

A new species of the genus *Physarchus* Pascoe, 1865 (Coleoptera, Curculionidae) from Malaysia

Новый вид рода *Physarchus* Pascoe, 1865 (Coleoptera, Curculionidae) из Малайзии

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Ключевые слова: Curculionoidea, Molytinae, Metatygini, новый вид, Калимантан.

Abstract. A new species, *Physarchus kalimantanensis* Legalov, **sp.n.** from Sabah (Malaysia), is described and illustrated. This new species differs from *Physarchus octotuberculatus* (Voss, 1958) in that it has a small body size, an absence of tubercles on the second and fourth elytral interstriae, a long rostrum and a wide pronotum. This is the first record of the genus *Physarchus* Pascoe, 1865 in the Sunda Islands, *Ph. octotuberculatus* in Vietnam, and of *Ph. castaneipennis* Faust, 1891 in Nepal.

Резюме. В статье описан новый вид *Physarchus kalimantanensis* Legalov, **sp.n.** из Сабаха (Малайзия). Новый вид отличается от *Physarchus octotuberculatus* (Voss, 1958) мелкими размерами тела, отсутствием бугорков на 2-м и 4-м промежутках надкрылий, длинной головотрубкой и широкой переднеспинкой. Это первые находки рода *Physarchus* Pascoe, 1865 на Зондских островах, *Ph. octotuberculatus* во Вьетнаме, и *Ph. castaneipennis* Faust, 1891 в Непале.

Introduction

The tribe Metatygini belongs to the subfamily Molytinae [Legalov, 2018] and comprises two genera *Omophorus* Schoenherr, 1835 and *Physarchus* Pascoe, 1865 [Wang et al., 2011; Lyal, 2014; Tseng et al., 2018]. The genus *Physarchus* is similar to *Omophorus*, but can be distinguished by its projecting dentiform humeral calli [Wang et al., 2011]. The genus includes the following species: *Ph. octotuberculatus* (Voss, 1958) from China (Fujian and Taiwan), *Ph. castaneipennis* Faust, 1891 from eastern India, *Ph. conispicillatus* Fairmaire, 1878 from Polynesia, and *Ph. pyramidalis* Pascoe, 1865 from Fiji [Pascoe, 1865; Fairmaire, 1878; Faust, 1891; Voss, 1958; Alonso-Zarazaga et al., 2023] and some undescribed species [Wang et al., 2011]. According to the iNaturalist (<https://www.inaturalist.org/taxa/1397581-Physarchus>), reliable sightings of this genus have been recorded in India (Arunachal Pradesh), Malaysia (Pahang and Sabah) and Fiji.

This paper describes a new species of the genus *Physarchus*, discovered in Sabah, Malaysia. This is the

first record of the genus *Physarchus* in the Sunda Islands. It is also a continuation of the author's previous work on the subfamily Molytinae [Legalov, 2018, 2020a–d, 2021, 2022a, b, 2024].

Materials and methods

The holotype of *Physarchus kalimantanensis* Legalov, **sp.n.** and specimens of *Ph. octotuberculatus* are deposited at the Institute of Systematics and Ecology of Animals, Novosibirsk, Russia.

The photographs were taken by S.V. Reshetnikov.

Nomenclatural acts introduced in the present work are registered in ZooBank (www.zoobank.org) under urn:lsid:zoobank.org:pub:AB16807F-72B9-4244-AB5E-BCCC2CCEC47A

Results

Curculionoidea: **Curculionidae**: Molytinae:
Metatygini

***Physarchus* Pascoe, 1865**

Physarchus kalimantanensis* Legalov, **sp.n.*

Figs 1–2.

urn:lsid:zoobank.org:act:B6638225-02C9-42FC-996A-4F3A7514683F

Material. **Malaysia, Kalimantan:** holotype, ♀, NE Borneo, Sabah Prov., Tambungan reg., Tras Madi Mts., 1200 m, 12–24.I.2007, A. Sochivko.

Description. **Female.** Body brownish, covered with yellow adpressed hairs. Rostrum robust and straight, about 1.7 times as long as pronotum, about 3.3 times as long as wide at apex, 3.7 times as long as wide at midlength, about 3.1 times as long as wide at base, finely punctate, with longitudinal median groove in basal half. Forehead quite wide, about 0.7 times as long as rostrum base width, weakly convex, with longitudinal median groove. Labial palpi absent. Eyes large, not protrude beyond contour of head, finely faceted. Temples slightly shorter than eyes. Vertex densely punctate. Antennal strobil lateral, directed obliquely toward beneath base of rostrum. Antennae geniculate, inserted laterally before middle of rostrum. First antennomere long, about 7.1 times as long as wide at apex, not reaching eyes.



