Neuraphes hengduanus n. sp. from Yunnan, China (Coleoptera: Staphylinidae: Scydmaeninae)

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ABSTRACT. *Neuraphes (Pararaphes) hengduanus* n. sp. from China (Yunnan) is described, and its diagnostic characters are discussed and illustrated. The new species belongs to the East Palearctic group of *Neuraphes* characterized by the distinctly bicolorous body (the head and pronotum much darker than the elytra).

Key words: entomology, taxonomy, Coleoptera, Scydmaenidae, Cyrtoscydmini, *Neuraphes*, new species, East Palearctic, China, Tibet.

INTRODUCTION

In two recent papers the Himalayan and sub-Himalayan species of *Neuraphes* Thomson were revised (Jałoszyński 2008, 2010). As a result of examination of type specimens and additional materials, misidentifications and synonymies were clarified, and currently eight species of *Neuraphes* (all in the subgenus *Pararaphes*) are known to occur in the Himalayas and Tibet. Five of them (*N. jumlanus* Franz, 1974, *N. himalayanus* Franz, 1970, *N. khumbuanus* Jałoszyński, 2008, *N. tibetanus* Jałoszyński, 2008 and *N. qinghaiensis* Jałoszyński, 2010) share a remarkable pigmentation, with the head and pronotum dark brown or nearly black and the elytra much lighter, brown or reddish-brown. Another very similar species belonging to this distinct group, *Neuraphes niponensis* Franz, 1976, from Hokkaido, was revised previously (Jałoszyński 2004). In the present paper a new Tibetan member of this interesting species group is described.

The type material is deposited in the private collection of Michael Schülke, Berlin, Germany (PCMS). The nomenclature and measurements follow the convention used previously (Jaloszyński 2008).

TAXONOMY

Neuraphes (Pararaphes) hengduanus n. sp. (Figs. 1-4)

NAME DERIVATION

Locotypical, after the Hengduan Mountain Range, which includes the Gaoligong Mountains, where the holotype comes from.

Diagnosis

Males of this species can be identified on the basis of a unique set of characters: body distinctly bicolorous, with reddish-brown elytra and much darker head and pronotum; head densely but shallowly and unevenly punctate; mediobasal longitudinal carina on pronotum longer than half length of pronotum; apex of each elytron with very small, barely visible pore nearly adjacent to suture and distant from posterior margin of elytron; aedeagus very stout, nearly rhomboid in ventral view, with indistinct semielliptical median apical plate and very large, subtriangular lateral apical plates.

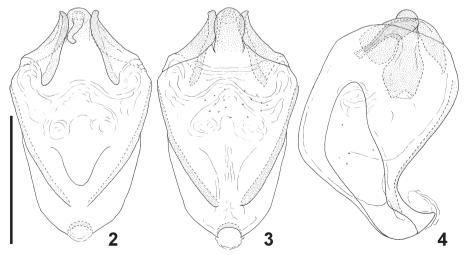


1. Dorsal habitus of *Neuraphes hengduanus* n. sp. (length 1.50 mm)

DESCRIPTION

Male (Fig. 1). Body relatively moderately large and relatively stout; length 1.50 mm; head and pronotum dark brown, elytra, antennae and legs except tarsi reddish-brown, tarsi and maxillary palps yellowish; vestiture on elytra light brown, on darkest body parts grayish. Head broadest at large, moderately coarsely faceted eyes, length 0.25 mm, width 0.29 mm; tempora in dorsal view slightly shorter than length of eye; vertex regularly convex; from flattened, in anterior part steeply lowering toward clypeus; supraantennal tubercles feebly marked. Punctation on frons and vertex distinct, composed of large but very shallow and somewhat smoothed punctures separated by spaces comparable to puncture diameters; setae sparse, relatively long, suberect to erect. Antennae as long as half of body length, slender, gradually thickened toward apices, length 0.75 mm; antennomere I 2.2x as long as broad; II distinctly shorter but not narrower than I, 1.9x as long as broad; III-IV subequal in shape and size, each slightly narrower and much shorter than II, distinctly transverse; V slightly larger than IV, only slightly transverse; VI slightly larger than V, slightly transverse; VII distinctly larger than VI, transverse; VIII distinctly larger than VII, transverse; IX slightly longer and much broader than VIII, strongly transverse; X slightly larger than IX, strongly transverse; XI slightly narrower than X and slightly shorter than IX-X together.

