

A new species of *Cylindera*, subgenus *Verticina* from northern Borneo (Coleoptera: Carabidae: Cicindelinae)

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MATALIN, A.V. 2002. A new species of *Cylindera*, subgenus *Verticina* from northern Borneo (Coleoptera, Carabidae: Cicindelinae). *Entomol. Probl.* 32(2): 139–142. A new species, *Cylindera (Verticina) dayaka* sp.nov., is described from Kinabalu mountain, northern Borneo. The distinctions from related species is discussed.

Key words: Coleoptera, Cicindelinae, *Cylindera*, *Verticina*, Borneo, new species.

Introduction

The subgenus *Verticina* RIVALIER, 1961 of the genus *Cylindera* WESTWOOD, 1831 was established by RIVALIER (1961) for two south-eastern Asiatic species: *C. versicolor* MACLEAY, 1825 (type species) and *C. elegantissima* W. HORN, 1892. Later, WIESNER (1992) regarded *C. neervoorti* W. HORN, 1913 and *C. glabra* BOGENBERGER, 1988 together with two above mentioned species within subgenus *Verticina* too. The last species of *Verticina*: *C. antoni* was described by CASSOLA & PROBST (1996) from north-western Vietnam. So, at present time, subgenus includes five species, living in Vietnam, Thailand and Malakka as well as on Borneo, Jawa, Sumatra and Palawan Islands. Only one of them: *C. (V.) versicolor* is a widely distributed species in south-western Asia (WIESNER 1992).

In the present paper, one new *Cylindera* species of subgenus *Verticina* is described. A single female was collected by Moscow entomologist Sergei Kazantsev on Kinabalu mountain, northern Borneo in June 1995. Unfortunately, not one additional specimen was caught. However, this female well distinguished from all known *Verticina* species including the closest related *C. (V.) versicolor*.

Systematic part

Cylindera (Verticina) dayaka sp.nov.

(Figs. 1–2, 4, 8, 10, 12, 16)

Holotype ♀: "N. Borneo, Kinabalu, 1500-1700m, June 24, 1995, leg. S. Kazantsev". The holotype of new species is presently kept in the collection of Sergei Kazantsev (Moscow, Russia).

Diagnosis. Body relatively large; head, pronotum, thoracic and abdominal segments as well as legs with shining violet reflections. Base of supraorbital area with five deep, rough striae. Labrum metallic green, transverse, with 8 setae. Basal palpomeres of labial and maxillary palpi metallic violet, apical ones metallic green. Pronotum slightly transverse, rounded by sides, bordered basally. Legs

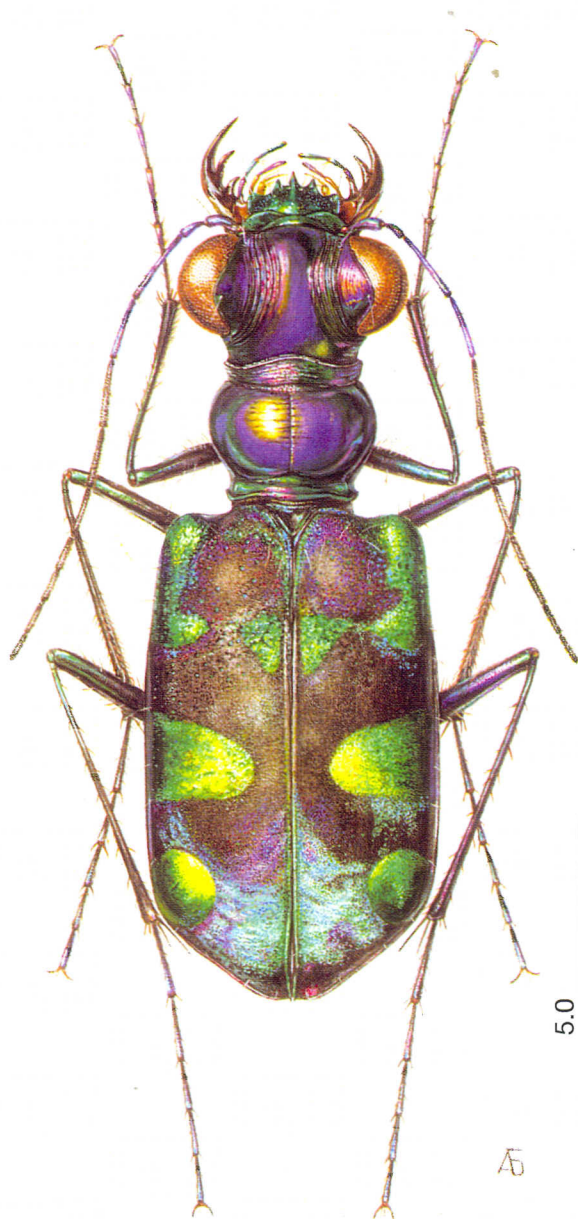


Fig. 1. *Cylindera (Verticina) dayaka* sp. nov. (Holotype). Scale bar in mm. Original colour picture by Alexei Brinev.