Figs 1–2. External appearance of *Physarchus kalimantanensis* sp.n. holotype female. 1 — dorsal view; 2 — lateral view.

Рис. 1–2. Внешний вид голоטיפа самки *Physarchus kalimantanensis* sp.n. 1 — вид сверху; 2 — вид сбоку.

Second and third antennomeres long-conical. Second antennomere about 1.6 times as long as wide at apex, about 0.2 times as long as and of same width to first antennomere. Third antennomere about 1.3 times as long as wide at apex, about 0.6 times as long as and about 0.8 times as narrow as second antennomere. Fourth–eighth antennomeres wide-conical. Fourth antennomere 0.5 times as long as wide at apex, about 0.4 times as long as and of same width to third antennomere. Fifth antennomere about 0.4 times as long as wide at apex, slightly shorter and of same width to fourth antennomere. Sixth antennomere 0.4 times as long as wide at apex, of same length to and slightly wider than fifth antennomere. Seventh antennomere about 0.5 times as long as wide at apex, about 1.3 times as long as and about 1.1 times as wide as sixth antennomere. Eighth antennomere 0.4 times as long as wide at apex, of same length to and about 1.2 times as wide as seventh antennomere. Antennal club compact and long, with fused antennomeres, about 3.4 times as long as wide in middle, about 1.4 times as long as second–eighth antennomeres combined. Pronotum campanulate, of almost same width at apex, about 0.7 times as long as width at midlength and about 0.6 times as long as width at pronotal base. Pronotal disk convex dorsally, densely rugose-punctate. Base clearly biconcave. Scutellar shield almost rhomboidal, convex, slightly wider than length, about 1.3 times as long as width, punctate. Elytra almost rhomboidal, about 1.3 times as long as wide at base and at apical fourth, about 1.1 times as long as wide at midlength, about 2.3 times as long as pronotum. Humeral calli projecting dentiform. Elytral striae distinct, with large punctations. Elytral base with anterior projection near third interstria which extends over pronotum. Interstriae weakly convex, densely punctate, slightly longer than striae. Tubercles on second and fourth interstriae absence. Pre- and postcoxal portions of prosternum short. Precoxal portion about 0.4 times as long as length of procoxal cavity. Procoxal cavities continues. Postcoxal portion about 0.3 times as long as length of procoxal cavity and about 0.7 times as long as precoxal portion. Mesocoxal cavities widely separated. Mesepimera simple. Metanepisternum quite wide, densely punctate. Metaventricle short, 0.6 times as long as metacoxal cavity length, convex, densely punctate. Abdomen ventrally convex, densely punctate. First ventrite 0.6 times as long as metacoxal length. Second ventrite slightly shorter than first ventrite. Third ventrite about 1.3 times as long as second ventrite. Posterior margin of second–fourth ventrites weakly curved posteriad on lateral sides. Fourth ventrite 0.7 times as long as third ventrite. Fifth ventrite of same length to fourth ventrite. Pygidium not exposed. Procoxae conical. Metacoxae transverse. Femora unarmed. Femora

weakly clavate. Tibiae with large uncus and mucro. Tarsi long. First tarsomere long-conical. Second tarsomere conical. Third tarsomere bilobed. Fifth tarsomere elongate. Tarsal claws free and simple. Total body length (without rostrum) 6.4 mm. Length of rostrum 3.1 mm.

Comparison. This new species differs from *Physarchus octotuberculatus* (Voss, 1958) from China, in that it has a smaller body size (6.4 mm), a longer rostrum and an absence of tubercles on the second and fourth elytral interstriae, and a wider pronotum.

Etymology. From Kalimantan Island.

Physarchus castaneipennis Faust, 1891

Material. Nepal, *Karnali province*: 1♀, Humla District, 10–12 km S of Simikot, Raya-Hulma Karnali, 2100–2400 m, 9.VII.2001, A. Weigel; 1♀, Karnali prov., Jumla District, 30 km N of Julma, Mugu-Karnali-Tal, Lumsa bis Mangi, 29°32' N, 87°11' E, 1800 m, 27.VI.1999, A. Weigel.

Remarks. The specimens are deposited at the Naturkundemuseum, Erfurt, Germany. It is the first record of *Physarchus castaneipennis* for Nepal.

Physarchus octotuberculatus (Voss, 1958)

Material. Vietnam, *Yên Bái province*: 3♀, env. Yên Bái, V.2024.

Remarks. It is the first record of *Physarchus octotuberculatus* for Vietnam.

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