Pronotum trapezoid in shape, broadest near anterior third, length and width 0.38 mm. Anterior margin broadly rounded; sides in anterior third rounded, in posterior part nearly straight and slightly convergent toward slightly obtuse hind angles; posterior margin in middle slightly expanded toward scutellum; base of pronotum with two pairs of very shallow impressions, median pair separated by longitudinal carina extending from nearly posterior margin of pronotum to its anterior third. Punctation of disc very similar to that on frons and vertex but punctures slightly smaller; setae relatively sparse, moderately long, suberect, very thin.



2-4. Aedagus of *Neuraphes hengduanus* n. sp. in dorsal (2), ventral (3) and lateral (4) views (scale bar: 0.1 mm)

Elytra oval, broadest distinctly anterior to middle, length 0.88 mm, width 0.65 mm, elytral index (length / combined width) 1.35. Humeral calli moderately distinct, elongate; basal pit on each elytron large; circumsutural area in anterior third indistinctly flattened; apex of each elytron with very small, barely noticeable pore nearly adjacent to suture and separated from posterior margin of elytron by space twice as long as pore diameter. Punctures slightly sparser than those on pronotum, small and very shallow, with diffused margins; setae slightly thicker than those on pronotum, short and sparse, suberect. Metathoracic wings well developed.

Legs slender, moderately long; all tibiae straight.

Aedeagus very small (Figs. 2-4) 0.18 mm in length, in ventral view nearly rhomboid, apical part subtrapezoid; ventral median apical plate very small, semielliptical; lateral subapical sclerites large, in ventral view subtriangular; parameres relatively long and very broad, in lateral view with dorsal margin bent at obtuse angle and ventral margin recurved.

Female. Unknown.

Type material

Holotype (male): "CHINA: Yunnan [CH07-24], Nujiang \ Lisu Aut. Pref., Gaoligong Shan, valley 18 \ km W Gomgshan, 3020 m, 27°47'54"N, \ 98°30'13"E, mixed forest, litter, moss \ wood sifted, 7.VI.2007, M. Schülke" [white, printed]; "NEURAPHES \ PARARAPHES \ hengduanus m. \ det. P. Jałoszyński, 2010" (PCMS).

DISTRIBUTION
China: Yunnan.

REMARKS

All other species of Eastern Palearctic *Neuraphes* with bicolorous bodies (*N. jumlanus*, *N. himalayanus*, *N. khumbuanus*, *N. tibetanus*, *N. niponensis*, and *N. qinghaiensis*) have distinctly more elongate elytra, with the elytral index ranging from 1.39 to 1.49, while in *Neuraphes hengduanus* the elytra are stouter, and the elytral index equals to 1.35. The very stout aedeagus of the newly described species, with its very small ventral apical plate, is unique among all Eastern *Neuraphes*. In lateral view, it is most similar to the copulatory organ of *N. tibetanus*, but the shape of the parameres and the apical plate and sclerites are clearly different. In ventral and dorsal views the aedeagus of *N. hengduanus* resembles that of *N. niponensis*, but the latter species is distinctly more elongate, with the pronotum longer than broad (as long as broad in *N. hengduanus*), its aedeagus is much broader at base, and the parameres are shorter and have different shape. The very small and semielliptical ventral apical plate of the aedeagus resembles also that of *N. jumlanus*, but the latter species is much larger (1.95 vs. 1.50 mm in *N. hengduanus*), distinctly more elongate, and has each of the antennomeres IV-VII much longer than broad (broader than long in *N. hengduanus*).

ACKNOWLEDGMENTS

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REFERENCES

- Franz, H., 1970. Scydmaenidaen der Himalaya-Ausbeute Prof. Dr. H. Janetscheks. Khumbu-Himal, **3(3):** 435-438.
- —, 1974. Die Scydmaeniden des Raumes von Jumla in Westnepal und aus dem Therai (Col.). Koleopt. Rundsch., **51:** 86-104.
- —, 1976. Neue Scydmaeniden aus Japan, sowie Bemerkungen zu bekannten Arten. Ent. Blätter, 72: 51-60.
- JALOSZYŃSKI, P. 2004. Redescriptions and new records of Japanese species of *Neuraphes* and *Scydmoraphes* (Coleoptera, Scydmaenidae). Bull. Nat. Sci. Mus. Tokyo, **30**(3): 137-145.
- —, 2008. Revision of Neuraphes Thomson of the Himalaya Mts. (Coleoptera: Scydmaenidae). Genus, Wrocław, 19(4): 619-637.
- —, 2010. Two new species of Himalayan and sub-Himalayan *Neuraphes* Тномsоn (Coleoptera: Scydmaenidae). Stuttgarter Beitr. Naturkunde A, Serie 3, 127-131.