A description of two new species of the genus *Polyphida* Pascoe, 1869 (Coleoptera: Cerambycidae: Cerambycinae: Glaucytini) from the Oriental Region

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**Taxonomy, new species, Coleoptera, Cerambycidae, Glaucytini, Polyphida, Polyphidiopsis, Oriental Region**

**Abstract.** *Polyphida aurata* sp. nov. from Indonesia (Sumatra) and *Polyphida hayashii* sp. nov. from Peninsular Malaysia are described and illustrated. List of presently known species of the genus *Polyphida* Pascoe, 1869 is added.

**INTRODUCTION**

*Polyphida* was established with type species *Polyphida clytoides* by Pascoe (1869). Species of the genus *Polyphida* are known from the Oriental Region only. Ten species have been described until now (Tavakilian G. (Author) & Chevillotte H. (Software), 2014). The authors who focused recently on this genus and described new species are Holzschuh (2005) and Vives (2013).

In the present paper, I describe two new species of the genus *Polyphida* from material, which was recently collected.

*Polyphida aurata* sp. nov. from Indonesia (Sumatra) and *Polyphida hayashii* sp. nov. from Peninsular Malaysia are described and illustrated.

New species are compared in the Differential diagnosis with the species *Polyphida fulvitarsis* Holzschuh, 2005, *Polyphida modesta* Gahan, 1906, *Polyphida clytoides* Pascoe, 1869 and *Polyphidiopsis punctatus* Hayashi, 1979, which are also illustrated.

A list of presently known species of the genus *Polyphida* Pascoe, 1869 is added.

**MATERIAL AND METHODS**

Type material is deposited in the following collections.

CMS private collection of Milan Štrba, Bratislava, Slovakia;
CPV private collection of Petr Viktora, Kutná Hora, Czech Republic;
CRH private collection of Roman Hergovits, Bratislava, Slovakia.

Slash (/) separates data from different lines of locality and determination labels.
TAXONOMY

Genus Polyphida Pascoe, 1869

Polyphida aurata sp. nov.
(Fig. 1)

Type locality. Indonesia, West Sumatra, Mt. Sanggul.

Type material. Holotype (♀): ‘Indonesia, West Sumatra’ / ‘MT. SANGGUL, 1250 m alt’ / ‘Landai vill. env., v.-vi. 2012’ / ‘St Jakl lgt.’, (CPV). The holotype is provided with a printed red label: ‘Polyphida aurata sp. nov. / HOLOTYPUS / P. Viktora det., 2014’.

Description of holotype. Habitus of female holotype as in Fig. 1a. Body elongate, narrow, parallel, punctuate, with golden yellow pubescence, black. Body length 13 mm, widest in humeral part of elytra (2.9 mm), 4.5 times longer than wide.

Head short and narrow, but through the eyes approximately as broad as pronotum, with golden yellow pubescence. Anterior part of head with a few long pale setae. Between eyes with an elongate furrow. Eyes from pale brown to black, distinctly longitudinally emarginate.

Maxillary palpus pale brown with a few pale brown setae. Ultimate palpomere slightly broader than penultimate, sharply cut in apex.

Antennae a little longer than body, narrow, filiform, antennomeres 1-5 blackish-brown, antennomeres 6-11 brown, with short dense pale setation. Antennomere 2 the shortest, antennomere 3 the longest, ratios of relative lengths of antennomeres 1-11: 0.45 : 0.16 : 1.00 : 0.46 : 0.62 : 0.70 : 0.73 : 0.67 : 0.56 : 0.51 : 0.53.

Pronotum narrow, parallel, elongate, black, with coarse punctuation and golden yellow pubescence, three elongate black strips without pubescence, with large punctures are in the middle and parallel from both sides, separated by longitudinal strips of golden yellow pubescence (as in Fig. 1a). Pronotum 1.22 times longer than wide in the widest part (base and middle of pronotum). Lateral margins parallel. All margins covered with golden yellow pubescence.