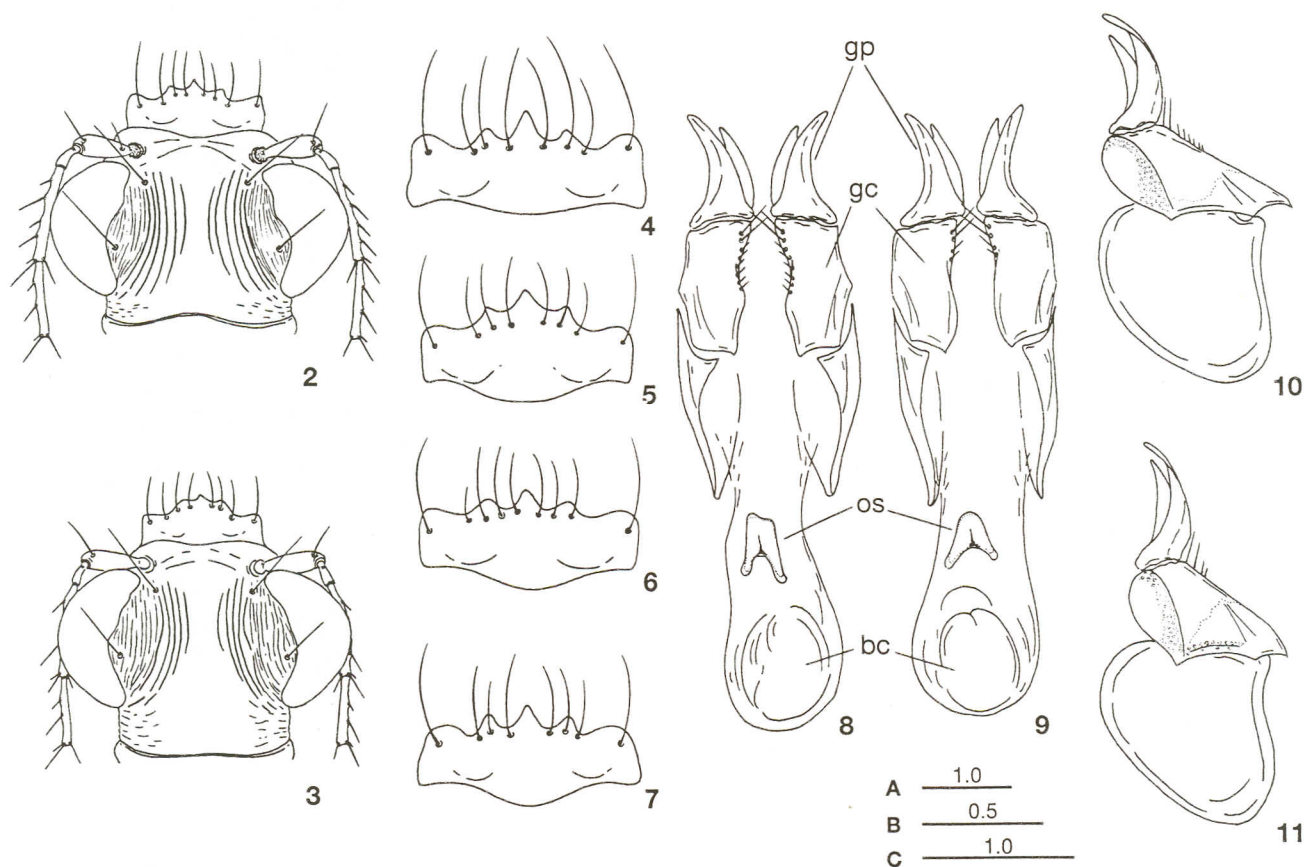
fully metallic-coloured. Elytra elongate, subparallel-sided, dull black with narrow bright violet margin; with shining metallic golden-green humeral, subsutural and apical dots as well as wide middle band, without any pale (white or yellow) markings. Posterior margin of sternum 8 with one, lateral margin with nine setae; syntergum 9&10 oval, with 18 setae apically and 35 setae laterally; ventral notch on second gonacoxa with two long and six short setae; oviduct sclerite large, elongate.

