, 79—83; scape index (SI) 79, 76—91; Weber's length of alitrunk (WL) 0.51, 0.49—0.54. (Unit: mm, Five individuals were measured)

Head slightly longer than wide, with slightly convex sides and shallowly concave occipital border. Mandibles subtriangular with 5 teeth. The apical 3 teeth smaller and pointed, the 4th larger than the 3rd, slightly smaller than the apical 2; basal tooth heavy and truncate. Eyes small, 0.03mm in maximum diameter. Antennae 11-segmented; 10th as long as broad; last segment 2.1—2.9× as long as broad. Clypeus convex, without median crina; its anterior border slightly convex. Frontal area distinct, subtriangular. Maxillary palpi 2-segmented; labial palpi 3-segmented.

Lateral view of the alitrunk convex, propodeum very sloping;

pro-mesonotal and mesonotal-propodeal suture distinct, viewed from the above, pronotum 1.5—2.0× as broad as long, petiole with the general shape.

Head, alitrunk and gaster shagreened. Mandibles shining, with some shallow punctures. Clypeus with sparsely punctures. Anterior part of head with several long hairs. Anterior border of clypeus with no more than 3 long hairs. Suberect hairs absent on other part of the head and antennae. Alitrunk with several pairs of erect hairs. Apex of petiole node without erect hairs or with 1 to 2 hairs. The whole body covered with dense pubescence.

Color white to pale yellow, with the tibiae, antennae and mandibles reddish; mandible teeth reddish brown.

Male; TL 2.4; HL 0.37—0.41; HW 0.25—0.33; SL 0.28—0.29; HL 68—80; SI 89—110; WL 0.75—0.76. (Two individuals were measured)

Head longer than wide. Eyes large and very convex, 0.16—0.18 mm in maximum diameter. Mandibles 4 teeth, the apical 3 sharp pointed, basal tooth large, more round; not rectangular. Antennae 12-segmented, the 2nd 2.3—2.7× as long as broad, 3th—11th longer than wide, or approximately as long as broad. Ratio of length from 10th segment to last one, 4:5:14. Maxillary palpi 2-segmented, slender. Labial palpi 3-segmented.

Dorsal outline of alitrunk round, petiole node thin. Wing veins as in figures.

Body subopaque with sparse punctures; covered with dense pubescence. Mandibles with several long hairs. Gaster with sparse hairs.

Color pale yellow, slightly brownish; Area near ocelli blackish brown. Terminal antennae segment a little darker than the others. Mandible teeth reddish brown.

Holotype; worker, 11. X. 1989, Dagang Mt., Fenyi County, Jiangxi Provin., Wang Changlu leg..

Paratypes; 14 workers, 2 males, same as the holotype.

This species resembles closely with *A. baodaoensis* Terayama, but differs from the latter in the following characters of worker: 1. Head and antennae without numerous suberect hairs; anterior border of clypeus with no more than 3 long hairs; apex of petiole with 1—2 hairs or without hairs. 2. Clypeus without median crina. 3. Vertex without large dark subtriangular spot. 4. 4th tooth not distinctly larger than the apical 2. Male of the new species differing in the following characters: 1. Second segment of antennae 2.3—2.7× as long as broad (3.0x as long as broad in *baodaoensis*). 2. Terminal mandible tooth triangular-shaped.

Key words Hymenoptera; Formicidae; *Acropyga*; Taxonomy