Scutellum black, semicircular, covered with dense golden yellow pubescence.

Elytra 8.5 mm long and 2.9 mm wide; narrow, elongate, parallel, broadest at base, with golden yellow pubescence and punctuation. Each elytron with longitudinal darker lines of dark pubescence from reddish brown to dark brown and a black longitudinal strip from base to half of elytron without pubescence and with rows of very large and coarse punctures (as in Fig. 1a). Apical fourth with long setae near lateral margins. Apex of elytra with small spine on inner side. Elytral epipleura well-developed, narrow, black, glabrous.

Legs long and narrow, black, tibia and tarsi with pale brown pubescence, femora distinctly thicker, profemora with elongate strips of golden yellow pubescence, meso- and metafemora from dorsal side black, lateral sides with short golden yellow pubescence.

Metatarsomere 1 as long as metatarsomeres 2 and 3 together, metatarsomeres distinctly pale brown.
Ventral side of body with dense golden yellow pubescence.
Genitalia as in Fig. 1b.

**Male.** Unknown.
Differential diagnosis. The most similar species are *Polyphida fulvitarsis* Holzschuh, 2005 (Fig. 2) and *Polyphida modesta* Gahan, 1906 (Fig. 3). The new species *Polyphida aurata* differs from similar species mainly by its parallel sides of pronotum and golden yellow pubescence of dorsal and ventral sides, while *Polyphida fulvitarsis* Holzschuh, 2005 and *Polyphida modesta* Gahan, 1906 have sides of pronotum distinctly arcuate and different colour of pubescence (silver green) (as in Figs. 2-3).

Etymology. The name refers to its golden pubescence.

Distribution. Indonesia (Sumatra).

*Polyphida hayashii* sp. nov.
(Figs. 4-5)

Type locality. Peninsular Malaysia, Perak, Belum Forest.


Description of holotype. Habitus of male holotype as in Fig. 4a. Body elongate, narrow, parallel, punctuate, with short grayish silver pubescence, black. Body length 11.0 mm (male paratypes 7.2 – 11 mm), widest in humeral part of elytra (2.42 mm), 4.5 times longer than wide.

Head short and narrow, through the eyes slightly narrower than pronotum, with short golden yellow pubescence. Anterior part of head with a few long pale setae. Posterior half with relatively large and coarse punctures. Eyes dark blackish brown, strongly longitudinally emarginate.

Maxillary palpus. Palpomeres bicolour, partly pale brown, partly brown with a few pale brown setae. Ultimate palpomere bicolour, dark brown with pale brown apex, broadest at the middle, distinctly broader than penultimate palpomere.

Antennae long, narrow, filiform, antennomeres 1-6 black, antennomeres 7 and partly 8 pale brown, apical part of antennomere 8 and antennomeres 9-11 distinctly darker, with short pale setation. Antennomeres 1-5 with distinct microgranulation. Antennomeres 1-5 with a few long pale setae on inner side. Antennae distinctly longer than body. Ratios of relative lengths of antennomeres 1-11: 0.39 : 0.14 : 1.00 : 0.64 : 0.80 : 0.85 : 0.76 : 0.70 : 0.67 : 0.64 : 0.80.

Pronotum narrow, elongate, black, with very dense and coarse punctuation and very short grayish silver pubescence, distinctly narrower than elytra at base. Pronotum in the middle with transverse narrow black spot. Pronotum 1.45 times longer than wide at base and 1.27 times longer than wide in the widest part (at two-fifths of the pronotum). Lateral margins slightly arcuate.

