

## The cicada genus *Megapomponia* Boulard, 2005 from Laos, with description of a new species (Hemiptera: Cicadidae)

Lee (2014) recorded 60 species of Cicadidae (Insecta: Hemiptera) from Laos, belonging to 33 genera.

The genus *Megapomponia* Boulard, 2005 contains eight species distributed throughout the Oriental Region. The five species included in *Megapomponia* by Boulard (2005), *M. imperatoria* (Westwood, 1842), *M. merula* (Distant, 1905), *M. intermedia* (Distant, 1905), *M. pendleburyi* (Boulard, 2001), and *M. clamorigravis* Boulard, 2005, are very hard to distinguish from each other in morphology, even in the male genitalia. More recently, Lee & Sanborn (2010) described three additional species of this genus, *M. atrotunicata* Lee & Sanborn 2010, *M. sitesi* Sanborn & Lee 2010, and *M. castanea* Lee & Sanborn 2010 from Thailand and Cambodia.

Boulard (2008) produced a list of the cicadas from Asia, recording one *Megapomponia* species inhabiting Laos: *Megapomponia intermedia* (Distant, 1905).

A recent visit to the MNHN collections allowed the discovery of an undescribed species of *Megapomponia* from Laos which is here described as *M. bourgoini* sp. nov. An identification key to separate the two species from Laos is provided.

The specimens were found among undetermined material in the collections of the Museum National d'Histoire Naturelle, Paris, France (MNHN).

Nomenclature for family, subfamily and tribal classification follows that of Lee (2008) and Lee & Emery (2014). Morphological terminology follows that of Moulds (2005). The male genitalia of the holotype were examined and photographed using a dissecting microscope (Leica MZ12.5). The distribution map was produced with SimpleMappr (Shorthouse 2010).

### Taxonomy

Order Hemiptera Linnaeus, 1758

Suborder Auchenorrhyncha Duméril, 1806

Infraorder Cicadomorpha Evans, 1946

Superfamily Cicadoidea Latreille, 1802

Family Cicadidae Latreille, 1802

Subfamily Cicadinae Latreille, 1802

Tribe Dundubiini Atkinson, 1886

Subtribe *Megapomponiina* Lee & Emery, 2014

Genus *Megapomponia* Boulard, 2005

*Megapomponia* Boulard 2005: 100–102.

Type species: *Cicada imperatoria* Westwood 1842 (peninsular Malaysia).

### Key to the species of the genus *Megapomponia* from Laos

- Submedian sigilla of mesonotum with a black spot on anterior margin; male abdominal tergites and sternites with a broad black transverse band along posterior margin of each segment; male wing span about 175 mm.....  
.....*M. intermedia* (Distant, 2005)
- Submedian sigilla of mesonotum without black spot on anterior margin; male abdominal tergites and sternites largely fuscous; male wing span 168 mm.....  
.....*M. bourgoini* sp. nov.

### *Megapomponia intermedia* (Distant 1905)

*Pomponia intermedia* Distant 1905: 68–69 [Type Location: Tenasserim: Thaungyang Valley]; Hayashi 1993: 14, fig. 3.

*Megapomponia intermedia*: Boulard 2008: 365; Lee & Sanborn 2010: 31, 32, 34, figs 3–4, 8; Lee, 2014: 64.

Distribution: Vietnam, Laos, Thailand, and Myanmar.

### *Megapomponia bourgoini* sp. nov.

urn: Figs 1–3

Etymology: the species is dedicated to Prof. Thierry Bourgoin in acknowledgment for all his help during visit of the first author to the MNHN collection.

Type material: Laos: Holotype ♂: [Laos, Seno, 1961, leg. Duhaut] (MNHN). Coordinates of Seno (= Xeno): 16°40'37"N 104°58'58"E.

Description: Measurements (in mm) - ♂: body length: 72.5; fore wing length: 83.5; head width: 20.2; length of head: 9.1; pronotum width: 24.5.

Head: slightly narrower than mesonotum; castaneous with the following marks: a median piceous mark enclosing ocelli except lateral border of lateral ocelli, extending along posterior half of anterior arm of epicranial suture and anteriorly along midline, terminating posterior to frontoclypeal suture; fuscous area on anterior third of supra-antennal plate; fuscous mark on vertex about half the distance between eye and frontoclypeal suture, following curvature of eye to level of lateral ocellus where mark narrows, connecting to piceous mark that extends from posterior to eye. Head covered dorsally with fine golden pile, longer and thicker posterior to eye. Antennae piceous except castaneous scape, proximal pedicel, and ventral portion of first and second flagellar segments. Genae with large piceous spot. Lorum with piceous spot on posterior two-thirds. Postclypeus with piceous mark dorsally along midline splitting along medial borders of transverse ridges then fusing along midline centrally forming a castaneous spot on apical midline. Mark extending laterally into transverse grooves increasing in length reaching the border at the supra-antennal plate and the next three grooves, then decreasing in length in the next three



Figure 1. *Megapomponia bourgoini* sp. nov., distribution map.

