A new species in the genus Epitettix Hancock (Orthoptera: Tetrigoidea: Cladonotidae) from Yunnan Province

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Abstract: One new species of Epitettix Hancock in the family Cladonotidae is described, i.e. Epitettix torulosinota sp. nov. This new species is allied to Epitettix tamlus Günther, 1939, but differs in: 1) anterior margin of pronotum straight; 2) lateral carinae of prozona long, obviously shrunk to posterior; 3) posterior process reaching 3/4 of hind femur; 4) disc of pronotum rough, with dense protuberances; 5) lower margin of lateral lobe of pronotum in postzona straight, space between lateral carina and lower margin of lateral lobe narrow.

Key words: Caelifera; pygmy locust; taxonomy

Introduction


Epitettix is closely related to Pseudopepitettix Zheng 1995, but can be easily distinguished by the narrow frontal ridge, width of forntal ridge near base of antennae 1.3–1.8 times width of
1st antennal segment in species of the genus *Epitettix*, while width of frontal ridge near base of antennae 2.3–2.5 times width of 1st antennal segment in species of the genus *Pseudeitettix*.

While identifying tettigid specimens provided by Professor Zhenghui XU, collected from Yunnan and Xizang regions, one new species in the genus *Epitettix* was found. This is the first discovery of species in this genus in China, which is described as follows. Type specimens are deposited in the Institute of Zoology, Shaanxi Normal University.

**Taxonomy**

*Epitettix* Hancock, 1907


Type species: *Epitettix punctatus* Hancock, 1907.

Size small, stubby. Head not prominent above the pronotal surface; vertex broad, much wider than width of an eye; frontal ridge between antennae 1.3–1.8 times width of first segment of antennae. Antennae filiform, inserted between upper or lower margin of eyes. Anterior margin of pronotum straight, posterior process not reaching top of hind femur, apex point or depressed in the middle; with or without lateral carinae in prozona; lateral lobes of pronotum outturned, posterior margin with only one depression, apex of posterior angle truncated. Totally wingless. Length of first segment of hind tarsi greater than the third.

**List and distributions of species in the genus *Epitettix***

- *E. dammermanni* Günther, 1939—South Java
- *E. elytratus* Günther, 1939—Northeast India
- *E. emarginatus* (de Haan, 1843)—New Guinea and Northeast India
- *E. fatigans* Günther, 1938—New Guinea
- *E. humilicolus* Günther, 1938—New Guinea
- *E. lativertex* Günther, 1938—New Guinea
- *E. obtusus* Storozhenko & Dawwrwuen, 2014—Thailand
- *E. punctatus* Hancock, 1907—Borneo
- *E. spheniscus* Günther, 1974—Madagascar
- *E. strigonovae* Storozhenko, 2012—Vietnam
- *E. timilus* Günther, 1939—South India
- *E. torulosinota* sp. nov.—China (Yunnan)
- *E. tumidus* Günther, 1938—New Guinea

*Epitettix torulosinota* sp. nov. (Figs. 1–7)

Female. Body small, stubby. Head not prominent above the pronotal surface; vertex broad, with width 2.0 times width of an eye; anterior margin of vertex straight, slight prominence before anterior margin of eyes, middle carinae short, obvious; lateral margin of vertex upturned; Frons vertical in lateral view, vertex and frons form a right angle; width of frontal ridge between antennae 1.3 times width of first segment of antennae. Antennae filiform, inserted between lower margin of eyes, 16-segmented, length of one segment in the middle 4.0–5.0 times its width. Eyes globose, prominent; lateral ocelli located in the middle of anterior margin of eyes. Disc of pronotum rough, with dense protuberances; anterior margin of pronotum
straight, middle carina distinct in whole length, upper margin of pronotum slightly arc-shaped and uplifting before shoulders in profile, nearly straight after shoulders; lateral carinae of prozona long, obviously shrunk to posterior; humeral angle inconspicuous; posterior process reaching 3/4 of hind femur, apex depressed in the middle; lateral lobes of pronotum outturned, posterior margin with only one depression, apex of posterior angle truncated, lower margin of lateral lobe of pronotum in postzona straight, space between lateral carina and lower margin of lateral lobe narrow. Totally wingless. Anterior and middle femora slender, lower margin of middle femur slightly undulating; hind femur stubby, pre-knee and knee teeth acute; outer side of hind tibia with 8 spines, inner side with 6–7 spines; length of first segment of hind tarsi 2.0 times the length of the third, three pulvilli of first tarsus progressively larger. Ovipositor slender, length of upper valvulae 3.0–4.0 times its width, upper and lower valvulae with fine serrations. Length of subgenital plate greater than its width, posterior margin with 3 protuberances in the middle.


Body black brown, hind tibia black brown.

Male. Body smaller than female, subgenital plate long, conical, with lighter body colour; other structures similar to male.

Measurements. Length of body: ♂ 8.0–8.5 mm, ♀ 13.0–13.5 mm; length of pronotum: ♂ 7.0–8.0 mm, ♀ 9.0–9.5 mm; length of posterior femur: ♂ 6.0 mm, ♀ 6.5 mm.
Holotype. ♀, China, Yunnan, Cangyuan (Mengleng), 2210 m, 18-IV-2012, Coll. Chunchang Li. Paratypes. 3♂1♀, same data as holotype.

Habitat. This new species lives on moss and surfaces of evergreen broad-leaved forest.

Remarks. Most species in this genus do not have lateral carinae in prozona of pronotum, except in 4 species. This new species is allied to Epitettix timalus Günther, 1939, the main differences are listed in Table 1.

Etymology. The specific epithet is derived from the Latin words “torus” for “bulging” and “nota” meaning “mark”.

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<tr>
<th>Table 1. Differences between E. timalus and E. torulosinota sp. nov.</th>
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<td>Disc of pronotum</td>
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<td>Anterior margin of pronotum</td>
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<td>Lateral carinae of prozona</td>
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<td>Posterior process</td>
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<td>Lower margin of lateral lobe of pronotum in postzona</td>
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References


