

## REDESCRIPTION OF *MYLLOCERUS DISCOLOR* BOHEMAN (COLEOPTERA: CURCULIONIDAE) WITH REFERENCE TO MALE GENITALIA FROM PAKISTAN

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### ABSTRACT

*Myllocerus discolor* Boheman is redescribed with reference to its male genitalia from Sindh, Pakistan. The present taxon is compared with its closest allies.

**Key words:** Redescription, *Myllocerus discolor* Boheman, coleoptera, genitalia, Sindh, Pakistan.

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### INTRODUCTION

*Myllocerus discolor* Boheman is a serious pest of crops due to its wide host range. It belongs to multitudinous family curculionidae, which has a great number of members as a pest of fruits, cereal and crops. Marshall (1916) described and keyed out 72 species of *Myllocerus* Schoenherr in his fauna of British India including Ceylon and Burma, on the basis of their varying morphological characteristics. Chaudhary *et al.* (1966) reported only 14 species from Pakistan. Ramamurthy and Ghai (1987) described and keyed out 73 species of *Myllocerus* from India and neighboring countries. Hashmi and Tashfeen (1992) listed 28 species of *Myllocerus* from Pakistan. Due to lack of their detailed description, the present species is redescribed and illustrated with special reference to its male genitalia.

### MATERIALS AND METHODS

The present taxon was collected from Malir, Quaidabad, Korangi; Karachi. The measurements and illustrations were made by using ocular grid microscope. For the study of male genitalia, the abdomen was excised at the base and boiled in 10 % KOH solution for about 10 minutes. It was then washed in tap water. The aedeagus was dissected out and examined under glycerin. After studying the male genitalia, these were placed in microvials with a drop of glycerin and pinned with the specimens for Natural History Museum, University of Karachi (NHMUK).

### RESULTS

*Myllocerus discolor* Boheman in Schoenherr, 1843: 428; Marshall, 1916: 348 (SM).

(Figs: 1A-D)

#### Coloration:

Head and rostrum black with ovate light gray scales; thorax dark brown with central part light green ovate scales and laterally gray ovate scales with light gray recumbent hairs; elytra black with gray scales, patches of light green oval scales and rows of light gray recumbent hairs; antennae piceous brown with light gray suberect hairs; legs piceous black with light gray recumbent hairs.

#### Head:

Almost subequal to rostrum 1.1mm (1.0-1.2 mm); eyes faceted, subdorsal, oval; rostrum slightly dilated at apex, apical emargination shallow, central carina and lateral carinae distinct; antennae inserted from scrobes at apex of rostrum, scape long, cylindrical, slightly clavate at apex, funicle seven segmented, 1<sup>st</sup> and 2<sup>nd</sup> segment long and subequal 0.4mm (0.35mm-0.45mm), rest segments small and subequal, club 3 segmented, compact.

#### Thorax:

Slightly longer 2.0mm (1.5mm-2.5mm) than broad (1.8mm), apex slightly convex, base bisinuate, laterally convex with depression anteriorly and posteriorly; mesosternum shorter than metasternum, mesoepisternum somewhat triangular shaped, laterally dilated, metaepisternum laterally extended, almost rectangular shaped,

metacoxal cavities oblong; apex of elytra broader than base of prothorax, narrow at base and jointly sinuate, striae ten in numbers, between intervals gray and light green oval scales and fine recumbent hairs; scutellum small, rounded; legs simple, prothoracic and mesothoracic femur with one tooth, metathoracic femur with three teeth, all tibiae internally angular, tarsi 4 segmented, 3<sup>rd</sup> segment bilobed, claws curved, hairy.

#### Abdomen:

Convex beneath, longer than broad. Total length, male 8.4 mm (Fig. 1A)

#### Male Genitalia:

Aedeagus (Fig. 1B) with penis broad at base to apex, length breadth ratio 3:1, apical process distinct, not protruding, internal sac almost globular, apical half chitinised with papillae and tubercles, flagellum distinct; apophyses one third more longer than penis; tegmen (Fig. 1C) slender, manubrium stout, apex rounded; parameres less triangular; spiculum (Fig. 1D) laterally deflected and spatulate, basal prong subequal.

#### Material Examined:

5 males, Pakistan; Sindh; Karachi, Malir, Korangi, Quaidabad on lucerne and falsa, 27-4-2002; leg. Ahmed, Z., Akhter, M. A. and Baig, A., deposited in NHMUK.

#### Comparative Note:

*Mylocerus discolor* is closely related to *Mylocerus dentifer* in having length of head same, vestiture color, tubular internal sac and funicle segmentation but it can easily be separated from *M. dentifer* in having apices of basal prongs pointed, spiculum gastrale with apex narrow and taper, manubrium with apex bluntly rounded in *M. dentifer* and by the other characters shown in the illustrations.

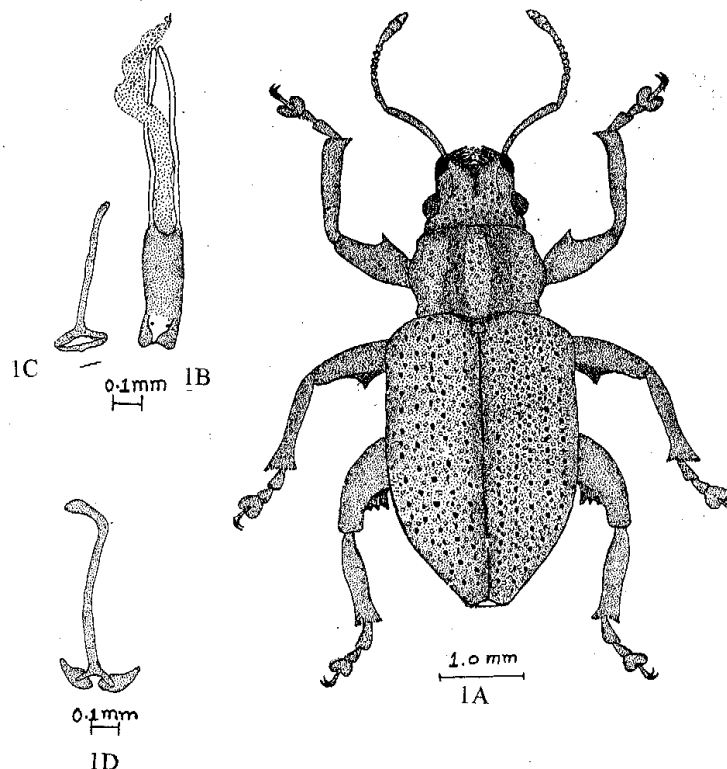


Fig. 1. (A-D). 1A: *Mylocerus discolor* Male: dorsal view; 1B: Aedeagus; 1C: Tegmen; 1D: Spiculum gastrale.

#### DISCUSSION

*Mylocerus discolor* was first described by Schoenerr (1843), latter Marshall (1956) described this specie with reference of their elytra vestiture shape, color, dentition on legs from Indian region. Ramamurthy and Ghai (1988)

described and emphasis only by bisinuation of prothorax, dentition of legs and male and female genitalia. The present taxon is newly recorded from Karachi, Pakistan.

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