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## FIELD NOTE

## New Locality Record and Notes on *Egesina (Callienispia) elegans* from East Kalimantan, Indonesia (Insecta, Coleoptera, Cerambycidae, Lamiinae)

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**ABSTRACT** Three specimens of *Egesina (Callienispia) elegans* (Fisher, 1925) are first recorded since 1925 as the first representative from East Kalimantan, Indonesia with detail description, fine quality figures, and brief notes.

**Key words:** Taxonomy, cerambycid fauna, lime stone forest

### INTRODUCTION

*Egesina (Callienispia) elegans* (Fisher, 1925) is a species of longhorn beetles belonging to the tribe Ptelopliini of the subfamily Lamiinae. It was originally described based on a single male specimen from "Iligan, Mindanao, Philippines" by Fisher (1925) as the type species of the genus *Callienispia* Fisher, 1925. Later on, it has been treated as a member of the genus *Egesina* Pascoe, 1864 since Breuning (1961), however no further specimen had been known for approximately 100 years since the original description.

In 2018, two males and a female of a particular species with twelve antennomeres belonging to *Egesina* were collected during our entomological survey at the Education Forest of College of Agriculture, East Kutai (STIPER KUTIM), located in a limestone area of East Kalimantan Province, Indonesia. After our close examination, the specimens in question were concluded to be corresponded well with *E. (C.) elegans*. Herein, we record this species from Kalimantan for the first time with description of the detail features, fine quality figures, and notes of the new population.

1

### MATERIAL AND METHOD

This study was conducted based on three specimens collected by beating a fine dead branch of broad leaves tree at the Karangan Education Forest of STIPER KUTIM,

located in Karangan Hlir, Karangan District, East Kutai Regency, East Kalimantan Province, Indonesia. These specimens are temporarily housed in STIPER KUTIM, Indonesia, and will be deposited in Bogor Zoology Museum, Bogor, Indonesia.

Measurements of various body parts are coded as follows: LB = length of body, from the tip of vertex to the apex of closed elytra; LE = length of elytra, from the basal to apical margins along suture; LG = length of gena, from the upper to lower margins; LL = length of lower eye lobe, from the upper to lower margins; LP = length of pronotum, from the basal to apical margins along the mid-line; WB = maximum width across body; WEH = width across elytral humeri; WL = maximum width of lower eye lobe; WP = maximum width across pronotum.

6

*Egesina (Callienispia) elegans* (Fisher, 1925)

*Callienispia elegans* Fisher, 1925: 211.

*Egesina (Callienispia) elegans*: Breuning, 1961: 284; Breuning, 1963: 531.

**Specimens examined.** 2 ♂♂, 1 ♀, the Karangan Education Forest of College of Agriculture, Karangan, East Kutai, East Kalimantan, Indonesia, 1° 25' N/117° 37' E, 1-3. I. 2018, Native leg.

**Description of the specimens from E. Kalimantan.** Male (n = 2, Figs. 1-3): LB = 3.8-4.2 mm, WB = 1.3-1.4 mm.

Body dark brown, with brown and light brown pubescence. Head, pronotum, elytra with sparse long



Figs. 1-8. Habitus and male genitalia of *Egesina (Callienis) elegans* from East Kalimantan, Indonesia. 1-3, Male; 2-6, female; 7-8, male genitalia (7, tegmen; 8, median lobe); 1, 4, 7, 8, dorsal view; 2, 5, lateral view; 3, 6, frontal view. Scale for Fig. 7-8: 0.5 mm.

suberect black, dark brown or light brown hairs dorsally; antenna with same hairs beneath antennomeres, which are shorter and sparser apically from antennomeres V to XII; legs with same hairs much more sparsely. Pronotum with narrow vitta of whitish pubescence along suture. Scutellum clothed with same pubescence. Elytra with three narrow bands of same pubescence on behind base, before middle and behind middle, of which the basal one is obliquely extended from behind humerus toward suture, the middle one is zigzag shape, and the apical one is obliquely extended apically from suture thence transversally widened laterally, and scattered with small spots of same pubescence in apical 1/3 as Fig. 1.

Head with frons convex anteriorly, with sparse punctures. Eye with lower lobe transverse, LL/WL = 1.2, LL/LG = 1.2-1.4. Antenna fine and long, 2.2 times as long as body length, 12 segmented; relative length of each antennomere from I to XII as follows: 1.1 : 0.2 : 1.0 : 0.9 : 0.9 : 0.9 : 0.8-0.9 : 0.8 : 0.8-0.9 : 0.9 : 0.9 : 0.6-1.0. Pronotum transverse, LP/WP = 0.9, WP/WEH = 0.8, widest before middle, constricted in basal area, with sparse fine

punctures, with pair of obtuse swellings on middle of disk. Elytra LE/LB = 0.6-0.7, LE/WEH = 1.9; disk with punctures which are distinct in basal half, reduced apically and almost disappeared in apical 1/4; sides almost straight toward apical 1/3, thence arcuately narrowed and rounded apically; apices with subquadrate inner angles.

