

## Three new species of the genus *Dendrocranulus* SCHEDL, 1937 from Peru (Coleoptera: Curculionidae: Scolytinae)

A. V. PETROV & M. Y. MANDELSHTAM

### Abstract

Three new species of *Dendrocranulus* SCHEDL, 1937 (Coleoptera: Curculionidae: Scolytinae: Dryocoetini) are described from Peru: *D. dervish*, *D. knizeki*, and *D. satipensis*.

**Key words:** Coleoptera, Curculionidae, Scolytinae, Dryocoetini, *Dendrocranulus*, taxonomy, new species, Junín, Satipo, Peru.

### Introduction

The genus *Dendrocranulus* SCHEDL, 1937 is distinguished from *Xylocleptes* FERRARI, 1867 by 1) the presence of a metatibial groove into which the tarsus can be placed, 2) the obscure, strongly procurved sutures of the antennal club, and by 3) the Neotropical distribution (WOOD 2007).

### Material

All specimens listed below were collected by A.V. Petrov in Peru (Junín Region, Satipo Province). The type material is deposited in APP and ZMM.

APP Alexander Petrov private collection, Moscow, Russia

ZMM Zoological Museum of Moscow State University, Moscow, Russia

Images were made with a Canon 50D camera body and a MP-e65 mm macro lens.

### *Dendrocranulus knizeki* sp.n.

TYPE LOCALITY: Rio Venado, Satipo Province, Junín Region, Peru.

TYPE MATERIAL: **Holotype** ♂ (ZMM): P E R U: JUNÍN: Rio Venado village, 15 km NW of Satipo, 1300 m a.s.l., 74°46'07.0"W 11°11'35.2"S, 3.X.2015, window trap, leg. A.V. Petrov. **Paratypes** (APP): 1 ♂, 5 ♀♀, same locality, 3.–13.X.2015, window trap, leg. A.V. Petrov.

DESCRIPTION (Male): 3.20 mm long, 2.90 times as long as wide (Fig. 1a–d). Body reddish-brown, shining.

Head dark-brown, frons shallowly impressed on lower part and convex on upper half, frontal surface with numerous small deep punctures and sparse raised vestiture; epistomal process with short yellow setae; hypostoma, pregena, and pregenal areas with short sparse setae; middle of vertex with impunctate median rounded shining bulla. Eyes large, weakly emarginate. Antennae reddish-brown, funicle short, 5-segmented, club flattened and rounded with yellow short setae, and two sutures, strongly procurved and marked by short setae.

Pronotum dark-brown, weakly shining, 1.16 times as long as wide, widest at middle, 3/4 length of pronotum with parallel sides, arcuately rounded towards apex; anterior margin without serrations; anterior half asperate, covered with coarse confused asperities in anterior part and numerous, rather small, confused asperities in central part of summit; basal half with large

rounded punctures, basal half without asperities, with microscopic shagreening; lateral sides and anterior part of pronotum with erect yellow setae, central area of pronotal disc with very short hair-like setae, basal half without setae.

Scutellum dark-brown, small, rounded, flat, flush with elytral surface.

Elytra reddish-brown, weakly shining, 1.78 times as long as wide, 1.52 times as long as pronotum. Sides subparallel and rounded toward apex on posterior 1/4; disc comprising 70 percent of elytral length; declivity occupying posterior fourth of elytral length, steep, broadly concave. Elytral disc punctate, with straight rows of striae and interstriae, sutural striae feebly impressed on disk and not impressed at declivity, other striae not impressed on disk and at declivity, interstriae flat and smooth, more than twice as wide as striae; striae punctures rounded, non-confluent, interstitial punctures smaller than striae punctures; striae and interstitial rows on declivity distinct, slightly procurved; sutural interstriae slightly elevated, interstriae 1 (sutural) and 3 each with a row of six or seven small tubercles; lateral sides of elytra with long erect yellow setae, interstriae in posterior part of elytra and declivity with rows of short erect setae.

Abdomen dark brown with numerous punctures (same size as punctures of elytral interstriae) and long erect yellow setae.

Legs typical for the genus, with metatibial groove, unicoloured reddish brown, with long yellow setae; protibia with five socketed teeth on outer surface.

Female (Fig. 1e–g): 3.50 mm long, 2.91 times as long as wide, similar to male except frons more convex in upper part, head with sparse fine and short frontal hair-like setae, epistomal process with long yellow setae and numerous, very long orange setae on hypostoma, pregenae and part of genal areas; elytral declivity more convex, without small tubercles on first (sutural) interstria.

NOTE: Paratypes (males) 3.10–3.20 mm long, elytra 2.78–2.81 times as long as wide, 1.70–1.81 times as long as pronotum; females 3.10–3.50 mm long, 2.73–2.91 times as long as wide, elytra 1.59–1.61 times as long as pronotum.

DIAGNOSIS: The new species is closely related to *Dendrocranulus barbatus* SCHEDL, 1939, but can be distinguished by the distinct punctation on the posterior part of the pronotum and the vestiture of the female's head consisting of sparse fine and short setae on frons, and by the numerous very long, orange setae forming a long "beard" on hypostoma, pregenae and part of the genal areas.