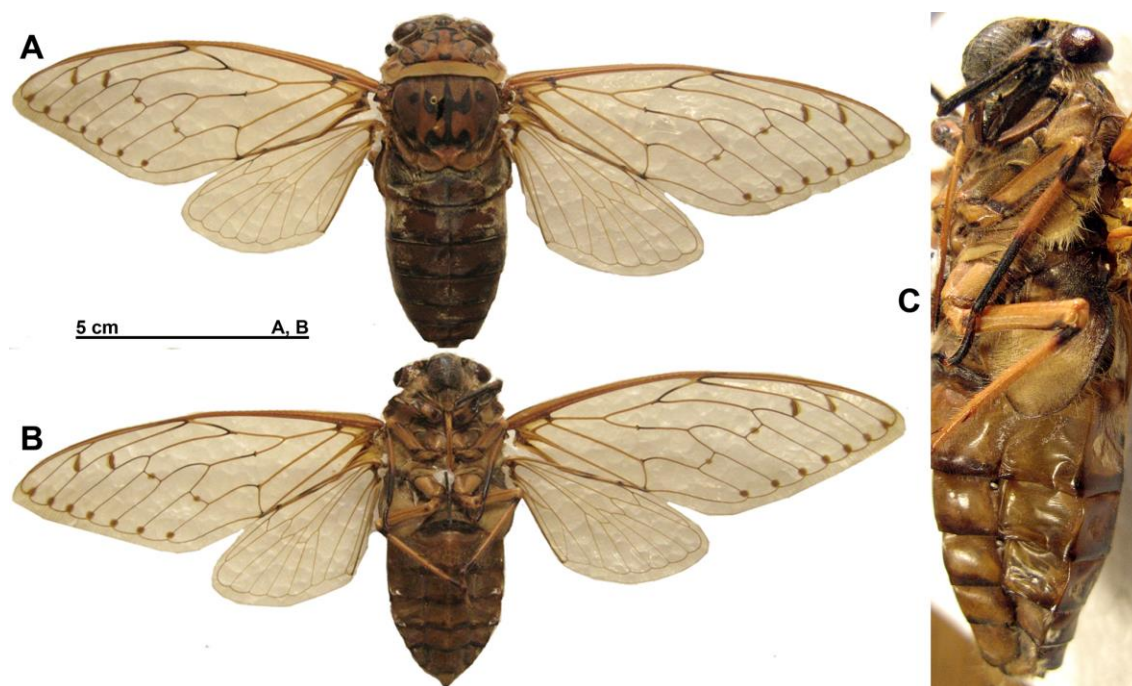


Figure 2. *Megapomponia bourgoini* sp.nov., holotype ♂: A, dorsal view. B, ventral view. C, body, lateroventral view.

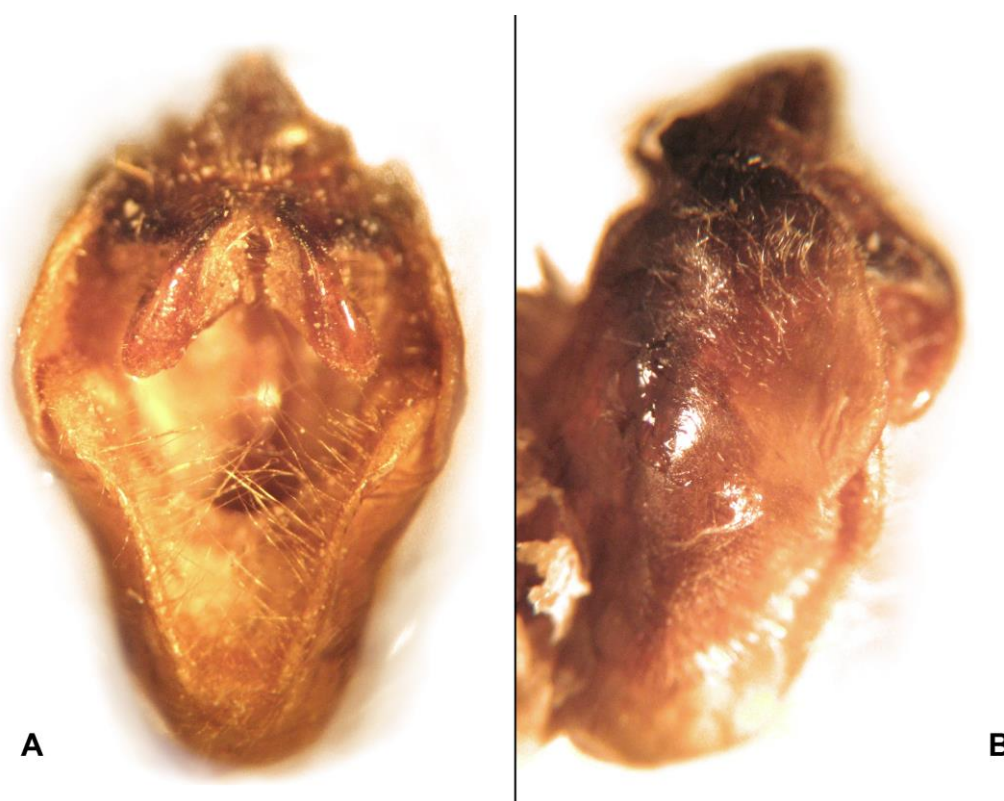


Figure 3. *Megapomponia bourgoini* sp.nov., holotype ♂: A, male genitalia, ventral view. B, male genitalia, lateroventral view.

grooves before lengthening again to border in final four grooves. Anteclypeus marked with piceous laterally and along anterior and posterior borders. Mentum tawny with castaneous margins. Labium tawny proximally becoming castaneous with piceous tip surpassing hind coxae. Intermediate golden pile on gena, lorum, and anteclypeus, shorter on lateral postclypeus and extending to midline along anteclypeus.