Description. Length without labrum is 9.5 mm (Fig. 1). Head metallic bluish-green with bright violet reflections on frons, vertex and posterior half of genae and a purple-blue lustre in supraorbital area; glabrous, with just two long, thin setae near the edge of each eye. Vertex in the base of each eye with five broad, deep, rough striae, supraorbital area finely striated (Figs. 1–2). Genae thin, longitudinally striated in anterior half, generally smooth in posterior half. Labrum metallic green, transverse, 2.0 times as wide as long, tridentate with more projected medial tooth, eight submarginal setae and shallow, transverse basal dimples (Fig. 4). Mandibles black with dark brown apices and teeth and short, narrow testaceous lateral edge basally. Labial and maxillary palpi slender, elongate, with metallic violet basal palpomeres and metallic green apical ones. Antennae slender, long, projected to the middle of elytra; scape and second antennomere bluish-green with violet

reflections, a single long seta on tip of right scape and two long setae (one on the tip and one in the base) on left one (Figs. 1–2); antennomeres 3–4 metallic violet, bluish tinged basally, with 2–4 short spiniform white setae only, except for apical ones; antennomeres 5–11 dull black, fully and finely pubescent.

Pronotum metallic bluish-green with bright purple-violet reflections in the middle of disc and blue-violet reflections on both front and hind lobe; slightly transverse, 1.18 times as wide as long, with rounded sides, maximum extended near the middle and well bordered basally; surface glabrous, smooth, finely wrinkled on front lobe and along thin, but distinct midline; anterior and posterior grooves very deep. Thoracic segments bluish-green with shining violet reflections, with very sparse, white semi-erect hairs on anterior edge of proepisternum and base of mesepisternum as well as on posterior edge of metathoracic segments. Coupling sulcus long, slightly sinuated, with very deep pit in apical third. Legs fully metallic-coloured, coxa, trochanters and femora bluish-green with bright violet reflections, femoral apices darker; tibia bicolour, bluish-green in basal third and violet in apical two thirds; tarsi violet with thin bluish tinge.

Elytra dull black with purple tinge in basal and golden-green lustre on apical half, with narrow bright violet lateral margin; subparallel-sided, with maximum wide near