DISTRIBUTION: Known only from the type locality.

ETYMOLOGY: The new species is named in honor of the eminent entomologist Dr. Miloš Knížek (Forestry and Game Management Research Institute, Czechia), our friend and colleague, expert of Scolytidae and Platypodidae.

### *Dendrocranulus dervish* sp.n.

TYPE LOCALITY: Río Venado, Satipo Province, Junín Region, Peru.

TYPE MATERIAL: **Holotype** ♂ (ZMM): P E R U: JUNÍN: Río Venado village, 15 km NW of Satipo, 1300 m a.s.l., 74°46'07.0"W 11°11'35.2"S, 10.X.2015, window trap, leg. A.V. Petrov. **Paratypes** (APP): 3 ♂♂, 5 ♀♀, same locality, 3.–25.X.2015, window trap, leg. A.V. Petrov.

DESCRIPTION (Male): 1.95 mm long, 3.25 times as long as wide (Fig. 2a–d). Body reddish-brown, shining.

Head dark reddish-brown, frons weakly shining, flat, with weak transverse impression on lower part; frontal surface covered with numerous deep rounded punctures, vestiture consisting of

sparse erect setae, epistomal process with numerous raised hair-like yellowish setae; centre of vertex with short impunctate median shining bulla. Eyes large, weakly emarginate. Antennae brown, funicle short, 5-segmented, club flattened, rounded, with yellow short setae, two sutures strongly procurved, marked by short setae.

Pronotum dark-brown, shining, 1.25 times as long as wide, widest at middle, with subparallel sides in 1/3 basal part of pronotum, arcuately rounded at anterior margin; surface between anterior slope and summit covered with numerous transverse coarse small confused asperities; surface of pronotal disc with microscopic shagreening between asperities; base and lateral parts of pronotum with small rounded punctures; entire surface of pronotum with erect yellow setae, basal and central areas of pronotal disc with very short hair-like setae, anterior slope and lateral sides with longer setae.

Scutellum rounded, reddish-brown, flat, flush with elytral surface.

Elytra reddish-brown, weakly shining, 2.0 times as long as wide, 1.6 times as long as pronotum. Sides subparallel and rounded toward apex in posterior 1/4; disc comprising 70 percent of elytral length; declivity occupying posterior fourth of elytral length, basally broadly convex, flattened posteriorly. Elytral disc with straight rows of punctures, sutural and other striae not impressed on disk; sutural and striae 2 feebly impressed on declivity. Interstriae flat and smooth, more than twice as wide as striae; striae punctures deep, rounded, non-confluent, interstitial punctures very sparse and smaller than striae punctures. Striae 1 and 2 on declivity distinct, not obscure, straight, with large rounded punctures; sutural interstriae flat, interstriae 1 (sutural), 2 and 3 each with a row of microscopic tubercles; surface of declivity weakly reticulate, dull; lateral sides of elytra with long erect yellow setae, interstriae from base to posterior part of elytra and declivity with distinct rows of erect setae, more dense at declivity.

Abdomen dark brown, with numerous punctures on fifth sternite and long erect yellow setae on all sternites.

Legs typical for the genus, with metatibial groove, unicoloured reddish brown with long yellow setae, protibia with five socketed teeth on outer surface.

Female (Fig. 2e–g): 2.10 mm long, 3.23 times as long as wide, similar to male except surface of flat frons weakly reticulate and coarsely punctate; vestiture more distinct, lateral sides from epistoma to upper level of eyes with dense long setae, median part of frons from epistoma to vertex without setae; hypostoma, pregenula, and pregenal areas with short sparse setae; elytral declivity similar to male.

NOTE: Paratypes (males) 3.10–3.20 mm long, elytra 2.78–2.81 times as long as wide, 1.70–1.81 times as long as pronotum; females 3.10–3.50 mm long, 2.73–2.91 times as long as wide, elytra 1.59–1.61 times as long as pronotum.

DIAGNOSIS: The new species is closely related to *Dendrocranulus limitaris* WOOD, 1979, but can be distinguished by the large striae punctures in the median part of the declivity; interstriae 2 and 3 not impressed; declivity broadly convex basally and flattened posteriorly, not impressed; pregenula, pregenal, genal areas, and hypostoma of female sparsely covered with setae; frons of female with dense long setae above upper level of eyes; vestiture on declivity more distinct.

DISTRIBUTION: Known only from the type locality.

ETYMOLOGY: The name of the new species refers to the vestiture of the female's head resembling the unbarbered head and long elf-lock of the dervish (“شیدیرو”, Farsi Language).



Fig. 1: *Dendrocranulus knizeki* sp.n., a–d) male habitus in a) dorsal view, b) lateral view, c) frontal view, and d) caudal view; e–g) female habitus in e) dorsal view, f) lateral view, and g) frontal view.



Fig. 2: *Dendrocranulus dervish* sp.n., a–d) male habitus in a) dorsal view, b) lateral view, c) frontal view, and d) caudal view; e–g) female habitus in e) dorsal view, f) lateral view, and g) frontal view.



