

**FIRST RECORD OF A CERAMBYCID  
BEETLE *PURPURICENUS KABAKOVI*  
MIROSHNIKOV & LOBANOV FROM  
KASHMIR, NORTHERN INDIA**H.V. Ghate<sup>1</sup>, M.H. Kichloo<sup>2</sup> and M. Arif<sup>2</sup><sup>1</sup> Department of Zoology, Modern College, Shivajinagar, Pune, Maharashtra 411005, India<sup>2</sup> Department of Zoology, Ahmednagar College, Ahmednagar, Maharashtra 414001, IndiaEmail: <sup>1</sup>hemantghate@hotmail.com (Corresponding author)*plus web supplement of 1 page*

Two colourful females (with bright orange prothorax and almost  $\frac{2}{3}$ <sup>rd</sup> of elytra) and four completely black male specimens of a cerambycid beetle belonging to the genus *Purpuricenus* Dejean (Cerambycidae: Cerambycinae: Purpuricenini) were recently collected in Kashmir at the same locality and at the same time (Image 1<sup>w</sup>). The male specimens were somewhat variable in size, had longer antennae, but otherwise had all the characters as those seen in the females and so appeared to be belonging to the same species (conspecific). Especially interesting were the five tubercles on the disc of prothorax.

The genus *Purpuricenus* Dejean is largely a Palearctic and Nearctic genus with only a few species in northern India. One species *P. sanguinolentus* (Olivier) is found in southern India, as well as Pune (Gahan, 1906; also description in Stebbing 1914; and personal observations; it is also in our collection from a locality in Kerala). The characters of the genus were verified as per Gahan (1906) but the specimen collected in Kashmir did not match with any species described in Gahan (1906). The beetle did not match with any of the images of the genus *Purpuricenus* available on internet either (especially beautiful images are available on a Russian website <<http://www.zin.ru/animalia/coleoptera/eng/purpgall.htm>>).

A renowned Cerambycidae expert - Dr. Carolus Holzschuh (Austria) - helped in the determination of the species. The black male and the colourful female from Kashmir are, in fact, conspecific and are confirmed to be *Purpuricenus kabakovi*, as described by Miroshnikov & Lobanov (1990). In addition, we obtained brief original description of this species as well as re-description of a related species *P. indus*, through kind courtesy of Dr. Denis Kasatkin (Russia). A brief description of the species *P. kabakovi* is presented because the original is in Russian and not available for Indian field workers easily. Digital colour image of the male and female is provided to help amateurs and field workers. Detailed characters of the Tribe Purpuricenini and those of the genus *Purpuricenus* can be seen in Gahan (1906).

Although the species is originally reported from Afghanistan and is known from Pakistan (Dr. Holzschuh, personal correspondence), this forms a first record of the species from the Indian territory.

Specimens examined: 4 males and 2 females, 1.vii.2005 & 2.vii.2005, on a local wild berry plant called "bird cherry" or "kavchair", collected at Hidyal, Kishtwar, Doda, Jammu & Kashmir, coll. M.H. Kichloo. Morphometry of all the specimens is presented in Table 1.

**Brief description**

**Male**: Total Length 25mm; Prothorax breadth 7.5mm (including lateral pointed tubercle), Prothorax length 4.8mm; breadth at humeral angles almost as that of prothorax. Colour- all black, no trace of orange-red colouration seen in female. More or less nitid (shiny) above, except for elytra which are relatively dull; ventrally also nitid with sparse pubescence (see Image 1<sup>w</sup>).

Head: Vertex coarsely punctate except some part behind the outer lobe of the eyes; antennal supports prominent, conical and distinctly raised on inside; a fine suture between the antennal supports which extends forward almost  $\frac{3}{4}$  length down on front and ends just before the transverse depression; except for a small area entire frontal region coarsely punctate; mandibles small, dorsally coarsely punctate; eyes broadly and deeply emarginated, finely faceted, outer lobe much larger than the inner lobe with a thin band of about five ommatidia joining the two lobes; gular area rugulose punctate except at the base; antennae long, much longer (about 2 times) than body. All antennomeres punctate, setose, more or less flattened, and distally slightly dilated. The first three segments much coarsely punctate, first antennomere (scape) much pubescent ventrally; distal three antennomeres very slender, 11<sup>th</sup> the longest.

