

## TWO GENERA OF CHEILONEURINI (HYMENOPTERA : ENCYRTIDAE) NEWLY RECORDED FROM CHINA WITH DESCRIPTIONS OF TWO NEW SPECIES

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**Abstract** The paper presents two new species of Cheiloneurini, Encyrtidae, collected from Liaoning and Jiangsu, China. i. e. *Ectroma loui* Xu, sp. nov., *Platencyrtus aclerus* Xu, sp. n., which are described in detail. These two genera *Ectroma* Westwood and *Platencyrtus* Ferriere are first recorded from China, and are all parasitoids of scale insects. All specimens are deposited in Institute of Applied Entomology, Agriculture & Biotechnology College, Zhejiang University, Hangzhou.

**Key words** *Ectroma* *Platencyrtus*, scale insects, new species, parasitoids

When dealing with collected material of parasitic wasps, we found two species of Encyrtids collected from Dalian, Liaoning and Nanjin, Jiangsu, all of which belong to Cheiloneurini, Encyrtinae, Encyrtidae. After checking in detail, we propose these species be new to science. i. e. *Ectroma loui* Xu, sp. nov. and *Platencyrtus aclerus* Xu, sp. nov.. The two genera are also new to China, and are all parasitoids on scale insects (Homoptera: Coccoidea). In this case it is already known 12 genera and 19 species in Chinese Cheiloneurini which will be discussed in detail in Chinese fauna of Encyrtidae, a monograph being published in near future. According to Noyes and Hayat 1984, the genera *Ectroma* and *Platencyrtus* are placed in Cheiloneurini, the two new species are described in detail as following. All specimens are deposited in Institute of Applied Entomology, Agriculture & Biotechnology College, Zhejiang University, Hangzhou.

### 1 *Ectroma* Westwood, new to China

*Ectroma* Westwood, 1833, descriptions of several new British forms amongst the parasitic hymenopterous insects. *Philosophical Magazine* 3(3):

334. Type-species: *Ectroma fulvescens* Westwood, by monotypy.

*Metallon* Walker, 1848, List of the specimens of hymenopterous insects in the collection of the British Museum, pt2, Chalcidites, additional species. iv: 219. Type-species: *Metallon acacallis* Walker, by monotypy.

*Pezobius* Forster, 1860, Eine zweite centurie neuer Hymenopteren. *Verhandlungen der Naturhistorischen Vereins der Preussischen Rheinlande und Westfalens* 17: 129. Type-species: *Pezobius polychromus* Forster, by monotypy.

The species of the genus are found as parasitoids on scale insects. Thirteen species are known distributed in Asia, Europe and North American. This genus has been placed in the tribe Miraini, subtribe Mayridiina (Encyrtidae), by Trjapitzin (1973). This is obviously incorrect since *Mira* belongs in the Tetracneminae whereas *Ectroma* and its relatives belong in the Encyrtinae.

*Ectroma loui* Xu, sp. nov. (figs. 1 - 2)

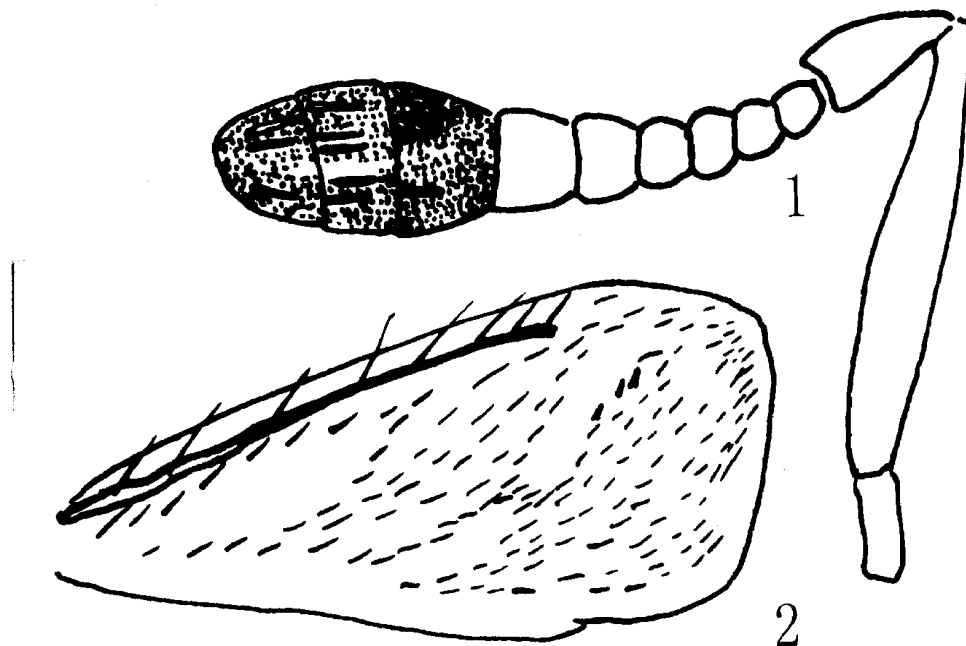
Female: body length 1.1 mm. yellow brown without metallic reflections; the following parts