Fig. 3: *Dendrocranulus satipensis* sp.n., a–d) male habitus in a) dorsal view, b) lateral view, c) frontal view, and d) caudal view.

***Dendrocranulus satipensis* sp.n.**

TYPE LOCALITY: Río Venado, Satipo Province, Junín Region, Peru.

TYPE MATERIAL: **Holotype** ♂ (ZMM): P E R U: JUNÍN: Río Venado village, 15 km NW of Satipo, 1300 m a.s.l., 74°46'07.0"W 11°11'35.2"S, 10.X.2015, window trap, leg. A.V. Petrov.

DESCRIPTION (Male): 2.00 mm long, 3.07 times as long as wide (Fig. 3a–d). Body dark brown, almost black, shining.

Head dark brown, almost black in upper half, shining; frons flat and convex in upper part, frontal surface strongly reticulate, punctures coarse, deep; upper part of frons to vertex with impunctate narrow shining median callus; frontal vestiture consisting of sparse erect yellow setae, epistomal process with short yellow setae; hypostoma, pregena, and pregenal areas with short sparse setae. Eyes large, weakly emarginate. Antennae brown, funicle short, 5-segmented, club flattened, rounded, with yellow setae, two sutures strongly procurved and marked by short setae.



Pronotum black, shining; 1.16 times as long as wide, widest at middle, 3/4 basal length of pronotum with subparallel sides, arcuately rounded at anterior margin; transverse crenulations from anterior slope to base of pronotum, asperities on anterior slope rather small, on centre of disk larger; vestiture moderately long, developed in anterior third and lateral areas.

Scutellum small, rounded, flat, flush with elytral surface, black.

Elytra reddish-brown, shining, 1.85 times as long as wide, 1.73 times as long as pronotum. Sides subparallel and rounded toward apex in posterior 1/4; disc comprising 75 percent of elytral length; declivity steep, basally broadly concave. Elytral disc with straight rows of striae and interstriae, juxtasutural striae feebly impressed on disk and not impressed at declivity, other striae not impressed on disk and declivity, interstriae flat and smooth, less than twice as wide as striae; strial punctures large, round, non-confluent, interstitial punctures slightly smaller than strial punctures; declivity shining, strial and interstitial rows on declivity distinct, straight, strial rows 1 and 2 slightly impressed; interstriae 1 slightly elevated, not elevated interstriae 2 and 3 each with row of microscopic tubercles; elytral disk and lateral sides of elytra with erect setae on interstriae in posterior part of elytra (setae on declivity longer and more numerous) and striae with rows of very small hair-like setae on posterior part of elytra (striae at declivity without hair-like setae).

Abdomen dark brown, with numerous punctures and long erect yellow setae.

Legs typical for the genus, with metatibial groove, unicoloured reddish brown, with long yellow setae, protibia with five large and two small socketed teeth on outer surface.

Female unknown.

DIAGNOSIS: The new species is closely related to *Dendrocranulus limitaris* and *D. melaenus* (EICHHOFF, 1871), but it can be distinguished by the shining declivity with well developed vestiture in interstriae 2, by the flat frons without impression, and by the black colour.

DISTRIBUTION: Known only from the type locality.

ETYMOLOGY: The new is species named after Satipo Province (Junín Region, Peru), where this species was collected.

### Acknowledgements

The authors express their most sincere gratitude to Dr. Harald Schillhammer and Dr. Helen Shaverdo (Naturhistorisches Museum Wien, Austria) for providing access to the collection of Karl E. Schedl.

Dr. Thomas H. Atkinson (University of Texas Entomology Collection, USA) is thanked for critical proofreading of the manuscript and language revision.

The research of the second author (M.Y. Mandelshtam) was supported by a grant from the Russian Science Foundation (No.16-14-10109).

The first author (A.V. Petrov) addresses special thanks to David Quispe for his help in organizing field work around Río Venado village.

### Reference

WOOD, S.L. 2007: Bark and ambrosia beetles of South America (Coleoptera: Scolytidae). – Provo: Monte L. Bean Life Science Museum, Brigham Young University, Utah, 900 pp.

Dr. Alexander V. PETROV

*Institute of Forest Science, RAS, Sovetskaya st., 21, Uspenskoe, Moscow Region, 143030, Russia* (hylesinus@list.ru)

Dr. Michail Y. MANDELSHTAM

*Centre for Bioinformatics and Genome Research, Saint-Petersburg State Forest Technical University named after*

*S.M. Kirov, Institutskii per., 5, Saint Petersburg, 194021, Russia*

*Tyumen State University, Volodarskogo st., 6, Tyumen, 625003, Russia* (michail@MM13666.spb.edu)



# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Koleopterologische Rundschau](#)

Jahr/Year: 2016

Band/Volume: [86\\_2016](#)

Autor(en)/Author(s): Petrov Alexandr V., Mandelshtam Mikhail Y.

Artikel/Article: [Three new species of the genus Dendrocranulus SCHEDL, 1937 from Peru 281-288](#)