

A new genus and two new species of Encyrtidae from China (Hymenoptera: Chalcidoidea)

Новый род и два новых вида наездников семейства Encyrtidae из Китая (Hymenoptera: Chalcidoidea)

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КЛЮЧЕВЫЕ СЛОВА: Encyrtidae, новые виды, новый род, паразитоиды, Китай.

ABSTRACT: *Cranencyrtus* gen.n., *C. sphenoides* sp.n. and *Anagyrtus fujianensis* sp.n. are described from Fujian, China.

РЕЗЮМЕ. Из провинции Фуцзянь, Китай описаны *Cranencyrtus* gen.n., *C. sphenoides* sp.n. и *Anagyrtus fujianensis* sp.n.

Among parasitoids of scale insects on trees in our collection, two species from Fujian, China appeared to be new for the science. One of the new species belongs to a new genus which is also described here. All specimens are collected on shrubs in the mountains. Type specimens are deposited in the Applied Entomology Institute, Agriculture & Biotechnology College, Zhejiang University.

Cranencyrtus gen.n.

Type-species: *Cranencyrtus sphenoides* sp.n.

DESCRIPTION. Gender: masculine.

Female: body of middle size.

Colour: mainly black. Frontovetex and face with metallic green reflections. Fore wing with a comma-like fuscous spot in its distal part.

Head in dorsal view: frontovetex gradually merged into face, with setiferous thimble-like punctures, expanding to upper part of scrobe; occipital margin sharp; ocelli forming an equilateral triangle, anterior ocellus separated from the posterior one ocellus by length of POL. Head in frontal view: toruli separated from each other by the longest diameter of torulus, much convex between, their upper margin below the lowest level of eye, lower margin separated from clypeus by a distance less than the longest diameter of toruli; maxillary palpi 4-segmented, labial palpi 3-segmented, pointed apically.

Antennae: scape much slender; pedicel slightly shorter than first funicle segment; the letter longer than wide, first to sixth funicle segments gradually short and widened, fifth segment quadrate, sixth segment wider than long; clava with 3 segments, strongly expanded and obliquely truncate.

Thorax: mesoscutum convex, with transverse rows of white hairs; scutellum strongly convex and thimble-like punctate centrally; mesopleurum posteriorly enlarged, touching the base of gaster; propodeum laterally with dense white hairs.

Fore wing: stigma longer than marginal vein and postmarginal vein; basal triangle uniformly pubescent, linea calva nude, hind margin open.

Leg: spur of mid tibiae slightly shorter than basal tarsi.

Gaster: oval, shorter than thorax, hypopygium shorter than half of gaster, thorax longer than gaster, gonostyli slightly exerted.

Host: unknown.

DISTRIBUTION. Fujian (Shanghang), China.

DIAGNOSIS. This genus is very similar to *Copidosoma*, and can be distinguished from the latter by: (1) frontovetex and scutellum centrally punctate; (2) scrobe just reaching half way between toruli and anterior ocellus; (3) clava with 3 segments, strongly expanded and obliquely truncate; (4) mesopleurum posteriorly enlarged, touching the base of gaster; (5) fore wing with postmarginal vein much shorter than the stigmal one; (6) fore wing with sensillae at apex of stigmal vein not arranged in a square; uncus present.

Cranencyrtus sphenoides sp.n.