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white: antennal scape, the fifth-sixth segments of funicle, hind tibiae apically. Clava black brown, .

Head: in dorsal view, 5.4 times as wide as frontovetex at anterior ocellus, frontovetex with sparse punctuations; ocelli forming an acute triangle; POL and OOL 1.5 and 1.5 times as long as diameter of anterior ocellus respectively, head in frontal view 1.2 times as wide as high, malar space

0.6 times as long as longitudinal diameter of eye; torulli separated from each other by 1.3 times their own longest diameters, upper margin above lowest level of eye; torullus separated from clypeus by 1.3 times longest diameter of torullus; mandible 3 denticles, maxillary palpi 4 segments, labial palpi 3 segments, with pointed apex.



Figs. 1 - 2 *Ectroma loui* Xu, sp. nov.

1. Antenna, 2. fore wing.

Antennae: scape ventrally slightly expanded, 5.4 times as long as maximum width, pedicel 2.5 times as long as wide at apex, 3.3 times as long as first funicular segment; the first-fourth segments of funicle nearly equal in length and width, the fifth-sixth funicular segment longer and wider, the sixth funicular segment 0.7 times as long as wide; clava 3 segmented, as long as the first-fifth funicular segments combined, slightly wider than sixth funicular segment, truncated apically.

Thorax: mesoscutum with punctuations; scutellum slightly convex, with reticulate sculpture, punctuated and nearly as long as mesoscutum; mesopleurae with scale sculpture; propodeum long.

Fore wing: rudimentary, not reaching apex of gaster, marginal vein long with 8 setae, linea calva

separated with hind margin by two rows of setae, outside linea calva pubescent.

Leg: mid tibiae with 4 spines apically, spurs of mid tibia 0.9 times as long as basal tarsi; basal tarsi 0.9 times as long as the second-fourth tarsi combined.

Gaster: oval, with apex pointed, pygostyli located close to middle of gaster, ovipositor slightly exerted.

Measures: taking mid tibia length as 100 (= 0.33mm), then thorax 127, gaster 154, fore wing 127, ovipositor 115.

Host: unknown.

Distribution: Liaoning (Dalian) Province.

Specimen examined: holotype, Dalian Liaoning, Aug. 16, 1994, LOU Jir-xian, C9505-102.

Diagnosis: This species is similar with *Ectroma fulvescens* Westwood 1833 but can be distinguished from the macropterous type of the latter by (1) antennae with the all funicular segments yellowish white, the latter with the a few funicular segments black; (2) fore wing not reached the apical gaster and hyaline, the latter with fore wing over apical gaster and infusate; and also can be distinguished from the brachypterous type of the latter by (1) antennae with the all funicular segments yellowish white, the latter with the a few funicular segments black; (2) fore wing rudimentary but over propodeum, the latter with fore wing not reached propodeum.