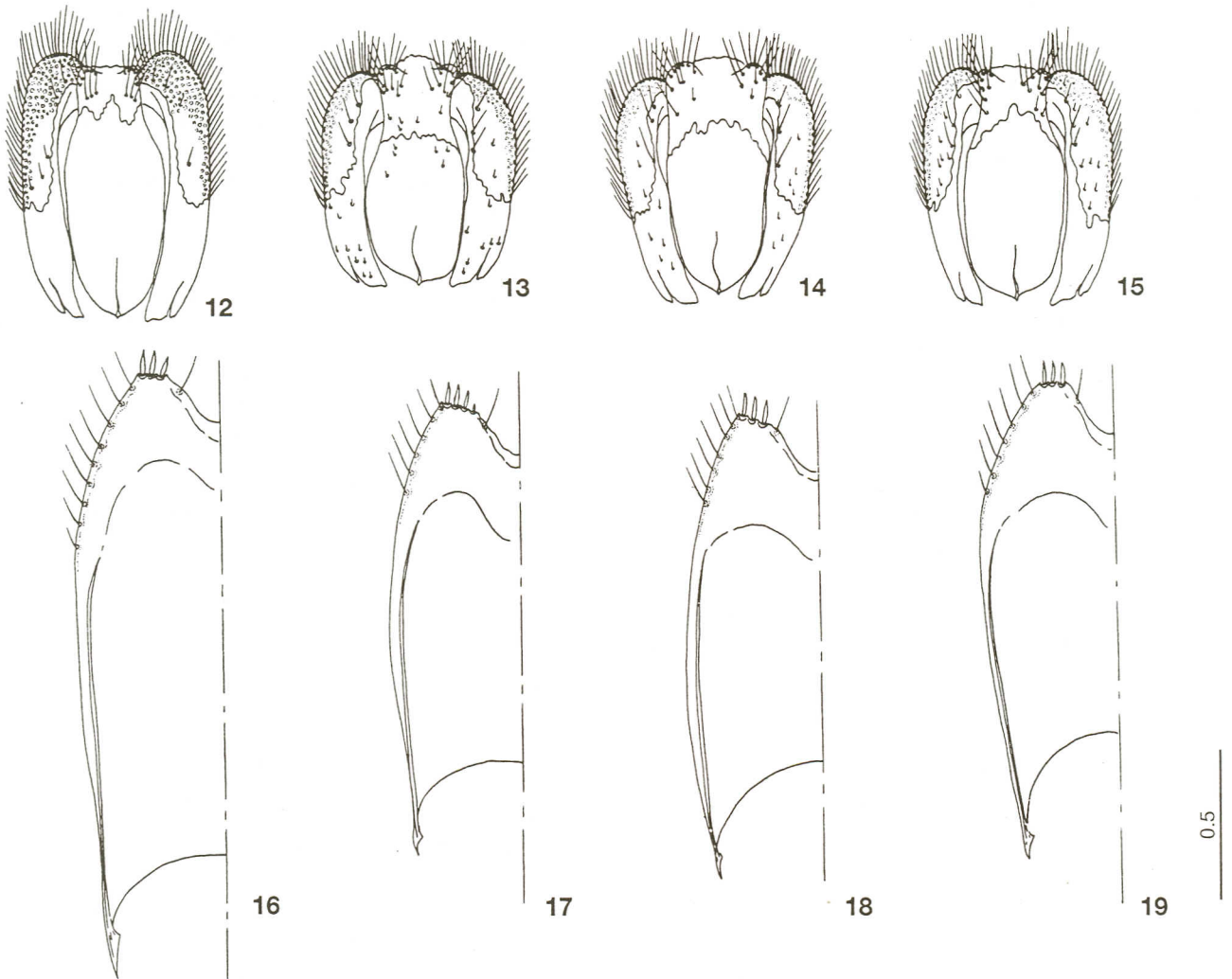
Figs. 2–11. Head, labrum, second gonapophyses and gonacoxa of *C. (V.) dayaka* sp.nov. and *C. (V.) versicolor* MACLEAY. 2–3 – head; 4–7 – labrum; 8–9 – second gonapophyses and gonacoxa, ventral view; 10–11 – second gonapophyses and gonacoxa, lateral left view. 2, 4, 8, 10 – *C. (V.) dayaka* sp.nov. (Holotype); 3, 5–7, 9, 11 – *C. (V.) versicolor* MACLEAY. 3, 5 – Java, Mt. Pangrango; 6 – Sumatra, Mt. Sibayak; 7, 9, 11 – Singapore, Bukit Timah. gp – second gonapophyses, gc – second gonacoxa, os – oviduct sclerite, bc – bursa copulatrix. Scale bars (in mm): A – 2–3; B – 8–11; C – 4–7.

the middle, elongate, 1.68 times as long as wide, slightly wider at shoulders than head with eyes, with marked depression before the apex. Elytral pattern represented by bright metallic golden-green humeral lunule, triangular subsutural dot, circular basal portion of apical lunule and wide middle band; elytral disc lacking any pale (white or yellow) markings (Fig. 1). Scutellum bluish-green with violet lustre; elytral suture poorly developed, just raised and narrowly bordered apically. Apical margin of elytra slightly serrulate, apical spine small, but distinct; epipleura dull brown, metallic blue-violet on basal half. Abdominal sternites blue-green with shining violet reflections, glabrous except for thin, sparse pubescence along lateral edge of sternites 4–6. Posterior margin of sternum 8 with a single seta; apices truncated, with three stout, short setae; lateral margin with nine long setae (Fig. 16). Syntergum 9&10 oval, 1.34 times as long as wide; with 18 long setae apically and 35 long setae laterally (Fig. 12). Base of second gonapophyses glabrous; ventral notch on second gonacoxa shallow, poorly developed, with two long and six short setae (Figs. 8 and 10). Oviduct sclerite large, elongate, 2.12 times as long as wide; bursa copulatrix slightly oval (Fig. 8).

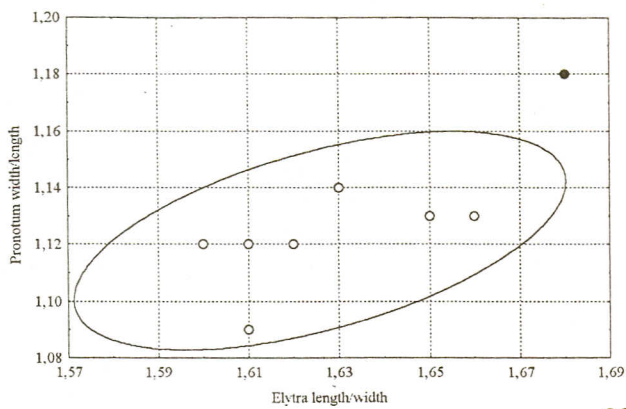
Male unknown.

