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## A new *Palnia* STEBNICKA, 1985 species from Oriental region (Coleoptera, Scarabaeidae, Aulonocneminae)

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**A b s t r a c t :** *Palnia thailandica* nov.sp. from Thailand is described and illustrated. A key to the genus *Palnia* is given.

**K e y w o r d s :** Coleoptera, Scarabaeidae, Aulonocneminae, *Palnia*, Oriental region, Thailand, taxonomy, new species

### Introduction

The eastasian genus *Palnia* STEBNICKA, 1985 previously included three species. *Palnia loebli* STEBNICKA, 1985 and *P. stebnicka* CAMBEFORT, 1989 were described from India and *P. cambeforti* KRÁL, 1999 from China. A study of Aphodiinae material from the Natural History Museum London yielded a fourth species of this genus from Thailand.

### Material and methods

The specimens were examined with a Nikon SMZ 800 stereomicroscope. The photographs were taken with a Canon EOS 1000D, a Rodenstock Ysaron 60 mm objective, a Leitz Ultropak 6.5 mm objective and with Helicon Focus 6 Pro software.

Morphological terms for this description were adopted from DELLACASA et al. (2001).

Type material is deposited in the collection of the Natural History Museum London (BMNH) and in the author's collection (CAB).

### Descriptions

#### *Palnia thailandica* nov.sp. (Figs 1-7)

**Type material:** Holotype ♂: Thailand Nan pr., Ban Huay Kon env., June 2001, local collector lgt., BMNH(E)2016-44 / *Palnia thailandica* nov.sp. HOLOTYPE det. A. Bellmann 2020 (BMNH); Paratypes ♂♀: same data as holotype, 1♀ (BMNH); Thailand Nan pr., Ban Bo Klua env., May 2001, local collector lgt., BMNH(E)2016-44 / *Palnia thailandica* nov.sp. PARATYPE det. A. Bellmann 2020, 2♂♀ (BMNH, CAB);

**E t y m o l o g y :** The new species is named after the country where type material was collected.

**D e s c r i p t i o n :** 2.8-3.0 mm. Body cylindrical, elongate, convex, shiny. Colour of body castaneous, legs reddish, antennal club yellowish.

**Male:** Habitus as in Figs 1-3. Head transverse, clypeal margin semicircular; genae weakly angulate, eyes weakly protruding. Frontal suture appearing as a dark shiny line, slightly impressed only laterally. Epistoma feebly gibbous, nearly flat. Punctuation dense, coarse, regularly distributed, punctures separated by 0.5-1 diameter.

Pronotum convex, subquadrate (Fig 4), anterior angles acute and feebly protruding. Sides feebly convex, posterior angles rounded and feebly emarginate. Basal margin weakly convex, nearly straight, with wide border and deep marginal groove. Basal marginal groove and posterior angles with conspicuous light tomentum. Lateral margin finely and anterior margin not bordered. Anterior third of disc with fine punctuation, punctures sparsely and regularly distributed. Punctuation on posterior two thirds and on lateral portions of disc coarser and denser, punctures separated by 1-3 diameters.

Scutellum triangular, acute and impunctate.

Elytra nearly parallel-sided, twice as long as combined width, widest behind middle. Bordered basally, humerus with distinct denticle. Outer anterior angles of each elytron with triangular macula of light tomentum, similar to pronotal base. Each elytron with 8 impunctate striae. Striae 1-5 impressed basally and apically, almost completely erased and mostly invisible over disc, stria 6 finely impressed, striae 7-8 clearly and entirely impressed. Punctuation of intervals coarse like that of head and pronotum, in one or two regular rows, each puncture with a very short seta; intervals convex laterally, nearly flat on disc.

Protibiae stout, externally with three triangular teeth, limited at base by a sharp elongate ridge, apical spur acuminate, slightly curved inwards, as long as first and second tarsomeres combined. Meso- and metatibia distally with a row of 7-9 short imbricated setae (Fig 5).

Metasternum flat, shiny, with coarse and dense punctures separated by 1-3 diameters.

Aedeagus stout, simple; in dorsal view parameres narrow, elongate, with wide rounded apices, feebly sinuate laterally; in lateral view dorsal margin nearly straight, ventral margin concave (Figs 6-7).

**Diagnosis:** *Palnia thailandica* nov.sp. is very similar to *P. cambeforti* KRÁL, 1999. The new species is larger (2.8-3.0 mm, compared to 2.4-2.6 in *P. cambeforti*) and in shape of the male genitalia (elongate, wide rounded apices in dorsal view, compared to stout, narrow apices in dorsal view). The new species differs from *P. loebli* STEBNICKA, 1985 and *P. stebnicka* CAMBEFORT, 1989 in having a short row of 7-9 short, imbricated setae on the meso- and metatibia. Additional characters for differentiation are in the key below.