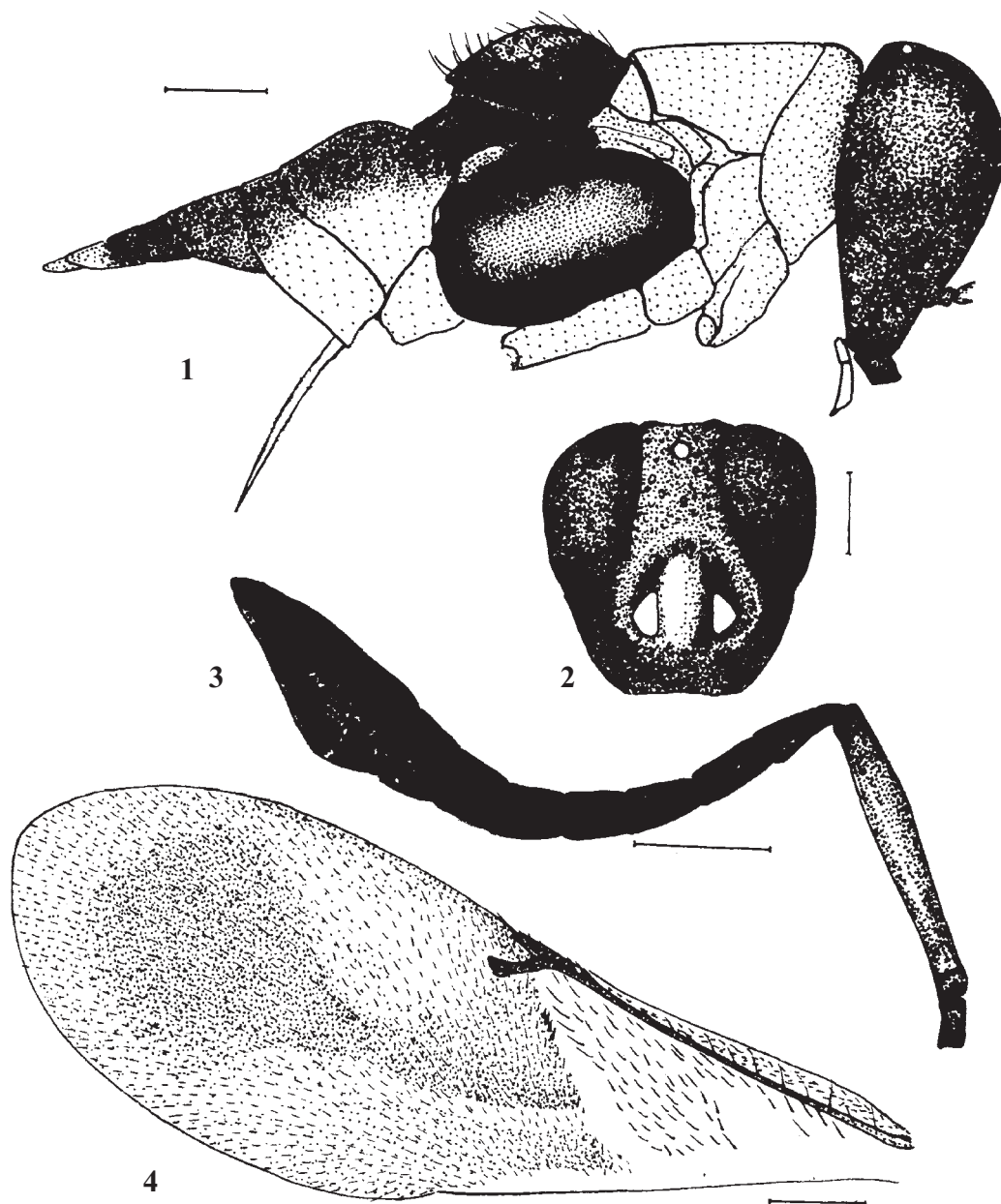
Figs 1–4.

MATERIAL. Holotype, ♀, Shanghang (25°0'N, 116°24'E), Fujian, elev. 1100–1700M, 1988–7–22, Jinjiang Fan, 886290.

DESCRIPTION. Female: body length 2.1 mm.

Colour: black, frontovetex and face with metallic green reflection; whitish: maxillary palpi, labial palpi, pronotum laterally, mesonotum laterally, tegulae in their apical half. Yellow brown: antennal scape, mesonotum (mostly), axillae, tegulae in their basal half, scutellum apically, propodeum laterally, legs, basal triangle of gaster dorsally, gaster centrally. Yellow: base of gaster ventrally. Fore wing transparent, out-side marginal vein with a fuscous spot.

Head in dorsal view 2.2 times as wide as long, 3.7 times as wide as width of frontovetex; frontovetex gradually merged into face, with setiferous thimble-like punctures, expanding to upper scrobe, occipital margin sharp; ocelli forming an equilateral triangle; POL, OCL and OOL as long as 1.8, 1.5 and 0.3 diameter of anterior ocellus respectively, anterior ocellus separated from the posterior one by length of POL; head in frontal view 0.9 times as wide as high, toruli separated from each other by their largest diameters, clearly convex between them, upper margin below the lowest level of eye; torulus separated from clypeus by 0.7 diameter of torulus. Maxillary palpi with 4 segments, labial palpi with 3 segments, with pointed tips.



Figs 1-4. *Cranencyrtus sphenoides* sp.n.: 1 — body in lateral view; 2 — head in front view; 3 — antenna; 4 — fore wing. Scale 0.2 mm.

