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

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ABSTRACT. *Neuraphes (Pararaphes) pseudojumlanus* n. sp. from China (W Sichuan) is described, and its diagnostic characters are discussed and illustrated. The new species belongs to a distinct group of *Neuraphes* characterized by a bicolorous body and is the tenth representative of this genus known to occur in the high mountains surrounding Qinghai-Tibetan Plateau.

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

#### INTRODUCTION

Himalayan and Tibetan species of *Neuraphes* Thomson were revised and described in a series of recent papers (Jałoszyński 2008, 2010a, 2010b). To date only the subgenus *Pararaphes* Reitter was found in this area, with nine species: *N. himalayanus* Franz, 1970; *N. taksangensis* Franz, 1973; *N. aruensis* Franz, 1974; *N. jumlanus* Franz, 1974; *N. khumbuanus* Jałoszyński, 2008; *N. tibetanus* Jałoszyński, 2008; *N. qinghaiensis* Jałoszyński, 2010a; *N. mephistopheles* Jałoszyński, 2010a; and *N. hengduanus* Jałoszyński, 2010b. *Neuraphes gartneri* Franz, 1979 from Pakistan (Naltar Valley in Karakorum) was transferred to *Scydmoraphes* Reitter, and *N. kashmirensis* Franz, 1979 placed as a junior subjective synonym of *N. aruensis*. Since some species that inhabit this area are highly similar to their Far Eastern Palaearctic congeners (e.g., to *N. niponensis* Franz, 1976 from Hokkaido (revised in Jałoszyński 2004), this group of taxa may be important to understand the historical dispersal-vicariance processes in the evolution of *Neuraphes*.

In the present paper a new sub-Himalayan *Neuraphes* is described, based on a specimen collected in Sichuan, China. The measurements and terminology are adopted after Jałoszyński (2008). The type material is deposited in Museo Civico di Storia Naturale di Genova "Giacomo Doria", Genova, Italy (MSNG).

#### **TAXONOMY**

# Neuraphes (Pararaphes) pseudojumlanus n. sp. (Figs. 1-6)

NAME DERIVATION

The specific epithet was chosen to underline the similarity of the new species to N, jumlanus.

# DIAGNOSIS

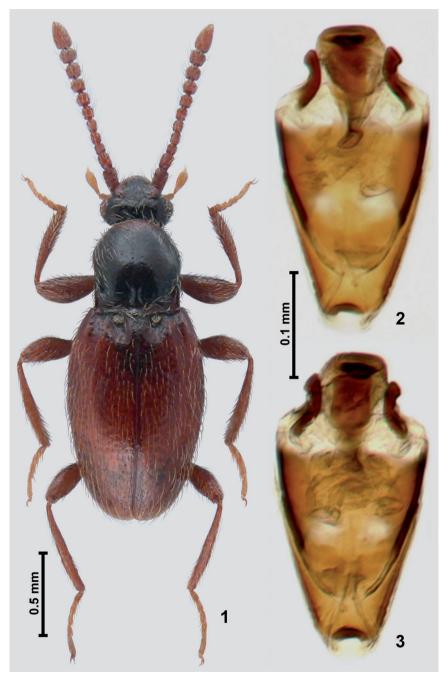
Male: body exceeding 2 mm in length, with dark brown head, slightly lighter pronotum and strongly contrasting reddish brown elytra; frons and vertex with superficial but dense and large punctures with diffused margins; pronotum in dorsal view distinctly narrowing caudad; elytra without adsutural grooves or impressions; antennomeres I-VII each elongate; aedeagus with short oval ventral plate, curved lateral plates and large, elongate copulatory piece strongly narrowing distally and with broad base. Females and their diagnostic characters unknown.

# DESCRIPTION

*Male* (Figs. 1-6). Body (Fig. 1) large, slender and moderately strongly convex; length 2.13 mm; head dark brown, nearly black; prothorax, meso-, metathoracic and abdominal ventrites slightly lighter than head, with reddish hue; elytra reddish-brown; antennae and legs except tarsi reddish-brown; tarsi and maxillary palps yellowish-brown; vestiture light brown.

Head broadest at large, coarsely faceted eyes, length 0.33 mm, width 0.43 mm; tempora in dorsal view nearly as long as eye; vertex convex; frons in posterior part flattened, in anterior part convex and steeply declining towards clypeus; supraantennal tubercles weakly raised and not delimited from surrounding areas. Punctures on vertex and posterior part of frons large and dense but very shallow, superficial, with diffused margins, unevenly distributed and separated by spaces 0.5-2x as wide as puncture diameters; vestiture of frons, vertex and tempora composed of sparse, moderately long, suberect to erect setae. Antennae long and slender, gradually thickening distally, length 1.08 mm; antennomere I about 3x as long as broad; antennomere II nearly twice as long as broad; III 1.2x as long as broad; IV 1.5x as long as broad; V 1.8x as long as broad; VI 1.5x as long as broad; IX slightly broader than long; XI slightly shorter than IX-X together, 2.2x as long as broad.