Scutellum black, rather transverse than semicircular, covered with dense grayish silver pubescence.
Fig. 4. Polyphida hayashii sp. nov.: a- ♂ holotype; b- ♂ genitalia.
Fig. 5. Polyphida hayashii sp. nov.: a- ♀ paratype; b- ♀ genitalia.
Elytra 6.8 mm long and 2.4 mm wide; black, narrow, elongate, parallel, broadest at base, with spots of grayish silver pubescence (as in Fig. 4a) and punctuation, punctures coarse.
Apical thirds with a few longer setae near lateral margins. Apex of elytron straight, with small spine on both sides. Elytral epipleura well-developed, narrow, black, glabrous.

Legs long and narrow, black, tibiae and tarsi with grayish silver pubescence, femora distinctly thicker, profemora with elongate strips of grayish silver pubescence, meso- and metafemora on dorsal side black, lateral sides with short grayish silver pubescence. Metatarsomere 1 1.2 times longer than metatarsomeres 2 and 3 together.

Ventral side of prothorax and abdomen with long and dense gray pubescence, prothorax with dense punctuation, pubescence of meso- and metathorax short.

Male genitalia as in Fig. 4b.

Female. Habitus as in Fig. 5a. Body length (female paratypes) 7.0 – 12.5 mm. Colour and shape of female the same as in the male. Antennae distinctly shorter than those in male, a little longer than body. Ratios of relative lengths of antennomeres 1-11 equal to: 0.45 : 0.16 : 1.00 : 0.55 : 0.72 : 0.82 : 0.80 : 0.67 : 0.63 : 0.60 : 0.62.

Female genitalia as in Fig. 5b.

Differential diagnosis. The most similar species are Polyphida clytoides Pascoe, 1869 (Fig. 6) and Polyphida tenebrosa Holzschuh, 2005. The new species Polyphida hayashii distinctly differs from similar species mainly by very dense punctuation of pronotum with small-sized punctures and shape of spots on elytra, while the similar species Polyphida clytoides Pascoe, 1869 and Polyphida tenebrosa Holzschuh, 2005, have distinctly sparser punctuation with larger and coarser punctures of pronotum and different shapes of spots on elytra. The punctuation of the pronotum in the new species is the same as in the only one known species of the genus Polyphidiopsis (Polyphidiopsis punctatus Hayashi, 1979) (Fig. 7), but these genera have different ratios between antennomeres 3 and 4 (the genus Polyphida has long setae on inner side of antennae).

Etymology. Dedicated in honour of Dr. Masao Hayashi (†), a specialist in Oriental Cerambycidae.

Distribution. Peninsular Malaysia.

A LIST OF THE SPECIES OF THE GENUS POLYPHIDA PASCOE, 1869

<table>
<thead>
<tr>
<th>Species</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>Polyphida argenteofasciata</td>
<td>Aurivillius, 1910: 163</td>
</tr>
<tr>
<td>Polyphida aurata sp. nov.</td>
<td>Malaysia (Borneo)</td>
</tr>
<tr>
<td>Polyphida buruensis</td>
<td>Breuning, 1970: 21</td>
</tr>
<tr>
<td>Polyphida clytoides</td>
<td>Pascoe, 1869: 652</td>
</tr>
<tr>
<td>Polyphida fulvitasris</td>
<td>Holzschuh, 2005: 37</td>
</tr>
<tr>
<td>Polyphida hayashii sp. nov.</td>
<td>Peninsular Malaysia</td>
</tr>
<tr>
<td>Polyphida lombokiana</td>
<td>Vives, 2013: 4</td>
</tr>
<tr>
<td>Polyphida lumawigi</td>
<td>Hüdepohl, 1992: 323</td>
</tr>
<tr>
<td>Polyphida metallica</td>
<td>(Nonfried, 1894): 338</td>
</tr>
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</tbody>
</table>

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Polyphida modesta Gahan, 1906: 113
Malaysia (Peninsular Malaysia, Borneo),
Indonesia (Java, Sumatra)

Polyphida monticola Heller, 1915: 238
Philippines (Luzon, Mindanao,
Negros, Sibuyan)

Polyphida tenebrosa Holzschuh, 2005: 39
Malaysia (Borneo)

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