Male genitalia as Figs. 7-8. Tegmen wide, widest near middle in dorsal view; paramere subequal to 1/4 length of tegmen, weakly constricted at base, slightly expanded laterally toward basal 1/3 and narrowed toward rounded apex; ringed part expanded laterally near middle of tegmen, arcuately narrowed toward basally, fused in basal 1/3. Median lobe long, with obtuse apex; basal struts long, bifurcated behind apical 1/4. Endophallus with flagellum long and fine.

Female (n = 1, Figs. 4-6): LB = 4.3 mm, WB = 1.4 mm. Similar to male, but antenna shorter, 1.8 times as long as body length; relative length of each antennomere from I to XII as follows: 1.3 : 0.2 : 1.2 : 1.0 : 1.0 : 0.9 : 0.8 : 0.8 : 0.8 : 0.8 : 0.8 : 0.6.

**Notes.** *Callienispia* was established by Fisher (1925)

as an independent genus for *C. elegans* and *C. minuta* Fisher, 1925, of which the former is the type species of the genus originally designated by Fisher (1925). It has been treated as a subgenus of the genus *Egesina* Pascoe, 1864 since Breuning (1961) and characterized mainly by the following characteristics within the genus (Fisher 1925, Breuning 1963): antenna with 12 antennomeres; antennomere III subequal or shorter than I, subequal to IV; elytron without longitudinal process on disk behind base, with suberect hairs. Currently *Egesina (Callienispia)* comprises of seven species distributed from India to Indonesia (Tavakilian and Chevillotte 2018).

Although no specimen of *Egesina (Callienispia) elegans* from the Philippines was unfortunately available for this study, based on a comparison with the holotype figured in Lingafelter *et al.* (2014), the specimens examined herein well agree with *E. (C.) elegans* in general appearances especially its basic pattern of elytral maculae and peculiar antennal feature with 12 antennomeres. Meanwhile, the specimens from East Kalimantan show slight differences from the holotype in the elytral maculae as follow: the basal and apical elytral bands are slightly more oblique in the specimens from East Kalimantan, whereas those are slightly less oblique in the holotype. The shapes of those bands, however, are slightly variable even among three specimens from East Kalimantan, and thus these features are probably ineligible to distinguish taxon. With these justifications, we treat them as the first representative of *E. (C.) elegans* from E. Kalimantan.

The localities, Mindanao of the Philippines (= the type locality) and E. Kalimantan of Indonesia (= the new locality), are well distant from each other, and the cerambycid faunas seem to be generally different according to our brief faunistic survey. On the other hand, several cerambycid species commonly occurred in both area are known. In the latter case, most of them are widely distributed in the Philippines and Indonesia especially in Wallacea [e.g. *Acalolepta rusticatrix* (Fabricius, 1801), *Myagrurus vinosus* (Pascoe, 1866), *Niphona hepaticolor* (Heller, 1923), etc.] except for a few species disjunctively known from Borneo/Kalimantan and Mindanao as with *E. (C.) elegans* [e.g. *Nyctimenius ochraceovittatus* (Aurivillius, 1922)].

Judging the discontinuous distribution, it is expected that *E. (C.) elegans* or relatives are possibly distributed in the intermediate area such as the north part of Borneo, Palawan, Sulu Islands, and so on. Further studies for the species are therefore required for verifying its exact distribution.

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## REFERENCE

- Aurivillius C. 1922. Neue oder wenig bekannte Coleoptera Longicornia. 18. *Arkiv för Zoologi, Uppsala* 14 (18): 1–32.
- Breuning S. 1961. Catalogue des Lamiaires du Monde (Col. Céramb.). *Verlag des Museums G. Frey, Tutzing bei München* (4): 183–284.
- Breuning S. 1963. Bestimmungstabelle der Lamiiden-Triben nebst Revision der Pteropliini der asiatischen Region (Col. Cerambycidae) III. Teil. *Entomologischen Arbeiten aus dem Museum G. Frey, Tutzing bei München* 14 (1): 466–537, figs 10–12.
- Fabricius JC. 1801. Systema eleutheratorum secundum ordines, genera, species: adiectis synonymis, locis, observationibus, descriptionibus. *Bibliopoli Academici Novi, Kiliae* 2: 1–687
- Fisher WS. 1925. New Malaysian Cerambycidae: Subfamily Lamiinae. *The Philippine Journal of Science* 28 (2): 205–275
- Heller KM. 1923. Neue Bockkäfer von den Philippinen und aus Borneo. *Deutsche Entomologische Zeitschrift* 1923: 414–425
- Lingafelter SW, Nearn EH, Tavakilian GL, Monné MA, Biondi M. 2014. *Longhorned Woodboring Beetles (Coleoptera: Cerambycidae and Disteniidae) Primary Types of the Smithsonian Institution*. Smithsonian Institution Scholarly Press, Washington D.C.: v–xviii + 390 pp., 187 figs. ISBN: 978-1-935623-40-3.
- Pascoe FP. 1866. Longicornia Malayana; or, a descriptive catalogue of the species of the three longicorn families Lamiidae, Cerambycidae and Prionidae collected by Mr. A. R. Wallace in the Malay Archipelago. (Part III). *The Transactions of the Entomological Society of London* 3: 225–336.
- Tavakilian G, Chevillotte H. 2018. *Titan : base de données internationales sur les Cerambycidae ou Longicornes. Version 4.0*. <http://titan.gbif.fr/index.html> (accessed December 13, 2018)

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