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# Euceros trispina, a new species with exceptional flagella from China (Hymenoptera, Ichneumonidae, Eucerotinae)

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#### **Abstract**

A new species of the genus *Euceros* GRAVENHORST, 1829 (Hymenoptera, Ichneumonidae, Eucerotinae) is described from China, *Euceros trispina* nov.sp. This new male is characterized by its unique flagellar form with highly modified 9<sup>th</sup> to 11<sup>th</sup> flagellomeres containing very long filiform processes arising from the apico-ventral edges, these processes having small club-shaped tips.

K e y w o r d s : *Euceros*, new species, China, description.

# Zusammenfassung

Hier wird eine neue Art der Gattung *Euceros* GRAVENHORST, 1829 (Hymenoptera, Ichneumonidae, Eucerotinae) aus China beschrieben, *Euceros trispina* nov.sp. Das neue Männchen ist durch die sehr ungewöhnliche Form der Fühlergeißeln charakterisiert: die Fühlergeißeln 9-11 haben lange fadenförmige Fortsätze an den apikalen Ventralränder, welche am Ende keulenförmig aufgetrieben sind.

#### Introduction

The Eucerotinae represent a small subfamily of Ichneumonidae (Hymenoptera) containing a cosmopolitan genus, *Euceros* GRAVENHORST, 1829, with 49 valid taxa (YU et al., 2016). The non-Nearctic *Euceros* species were studied by BARRON (1978) and the Palaearctic species of this genus have recently been revised by KASPARYAN & TOLKANITZ (1999). Actually, a second genus, *Barronia* GAULD & WAHL, 2002, was described from Chile.

As far as known, *Euceros* species are hyperparasitoids with an unusal form of parasitism that is rather similar to the family Trigonalidae (GAULD & WAHL 2002).

The males of Euceros are characterized by more or less modified flagella, and this feature makes it sometimes easier to differentiate the males rather than the females of this genus.

Here, I describe a new male of *Euceros* GRAVENHORST from China with an exceptional flagellar form.

## **Description**

# Euceros trispina nov.sp. (figs 1-5)

Holotypus: (3) China, Sichuan: Emei Shan: Jieyindian, N 29.537° E 103.331°, 2400-2500 m, 05.VII.2009, leg. Blank, Liston, Taeger (SDEI/Müncheberg).

R e m a r k: This new male is characterized by its unique form of flagella. In the key of KASPARYAN & TOLKANITZ (1999) it runs to number 15(16) (*Euceros kiushuensis* UCHIDA, 1958) due to the swellings on 2<sup>nd</sup> to 4<sup>th</sup> tergites. Beside the flagellar form it can be differentiated by the form the pronotal process and the different colour pattern.

D e s c r i p t i o n: Body length 7.5 mm. Flagella with 31 flagellomeres, 1st flagellomeres length c.2.9x width. 9th to 12th flagellomeres highly modified, 9th to 11th flagellomeres with very long filiform processes arising from the apico-ventral edges, these processes with small club-shaped tips; 12th flagellomeres with concave anterior margins (fig. 5).

Head large; temples slightly narrowed behind the eyes, length c.0.5x eye width (fig. 2). Ocelli small, distance of lateral ocelli from eye 2.3x as long as their diameter; frons almost smooth, with some superficial punctures, shining. Face and clypeus smooth and shining. Clypeus slightly convex; apical margin blunt, strongly rounded and bluntely pointed medially (fig. 3). Malar spaces wide, c.1.1x as long as the width of mandibular bases. Mandibles with two equal teeth. Occipital carina complete medially, genal carinae reach mandibular bases.

Pronotum with a strongly elevated median process, this process bilobed, with a strong anterior indentation (as in *Euceros unispina* KASPARYAN, 1984: see figure 544 in KASPARYAN & TOLKANITZ 1999: 332), but its lateral lobes with fine transversal striae in anterior half; sides of pronotum almost smooth, epomia absent. Notauli very strongly impressed in the frontal half of mesoscutum; median lobe of mesoscutum with fine punctures, shining; lateral lobes almost smooth. Prepectal carina narrow, obsolete on mesopleura, postpectal carina widely interrupted medially. Mesopleura smooth and shining; metapleura with some superficial punctures, shining; coxal carinae absent. Scutellum moderately elevated, longer than wide, with lateral carinae in basal fifth only. Area superomedia with carinae, almost rhombic, longer than wide, lateral carinae diverging from base (fig. 4); area petiolaris heart-shaped, carinated laterally and with a median longitudinal ridge. Fore tibiae without apical teeth; hind femora length c.4.6x width; claws with few (2-4) small teeth in basal 2/3.

Wings rather densely pilose, but subbasal cells of fore wings almost bare. Areolets without distal intercubiti; nervuli strongly postfurcal (by 1/3 their length); nervelli of hind wings vertical, intercepted in apical 0.7.

1<sup>st</sup> metasomal tergite subsessile, 1.4x as long as apically wide, with dorsal carinae basally, strongly convergent apically and ending in basal 0.4, tergite covered with strong rugae. 2<sup>nd</sup> tergite length c.0.9x width; with small transverse basal thyridia 2<sup>nd</sup> to 4<sup>th</sup> tergites with basolateral swellings and elevated median ridges, with coarse and more or less longitudinal rugose-striation; following tergites almost smooth and shining.

Colour: Black, with extensive yellow colour pattern. Flagella mainly yellow; scapes, pedicels and 1<sup>st</sup> to 3<sup>rd</sup> flagellomeres, the apical five flagellomeres and tips of flagellomeres 9-11 black. Yellow are mandibles except teeth, labrum, palps, head except ocellar field and dorsal 2/3 of occiput, frontal margins and hind upper edges of pro-

notum, anterolateral and central spots on mesoscutum, scutellum and postscutellum, tegulae, subtegular ridges, two large spots on mesopleura (one anterior, the other on the posterior lower edge), upper division of metapleura and central metapleura, propodeum in posterolateral parts, all metasomal sternites except small darker lateral marks, apical bands of all metasomal tergites (bands narrower medially), fore and middle coxae, trochanteres and trochantelli, hind coxae in apical 0.2, hind trochanters and trochantelli, hind femora in apical 0.1, hind tibiae in basal 0.4 and hind tarsi. Fore and middle legs otherwise reddish-yellow; 2<sup>nd</sup> to 5<sup>th</sup> hind tarsomeres ivory. Wings hyaline, pterostigmata brown.

Female and hosts unknown.

Distribution: China.

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#### References

BARRON J.R. (1978): Systematics of the world Eucerotinae. Part II: Non-Nearctic species. – Naturaliste canadien 105: 327-374.

GAULD I.D. & D.B. WAHL (2002): The Eucerotinae: a Gondwanan origin for a cosmopolitan group of Ichneumonidae? – Journal of Natural History **36**: 2229-2248.

KASPARYAN D.R. & V.I. TOLKANITZ (1999): [Fauna of the USSR. Hymenoptera Vol III, No 3. Ichneumonidae, Subfamily Tryphoninae: Tribes Sphinctini, Phytodietini, Oedemopsini, Tryphonini (addendum), Idiogrammatini, subfamilies Eucerotinae, Adelognathinae (addendum), Townesioninae] in Russian. – Sankt Petersburg, Nauka, 1-404.

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Figs 1-5: Euceros trispina nov.sp. ? (holotypus): (1) habitus, (2) head, (3) face, (4) propodeum, (5) modified flagellomeres.

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