## 2 Platencyrtus Ferriere, new to China

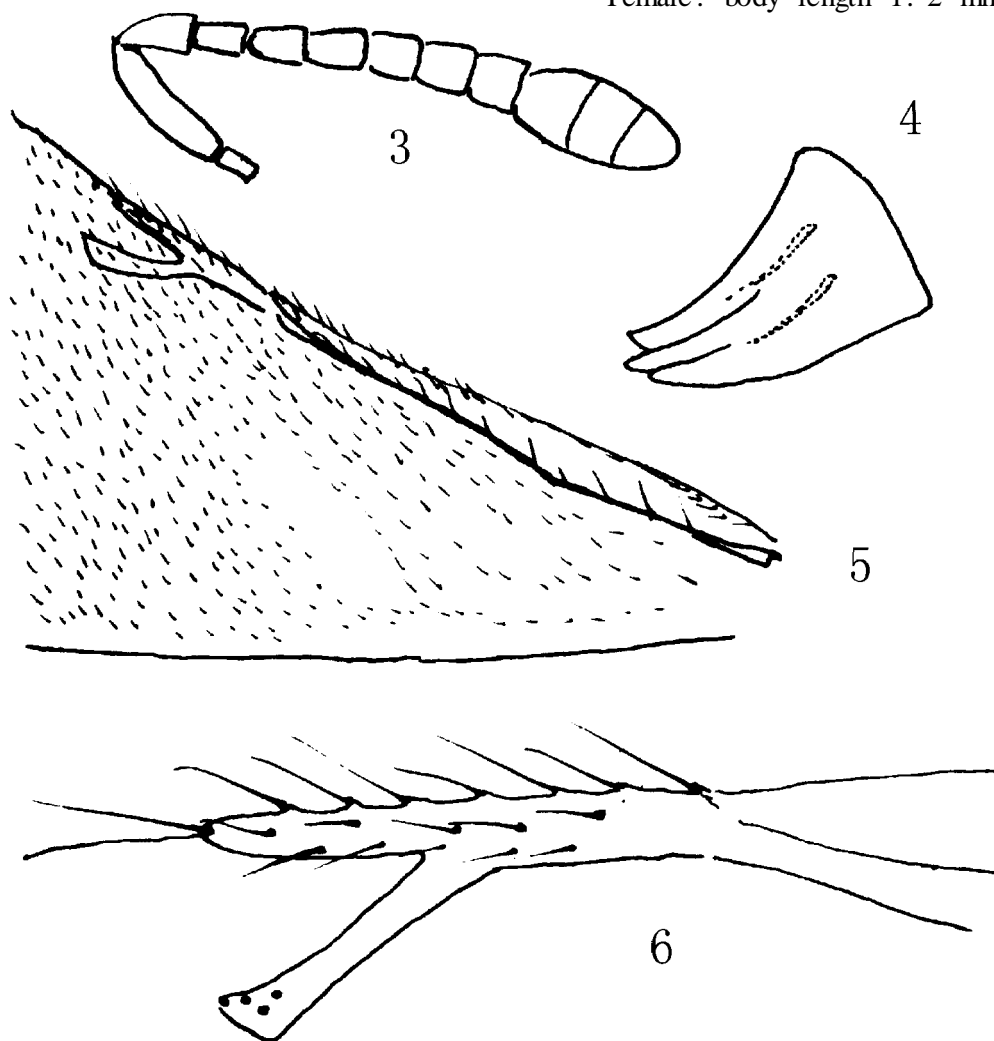
*Platencyrtus* Ferriere, 1955: 11. Type-species: *Platencyrtus parkeri* Ferriere.

*Platyencyrtus* Erdoes & Novicky, 1955: 197. Type-species: *Platyencyrtus esuriens* Erdoes & Novicky.

The only one species of the genus is found as parasitoids on *Chaetococcus phragmitis* March (Pseudococcidae) on Phragmites, and distributed in Europe and American. It is found as parasitoids on *Nipponaclerda biwakoensis* (Kuwana) (Acleridae) on Phragmites.

*Platencyrtus aclerus* Xu, sp. nov. (Figs. 3 - 6)

Female: body length 1.2 mm. Black with



Figs. 3 - 6 *Platencyrtus aclerus* Xu, sp. nov.  
3. Antenna; 4. mandible; 5. fore wing; 6. fore wing vein.

faint red metallic reflections; the following parts yellowish white: mid femora basally, hind femora both ends, tarsi, ovipositor apical 0.33. Wings hyaline.