Antennae: scape slender, 9.2 times as long as its maximum width; pedicel 2.3 times as long as wide at apex, 0.9 times as long as first funicle segment; the latter 1.9 times as long as wide, first to sixth funicle segments gradually shortened and widened, fifth segment quadrate, sixth segment 0.8 times as long as wide; clava with 3 segments, as long as fourth to sixth funicle segments combined, strongly expanded and obliquely truncated apically.

Thorax: mesoscutum convex, with transverse rows of white hair; scutellum strongly convex and thimble-like punctate centrally, mesopleurum posteriorly enlarged, touching the base of gaster, propodeum laterally with dense white hairs.

Fore wing: 2.7 times as long as wide; submarginal vein with 19 setae; submarginal, marginal and postmarginal veins as long as 8.0, 0.75 and 0.63 length of stigma respectively; fore wing with postmarginal vein much shorter than the stigmal one, fore wing with sensillae at apex of stigmal vein not arranged in a square, uncus present, basal triangle of fore wing pubescent; lineae calvae nude, hind margin open.

Leg: spurs of mid tibiae a little shorter than basal tarsi.

Gaster: oval, shorter than thorax; hypopygium shorter than half of gaster.

Thorax 1.14, gaster 0.86 times as long as middle tibia, gonostyl slightly exerted.

HOST: unknown.

DISTRIBUTION: Fujian (Shanghang), China.

Anagyryus fujianensis sp.n.

Figs 5–7.

MATERIAL. Holotype ♀, Jiangle (26°42'N, 117°24'E), Fujian, 1991–10–10, Xuexin Chen, 920249; paratype 1 ♂ same data as holotype, 920286.

DESCRIPTION. Female: body length 5.5 mm (excluding ovipositor not included).

Colour: black. Antennal scape basally and apically, fifth-sixth funicle segments, clava, maxillary palpi, labial palpi, tegulae, fore legs except tibiae and tarsi dorsally, middle legs except tarsi, hind legs except tibiae and tarsi yellowish white; mesoscutum (except central triangle), sternum of prothorax yellow brown; axillae, propodeum, mesopleura, ventral gaster apex reddish brown; second to fourth funicle segments, hind tibiae, all tarsi brown; gonostylus exerted, hypopygium nearly hyaline. Fore wing hyaline, outside marginal vein very weakly infuscate.

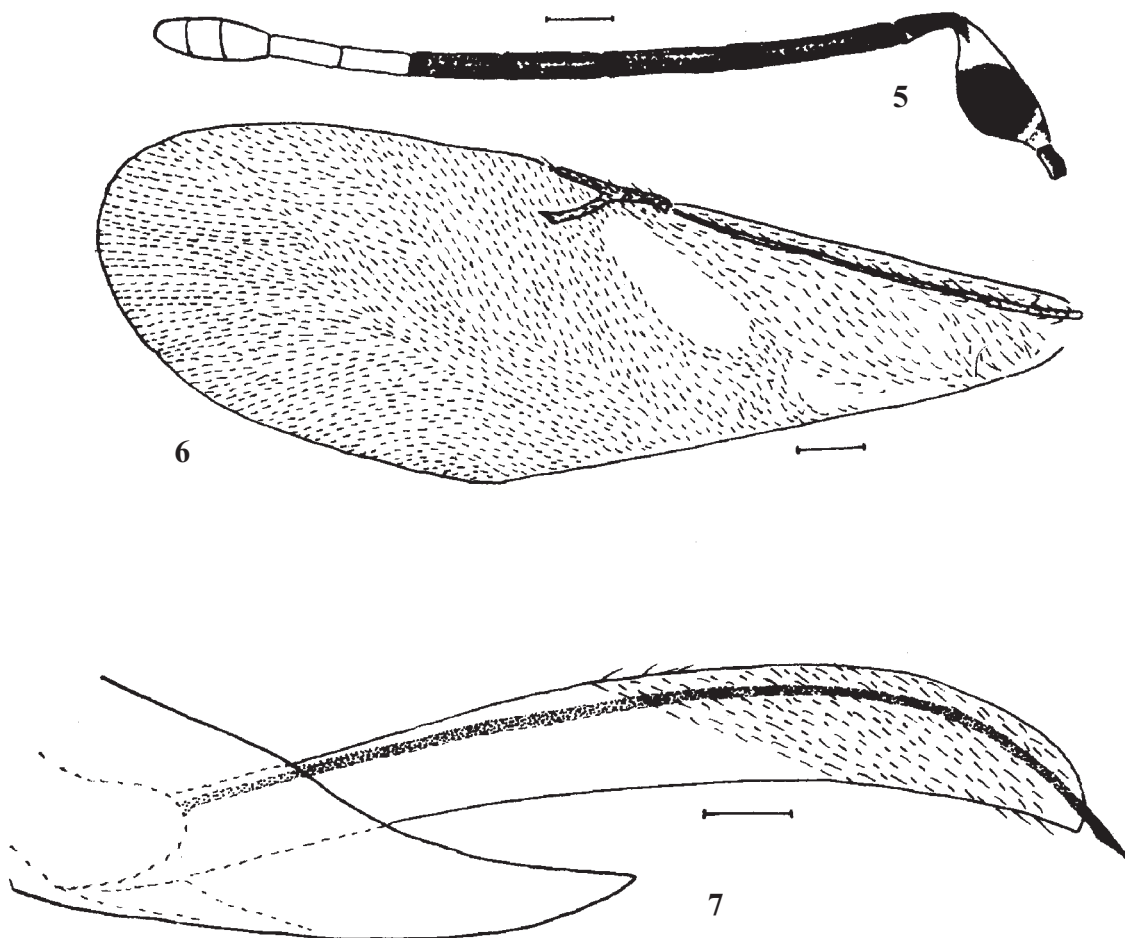
Head: 2.1 times as wide as long, in dorsal view 2.6 times as wide as width of frontovetex; frontovetex with dense fine