**Thorax:** inner area of pronotum castaneous with the following marks: parallel piceous marks from medial paramedian fissure expanding anteriorly and fusing medially on anterior border; marks in anterior and posterior paramedian fissures, on disc posterior to mark in posterior paramedian fissure, and along midline anterior to pronotal collar; piceous line from posterior lateral fissure along ambient fissure to spot on lateral disc. Pronotal collar castaneous but lighter

along posterior border, lateral tooth piceous ventrally. Mesonotum castaneous with the following marks: four piceous marks on anterior border; trident-shaped mark medially anterior to cruciform elevation; piceous spots lateral to arms of trident-shaped mark and in scutal depression; linear piceous mark laterally from level of basal membrane of forewing crossing anterior arms of cruciform elevation, wider in extremities. Pronotum and mesonotum with short golden pile. Long golden pile on posterior mesonotum including depressions anteriorly and laterally to cruciform elevation and dorsal metathorax. Thoracic sternites tawny with piceous marks on medial katapisternum 2, medial episternum 2, lateral anepisternum 2, lateral meron 2, and lateral episternum 3. Sternites covered with pile, longer laterally.

**Legs:** castaneous. Coxae with proximal and distal piceous marks. Protrochanters with proximal and distal piceous marks connected anteriorly. Profemora with piceous mark on medial proximal surface connected to annular piceous mark proximal to distal terminus through spines. Primary and secondary spines upright, small subapical spine, piceous except castaneous primary spine tip. Protibiae piceous except proximal castaneous band and distal terminus. Mesofemora with small piceous spot proximally and small annular piceous spot distally. Mesotibiae piceous proximally and distally. Metatrochanters and metafemora without marks. Metatibiae with small piceous bands proximally and distally. Tibial spur dark castaneous. Pro- and mesotarsi piceous. Posterior metatarsi piceous, mesotarsi and pretarsi castaneous. Pretarsal claws castaneous with piceous tip.

**Wings:** hyaline with smoky distal regions in the eight apical cells. Forewings with a distinct infuscation each on r, r-m, m, and m-cu crossveins, and on veins distal RA2, RP, M1-4, CuA1, and CuA2 proximal to ambient vein. A series of infuscated lines in marginal area. Venation castaneous with piceous marks at node, bifurcation of M and M1+2, middle of M3+4, and CuA posterior to split of CuA2, arcus, and two spots at wing base. Hind wings hyaline, smoky distally with infuscated lines in marginal area. Venation castaneous with piceous spot at junction of radius anterior, radial crossvein and ambient vein, and at base. Slight infuscation along anal veins 1-3.

Operculum: tawny with piceous base and linear mark on anterior three quarters of lateral border; roughly triangular with posterior angle rounded, extending to anterior third of sternite III. Long golden pile laterally on surface and margin. Medial border reaching level of hind trochanters. Meracanthus tawny.

**Abdomen:** dark castaneous, cylindrical, about 1.24 times as long as distance from head to cruciform elevation. Posterior margin of tergites III-VIII margined with piceous, piceous margin expanding laterally on posterior tergites III and IV. Tergites II and III with piceous mark along midline, expanding anteriorly. Tergites III-V with ferruginous spots laterally. Timbal cover dark castaneous, trapezoid with lateral side about 3.5 times longer than inner side and anterior angles rounded. Timbal concealed by timbal cover in dorsal view. Tergites covered with golden pile, longer pile on lateral timbal cover, and lateral portions of tergites III and V-VIII. Sternites tawny, with sternites II-VI castaneous posteriorly. Piceous mark on hypopleurites and lateral sternites. Epipleurites translucent, castaneous posteriorly.

**Genitalia:** pygofer oblong in ventral view, castaneous, with posterior margin tawny, piceous laterally. Dorsal beak small, piceous. Uncus bifurcated with lobate termini, piceous with tawny medial margin. Uncus with sparse golden pile.

**Distribution.** Laos.

The new species *Megapomponia bourgoini* sp. nov resembles *M. imperatoria*, *M. pendleburyi*, *M. intermedia*, *M. sitesi* and *M. atrotunicata* in having a pronotal collar with distinct marks, but is distinguished by the basal membrane of the forewings without reddish orange coloration. It resembles *M. merula* by the basal membrane of the forewings without reddish orange coloration but is distinguished from the latter by having a pronotal collar with distinct marks, while *M. merula* does not have distinct marks in the pronotal collar.

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