Etymology. The new species is named for the Dayak peoples of Borneo.

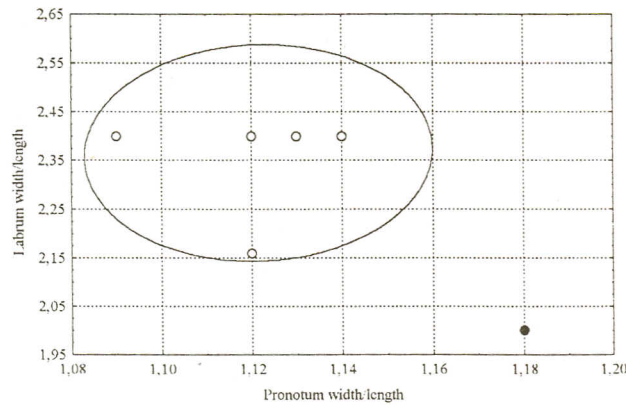
Taxonomic remarks. *Cylindera (Verticina) dayaka* is well recognised among other related species. From *C. (V.) neervoorti*, *C. (V.) elegantissima* and *C. (V.) glabra* the new species is distinguished by lacking of white elytral marking; tridentate, metallic green labrum; metallic violet basal palpomeres of both labial and maxillary palpi as well as fully metallic legs. From *C. (V.) antoni* CASSOLA & PROBST, 1996 a new species is easily distinguished by the smaller size; shining metallic elytral maculation; violet reflections of head and pronotum as well as metallic green labrum. From the closest relative, *C. (V.) versicolor*, the new species is well distinguished by a larger size; bright violet reflections on the head and pronotum; entirely dark metallic labial and maxillary palpi; number of rough striae on vertex in the base of supraorbital area (Figs. 2–3); broader labrum (Figs. 4–7, 21), pronotum and elytra (Fig. 20); elongate oviduct sclerite and 9&10 syntergum (Figs. 8–9, 12–15, 22) as well as by a chaetotaxy of mesepimeron, sternite 8, syntergum 9&10 and the second gonacoxa.



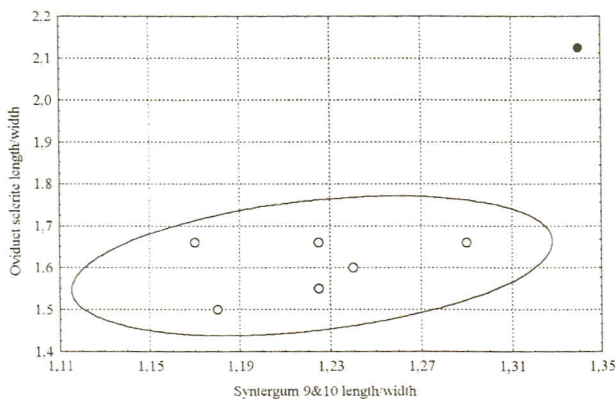
Figs. 12–19. Syntergum 9&10 and sternum 8 of *C. (V.) dayaka* sp. nov. and *C. (V.) versicolor* MACLEAY. 12–15 – syntergum 9&10, dorsal view; 16–19 – sternum 8, ventral view. 12, 16 – *C. (V.) dayaka* sp. nov. (Holotype); 13–15 and 17–19 – *C. (V.) versicolor* MACLEAY. 5 – Java, Mt. Pangrango; 6 – Sumatra, Mt. Sibayak; 3, 7, 9, 11 – Singapore, Bukit Timah. Scale bar in mm.



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Figs. 20–22. Measurements of some morphological features of *C. (V.) dayaka* sp.nov. and *C. (V.) versicolor* MACLEAY. White circles – *C. (V.) versicolor* MACLEAY, black circle – *C. (V.) dayaka* sp.nov.

There are two species groups within subgenus *Verticina*, *C. (V.) versicolor*, *C. (V.) antoni* and *C. (V.) dayaka* have tridentate metallic labrum, shining metallic elytral pattern without any pale markings and fully metallic coloured legs. Three other species: *C. (V.) elegantissima*, *C. (V.) nevoorti* and *C. (V.) glabra* have unidentate pale labrum, white elytral pattern and partly testaceous legs (W. HORN 1892, 1913; MACLEAY 1825; BOGENBERGER 1988).

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