punctures, ocelli forming an obtuse triangle; POL, OCL and OOL as long as 4.0, 4.0 and 1.0 diameter of anterior ocellus, respectively, anterior ocellus separated from post ocellus by 0.6 POL; head in frontal view 1.3 times as wide as high, toruli separated from each other by 0.8 their longest diameter space between them, clearly convex, lower margin above lowest level of eye; torulus separated from clypeus by 0.8 its diameter of torulus, clypeus concave, its lower margin rounded at the middle, mandible robust, with 2 denticles, maxillary palpi 4 with segments, labial palpi with 3 segments, their tips rounded.

Antennae: scape strongly expanded ventrally, 2.1 times as long as maximum width; pedicel 2.6 times longer its apical width, 0.9 time as long as first funicle segment; first funicle segment 8.0 times as long as wide, first to sixth segments gradually shortened, sixth segment 2.7 times as long as wide; clava 3 with segments, as long as and half of fifth funicle segments combined, slightly wider than sixth segment, rounded apically.

Thorax: mesoscutum and scutellum flat, with dense white hairs; mesopleura do not touch at gaster base.

Fore wing: 2.8 times as long as wide; submarginal vein with 55 setae; length of submarginal, marginal and postmarginal veins 8.0, 1.3 and 0.8 more than that of stigma respectively;



Figs 5–7. *Anagyryus fujianensis* sp.n.: 5 — antenna; 6 — fore wing; 7 — ovipositor in lateral view. Scale 0.2 mm.

basal triangle uniformly pubescent; linea calva broadly interrupted in its posterior 0.33 hind margin, occluded by 4 rows of setae.

Legs: spurs of middle tibiae 0.7 times as long as first tarsal segment.

Gaster: lanceolate, first tergite with 3 notches length of median notch equals 0.2 that of gaster, length of lateral notch equals 0.8 that of gaster; exerted part of hypopygium longer than 0.4 gaster length, gonostylus curved ventrally strongly compressed laterally.

Thorax 1.00, gaster 2.60, exerted part of gonostyli (measured from apex of last tergite) 0.65 as long as middle tibia.

Male: body length 2.4 mm, black; antenna! scape except dorsal margin, all leg except tarsi yellowish white; pronotum laterally, sternum, mesopleura orange yellow; hind tibiae and all tarsi, gaster ventrally brown; wings hyaline. Antennae longer than body, with verticillate long setae; 3 notches of first tergite more shallow, other characters as in female.

Host: unknown.

DISTRIBUTION. Fujian (Jiangle), China.

DIAGNOSIS. This species is very similar to *Anagyris sinensis* Noyes, 1988, and *Anagyris cristinae*, Noyes et Menezes, from each it can be distinguished by: (1) Antennae with scape strongly expanded ventrally, 2.1 times as long as

maximum width; (2) antenna black with scape basally and apically, fifth to sixth funicle segments and clava yellowish white; (3) postmarginal vein developed, slightly shorter than stigmal vein; (4) maxillary palpi with 3 segments, labial palpi with 2 segments; (5) hypopygium longer than gaster; (6) gonostylus obviously compressed laterally, strongly exerted.

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