Pronotum elongate, subtrapezoidal in shape, broadest distinctly in anterior third, length 0.58 mm, width 0.53 mm. Anterior margin broadly rounded; sides in anterior third



1-3. Neuraphes pseudojumlanus n. sp.: 1 – dorsal habitus of holotype male, 2 – aedeagus in dorsal view, 3 – aedeagus in ventral view

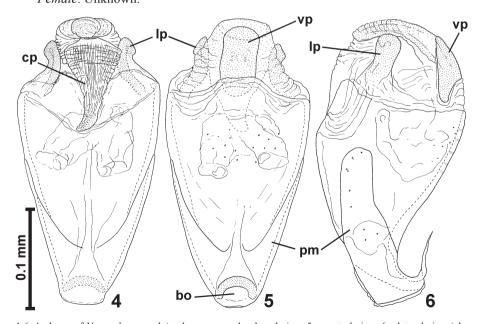
strongly rounded, in posterior half lateral margins slightly concave and convergent, in posterior 1/5 parallel; hind angles slightly obtuse but sharply marked; posterior margin arcuate; base of pronotum with large, shallow and subtriangular impression near each hind angle and short median longitudinal carina as long as about 1/5 of pronotal length, carina slightly constricted in middle and accompanied at each side by shallow, indistinct impression. Punctures on disc fine and shallow, indistinctly marked and sparse, surface between punctures glossy; vestiture sparse, moderately long, suberect.

Elytra oval, broadest slightly anterior to middle, length 1.23 mm, width 0.83 mm, EI 1.48. Humeri moderately distinct, developed as longitudinal protuberances; basal fovea on each elytron large, located closer to scutellum than to humerus; suture slightly raised only between basal elytral impressions; apex of each elytron with barely discernible small and low tubercle located much closer to suture than to posterior margin of elytron. Punctures more distinct than those on pronotum, small shallow and diffused, separated by spaces 1-2x as wide as puncture diameters; vestiture sparse, moderately long, suberect. Metathoracic wings not studied.

Legs slender and long, without modifications.

Aedeagus (Figs. 2-6) 0.28 mm in length, gradually broadening from base to subapical region and with subtrapezoidal apical part; dorsally with long tubular copulatory piece strongly narrowing distally (Fig. 4; *cp*); ventral plate (Figs. 5, 6; *vp*) elongate and oval; lateral plates (Figs. 4-6; *lp*) in dorsal view curved, in lateral view with rounded apical parts; parameres (Figs. 5, 6; *pm*) broad and in lateral view rapidly narrowed near middle, with rounded apices.

Female. Unknown.



4-6. Aedagus of *Neuraphes pseudojumlanus* n. sp.: 4 – dorsal view, 5 – ventral view, 6 – lateral view (abbreviations: bo, basal orifice; cp, copulatory piece; lp, lateral plate; pm, paramere; vp, ventral plate)

Type material

Holotype (male), three labels: "CHINA - W Sichuan, S Barkam/between Lianghekou-Fubian / 3450-3650m / Quercus shrubs and mixed wood / 10-30.VI.2004, leg. R. Fabbri" [white, printed], "MUSEO GENOVA/Acquisto V.2005 / da R. Fabbri" [white, printed], "NEURAPHES / (PARARAPHES) / pseudojumlanus m. / det. P. JAŁOSZYŃSKI, '13 / HOLOTYPUS' [red, printed] (MSNG).

# DISTRIBUTION

Eastern edge of the Qinghai-Tibetan Plateau (China: western part of Sichuan).

# REMARKS

Neuraphes pseudojumlanus belongs to a group of species with distinctly bicolorous body, with the head and pronotum darker than the elytra. This group in Himalaya and Tibet includes N. jumlanus, N. himalayanus, N. khumbuanus, N. tibetanus, N. qinghaiensis and N. hengduanus. Another species belonging in this group is N. niponensis from Hokkaido (Jałoszyński 2004). Within this lineage, N. pseudojumlanus is most similar to N. jumlanus; both species share a similar body size and silhouette. The aedeagus of the only known male of *N. jumlanus* (illustrated by Jałoszyński 2008; Figs. 10-12) is in an erected state and its lateral plates are partly damaged, so comparisons of genital structures are difficult. The general shape of the median lobe in N. jumlanus and N. pseudojumlanus is highly similar, but the parameres in N. jumlanus have a distinctly different shape, with their apical parts narrowing distally, while in N. pseudojumlanus the parameral apex is rounded and not narrowed. The ventral plate in *N. jumlanus* seems much more elongate than that in N. pseudojumlanus, what is well-visible in lateral view. These two species clearly differ in external characters: relative width of the head (pronotum 1.23x as wide as head in N. pseudojumlanus vs. 1.34x as wide as head in N. jumlanus); relative length of tempora (nearly as long as eyes in N. pseudojumlanus vs. as long as half length of eye in N. jumlanus); shape of pronotum (with wide anterior margin and distinctly concave sides in posterior half in N. pseudojumlanus vs. with narrow anterior margin and parallel sides in N. jumlanus); and elytral sculpture (without adsutural grooves in N. pseudojumlanus vs. with distinct and long adsutural grooves in N. jumlanus). Moreover, N. pseudojumlanus is known to occur in the eastern rim of the Oinghai-Tibetan Plateau (together with N. hengduanus, N. tibetanus and N. qinghaiensis; all these species occur in the mountain system forming the Hengduan Mts. in the south and the Qilian Mts. in the north), while N. jumlanus occurs in the central part of the Himalayas (together with N. taksangensis, N. khumbuanus, N. himalayanus and N. mephistopheles).

## ACKNOWLEDGMENTS

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