Head: in dorsal view, 1.6 times as wide as long, 1.8 times as wide as frontovertex at anterior ocellus, frontovertex with sparse punctuations; ocelli forming an obtuse triangle; POL, OCL and OOL 4.0, 1.0 and 0.8 times as long as diameter of anterior ocellus respectively, anterior ocellus separated with post ocellus by a distance 0.4 times of POL; head in frontal view 1.2 times as wide as high, malar space 0.5 times as long as longitudinal diameter of eye; torulli separated from each other by 1.0 times their own longest diameters, upper margin below lowest level of eye; torullus separated from clypeus by 0.45 times longest diameter of torullus; mandible 1 denticle.

Antennae: scape ventrally slightly expanded, 3.5 times as long as maximum width, pedicel 1.4 times as long as wide at apex, 1.1 times as long as first funicular segment; all funicular segments equal in length and widened apically, first funicular segment 1.7 times as long as wide, sixth funicular segment 1.0 times as long as wide; clava 3 segmented, as long as half of the first-sixth funicular segments combined, slightly wider than sixth funicular segment, rounded apically.

Thorax: mesoscutum with punctuations; scutellum flat, with 14 setigerous depressions.

Fore wing: 2.8 times as long as wide, submarginal with 6 setae; parastigma with 7 setae, submarginal, parastigma, marginal and postmarginal veins as long as 6.3, 2.0, 1.3 and 0.8 times of stigma respectively; basal triangle without setae, outside speculum uniformly pubescent.

Leg: mid tibiae with 2 spines apically, spurs of mid tibia 0.8 times as long as basal tarsi; basal tarsi 0.8 times as long as the second-fourth tarsi combined.

Gaster: elongated oval, with apex rounded, pygostyli located close to middle of gaster, ovipositor slightly exerted.

Measures: taking mid tibia length as 100 (= 0.50 mm), then thorax 112, gaster 163, ovipositor

145, exerted part of ovipositor 20.

Male: body length 1.14mm, yellow brown; wings hyaline. Antennal funicular segments longer than wide; clava solid, about as wide as the sixth funicular segment.

Host: *Nipponaclerda biwakoensis* (Kuwana).

Distribution: Jiangsu (Nanjing) Province.

Specimen examined: holotype, Nanjing Jiangsu, Jul. 9, 1991, HAO Kang-shaan, *Nipponaclerda biwakoensis*, C9401-1; paratype 20, 34, same data as holotype.

Diagnosis: This species is similar with *Platencyrtus parkeri* Ferriere, 1955 but can be distinguished from the macropterous type of the latter by (1) body black with faint red metallic reflections, the latter with its body black with green and blue metallic reflections; (2) head and thorax sparsely finely punctuated, the latter with head and thorax reticulate sculptured; (3) fore wing hyaline, the latter with fore wing infusate.

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## 中国刷盾跳小蜂族二新记录属二新种(膜翅目:跳小蜂科)

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报道了采自辽宁大连和江苏南京的跳小蜂新种,即娄氏伊克跳小蜂, *Ectroma loui* Xu, sp. n. 和仁蚧平背跳小蜂,新种 *Platencyrtus aclerus* Xu, sp. n.。对新种进行了详细描述。娄氏伊克跳小蜂 *E. loui*, 正模, 本种与 *Ectroma fulvescens* Westwood 1833 相似, 与后者的长翅型相比, 有以下几点区别: (1) 本种触角索节均白色, 后者触角索节有黑色节; (2) 本种前翅相当退化, 不超过腹末, 透明无色, 后者前翅发达, 超过腹末, 暗色; 与后者的短翅型相比, 有以下几点区别: (1) 本种触角索节均白色, 后者触角索节有黑色节; (2) 本种前翅较退化, 前翅超过并胸腹节, 后者前翅退化, 不及并胸腹节。仁蚧平背跳小蜂, 新种 *Platencyrtus aclerus* Xu, sp. n. 寄主: 芦苇日仁蚧 *Nipponaclerda biwakoensis* (Kuwana)。正模, 郝康陕采, 本新种与 *Platencyrtus parkeri* Ferriere, 1955 很相似, 主要区别是新种: (1) 体黑色, 具弱红色金属光泽, 后者体黑色有蓝绿色金属光泽; (2) 头胸具稀疏细刻点, 后者头胸有网状刻纹; (3) 前翅透明, 后者前翅暗色。本文也是伊克跳小蜂属 *Ectroma* Westwood 和平背跳小蜂属 *Platencyrtus* Ferriere 在我国分布的首次记录。

关键词 介壳虫 新种 寄生蜂

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