Thorax: Prothorax much coarsely rugulose punctate than head; broader than long with prominent lateral conical tubercle on either side; the middle of the disc with five typically arranged basal tubercles; prosternum also coarsely punctate; prosternal process blunt and dilated posteriorly; a transverse curved and elevated fold in the anterior part of the prosternum and the area in front of this fold rugulose punctate. Pronotum without any pubescence, but prosternum is with sparse black pubescence.

Scutellum triangular, its apex sharp. All three pairs of legs compressed, coarsely rugulose punctate; femora very much compressed and very rugulose on the sides and covered with thicker but sparse pubescence; tibia compressed, triangular and coarsely punctate, a pair of prominent tibial spurs present; tarsal segments short and pubescent; claws moderately divergent. Mesosternal process is like a rounded tubercle, prominently raised above coxae. Metasternum moderately convex, finely punctate and covered with sparse, but long, black pubescence. Hind or meta-femora slightly extending beyond elytral apex.

Abdomen: Five visible sternites, all finely punctate and with very sparse black pubescence.

Elytra: Naked without any pubescence, comparatively dull, parallel sided, evenly rounded; irregularly rugulose punctate all

<sup>w</sup> See Images in the web supplement at [www.zoosprint.org](http://www.zoosprint.org)

**Table 1. Morphometry of six specimens of *Purpuricenus kabakovi***

Parameter	Specimens					
	1 (M)	2 (M)	3 (M)	4 (M)	5 (F)	6 (F)
TL	21	25	25	28	18	23
HB	6	7.5	6.5	7.9	5.1	6.5
PL	4	4.8	4.5	5.5	3.2	4.2
PB	6	7.5	6.5	7.9	4.9	6.1
AL	50	57	55	64	17	19

All measurements in mm. TL - Total Length; HB - Breadth at Humeral angle; PL - Prothorax Length; PB - Prothorax Breadth; AL - Antenna Length; M - Male; F - Female

over; punctures coarse in the basal part and finer towards apical region; almost as broad as the prothorax, apical region somewhat truncate (at least not as evenly rounded as in female); scutellum triangular, its apex sharp.

**Female:** Most characters like that for male, with following differences.

**Colouration:** Prothorax orange-red except for a black basal line; sparse pubescence on orange prosternum also black; scutellum black; either side of scutellum with two linked semicircular areas that are also black; elytra largely orange-red except an apical black patch. Antennae shorter, not extending beyond elytral apex, sulcus between antennal supports not as prominent as in male; antennomeres 5 to 10 broader and with slightly angulate outer apical angle, 11 antennomere short; gular area finely rugulose; prosternal process mostly black; area in front of transverse fold of prosternum also black, rest orange-red. Hind femora shorter, do not extend up to elytral apex.

**Discussion:** Species of the genus *Purpuricenus* are often colourful, with a pattern of orange or red and black colouration. These beetles are known to be pests of a wide variety of living plants and dead wood. *Pinus*, *Quercus*, *Acacia*, *Dendrocalamus* are some names of the plants given by Beeson (1941). *P. indus* Semenov-Tian-Shanski, a similar species, is also known from Kashmir and is known to attack poplar (*Populus ciliata*). This (*P. indus*) is, in fact, the same species described in Gahan (1906) as *P. haussknechti* Witte, a fact clarified by Plavilstshikov (1938) (and Dr. Holzschuh, pers. comm.). Further, *P. haussknechti* Witte is now treated as a synonym of *P. montanus* White. *P. montanus* White, which is also found in Kashmir, is a highly variable species with respect to colouration and in which also entirely black forms, or black forms with only few red spots, are known (Gahan, 1906). *P. montanus* can be easily distinguished from *P. kabakovi* because the former has rather dense pubescence above and the typical five pronotal tubercles are absent. In case of *P. indus* the elytral surface is again pubescent while in *P. kabakovi* elytra are naked. In *P. kabakovi* the rare female may be entirely black and males may have few red spots on prothorax or elytra (Dr. Holzschuh, pers. comm.).

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