#### Key to the species of *Palnia*

- 1 Meso- and metatibia with a row of 7-9 short imbricated setae (Fig 5) .....2
- Meso- and metatibia lacking row of short imbricated setae; South India .....3
- 2 Large species, 2.8-3.0 mm; Thailand .....*thailandica* nov.sp.
- Small species, 2.4-2.6 mm; China: Yunnan .....*cambeforti* KRÁL
- 3 Aedeagus in lateral view dorsal and ventral margins curved, with a distinct contrasting top quarter; South India, Madras .....*loebli* STEBNICKA

- Aedeagus simple, in lateral view dorsal and ventral margin nearly straight, tapering to the top; South India, Nilgiri Hills ..... *stebnickae* CAMBEFORT

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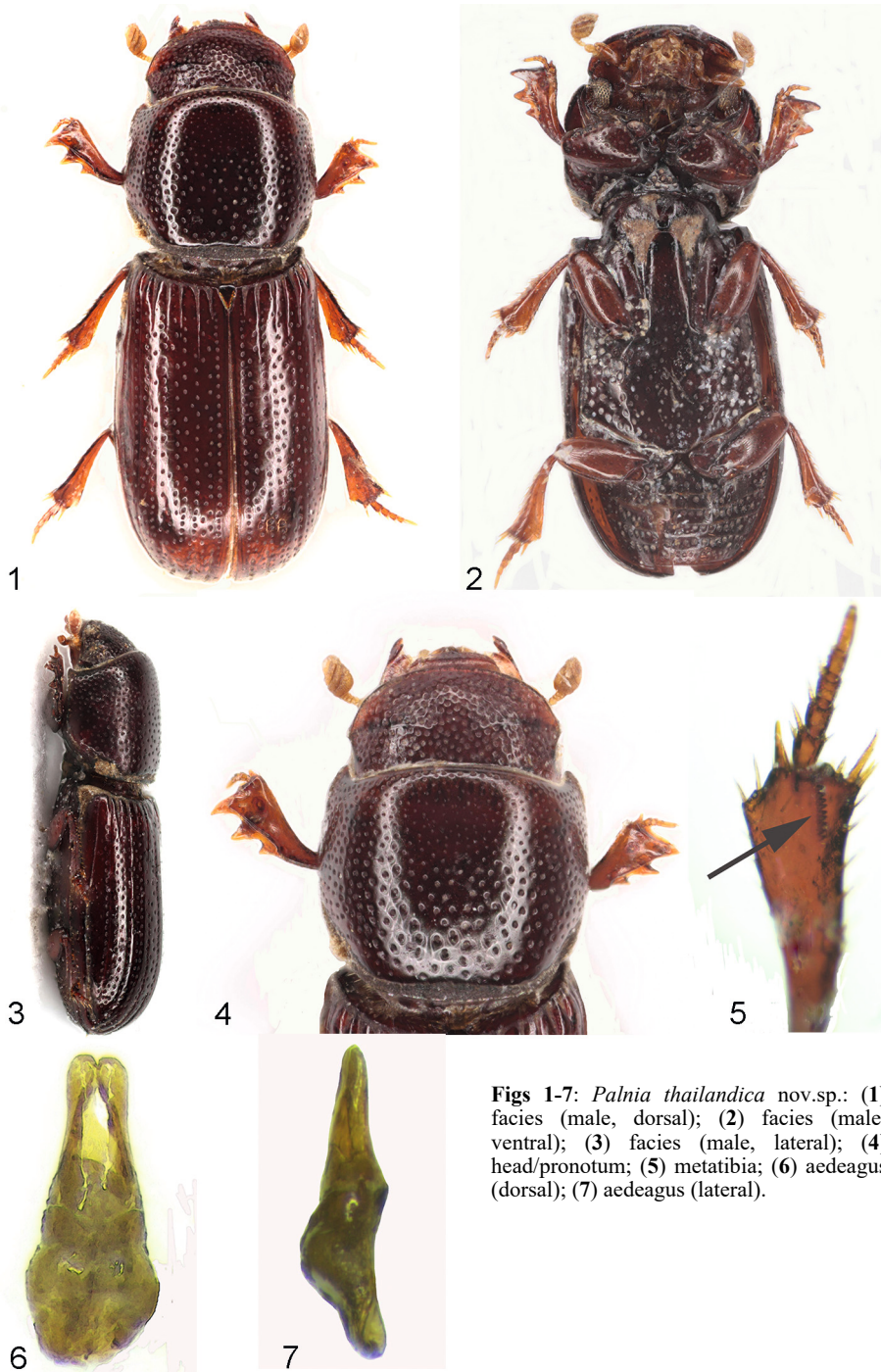
### Zusammenfassung

*Palnia thailandica* nov.sp. aus Thailand wird beschrieben und abgebildet. Die Arbeit wird durch einen Bestimmungsschlüssel für die Gattung *Palnia* ergänzt.

### References

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**Figs 1-7:** *Palnia thailandica* nov.sp.: (1) facies (male, dorsal); (2) facies (male, ventral); (3) facies (male, lateral); (4) head/pronotum; (5) metatibia; (6) aedeagus (dorsal); (7) aedeagus (lateral).

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