# NOTES ON THE GENUS MESTORUS SCHÖNHERR, 1840 (COLEOPTERA: CURCULIONIDAE: BRACHYDERINAE) 

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Abstract.- Mestorus mazuri sp. nov, is described from Mexico. Lectotype for M. crinitus Sharp, 1891 is designated. A key is provided to all the members of the genus Mestorus.

## $\therefore$

Key words.- Coleoptera, Curculionidae, Brachyderinae, Neotropical Region, taxonomy, Mestorus mazuri sp. nov.

## Introduction

The genus Mestorus Schönherr, 1840 was proposed for M. adumbratus Fåhraeus, 1840 based on specimens from Mexico. Next two species, also from Mexico, were described by Sharp (1891): M. crinitus and M. gracilis. During my studies on the tribe Cneorhinini I had an opportunity to examine types of the latter two species. The type series of M. crinitus Sharp includes two females which in my opinion represent two different species. One of the females has a label "sp. figured" and the figure included in the paper actually represents this specimen (cf. Sharp 1891: 148 and fig.13, VI tab.); for this reason I designate it as lectotype of $M$. crinitus Sharp. For the other species I propose the name $M$. mazuri sp. nov.

Sharp (1891) included Mestorus in the "Series Otiorhynchinae Apterae" and "group Epicaerina" with 14 Central American genera, later classified in different tribes. Epicaerina sensu Sharp includes apterous Otiorhynchinae without ocular lobes on the sides of pronotum, with inconnate claws "and in which the scrobes - whether definite or indefinite - are entirely lateral, with their lower border arcuate to a greater or lesser extent", and with spines or no spines on femora. Later authors classified Mestorus as one of two Neotropical genera (together with Pseudopantomorus Champion, 1911) within the Cneorhinini (Brachyderinae) (Emden 1936, 1944; Emden and Emden 1939; O'Brien and Wibmer 1982). However, the presence of teeth on fore femora and the structure of the reproductive system suggest exclusion of Mestorus from the Cneorrhinini. The systematic position of the genus Mestorus requires, however, further studies and cannot be resolved in this paper.

## TAXONOMY

Mestorus mazuri sp. nov.
(Figs 1, 2, 5)
Etymology. The species is dedicated to Prof. Sławomir Mazur (SGGW, Warsaw), an outstanding specialist in the Histeridae, in recognition of his valuable remarks on my doctoral thesis.

Diagnose. Most similar to M. crinitus. Besides the characters given in the key, M. mazuri differs from $M$. crinitus in the colouration of the body (in M. mazuri black, in M. crinitus brown), smaller size (M. mazuri 5.75 mm , M. crinitus 7.15 mm ), absence of impression at the base of pronotum (in M. crinitus a delicate, somewhat triangular impression (Fig.10)), slightly lighter scales on the dorsal body side, oval scutellum (in M. crinitus scutellum roughly oval) and the number of setae on stylus (in M. mazuri 6 , 5 of them short and 1 long (Fig. 5), in M. crinitus 8, 4 of them short, 3 medium and 1 very long (Fig. 7)), shape of abdominal sternite VIII and the length of its setae (Figs 2, 4) as well as spermathecal shape (Figs 1, 3).

Description. Body length 5.75 mm , width 2.70 mm .
Body black, pear-shaped, covered with white and beige scales and erect setae. Scales unevenly cover the dorsal surface which gives an impression of a marbled pattern. Scales on pronotum as a rule round or oval, sometimes characteristically emarginate (their shape resembling a flower of four petals), on elytra most often rhomboid, rounded or tapered at apex. Beige scales predominate on frons, lateral edges of rostrum, on sides of pronotum; on elytra they form a characteristic pattern of delicately marked spots: a more or less oval spot at the base of ely-


Figures 1-7. Mestorus spp. 1, 2, 5. M. mazuri sp. nov. 3, 4, 7. M. crinitus. 6. M. adumbratus: (1, 3) female terminalia, general structure diagramatic $(2,4)$ sternite VIII; $(5-7)$ stylus.
tra on intervals 4-6, an irregular band bent anteriad, on intervals $1-5$ and partly 6 , clearly darker scales only on the anterior and posterior margin of the band; on sides of elytra, on intervals from partly 6 to 11 scales distinctly dark, like those forming the spot at the base of elytra. Apex of elytra also with a spot of beige scales, especially on interval 1 . Setae white or light honey, distinctly erect, bent, emarginate at apex, $2.60-3.75 \times$ longer than scales. Spots of beige scales occur also on legs: edges of tibiae and outer parts of femora, before genu and at middle. Body underside with mostly white scales.

Head clearly widened behind eyes, frons flat, delicately ribbed. Rostrum slightly widened apically, in side view delicately convex at upper side, at base $1.08 \times$ wider than long and at apex, $1.05 \times$ as wide as base. Rostrum in middle delicately sulcate, with a poorly but distinctly marked median furrow, extending from middle of rostrum and prolonged into a median furrow on frons, terminating at the level of posterior margin of eye. On rostrum paramedian costae, clearly widened at base. Eyes large, unevenly, distinctly convex. Antennae rather short, thin, scape reaching posteriad to middle of eye. All segments of funicle longer than wide, club oval, pointed at apex. Antennal scrobes in top view visible only between their base and rostrum apex.

Pronotum more or less cylindrical, as long as its greatest width, in side view its upperside almost flat, from base to $4 / 7$ length almost parallel-sided and widest at $4 / 7$ length, then delicately narrowed towards apex. No sulcus or constriction at base or behind apex. Anterior margin clearly rounded, produced anteriad, posterior margin very delicately rounded. Pronotum of uneven surface: distinct impressions on sides behind anterior margin and less distinct impressions on sides anterior to base.

Elytra oval, distinctly convex, 1.28 x longer than wide, widest slightly behind middle. Intervals delicately but distinctly convex, with a regular row of erect setae. Rows narrow, with fine oval punctures partly covered by scales. Visible fragments of punctures with very fine, hair-like setae, in rows separated by distance of $1.5-2.0 \times$ puncture length, slightly smaller or larger than scale length. Rows (except the partly visible punctures) covered with scales, like intervals.

Legs rather short, slender, length of fore tibia slightly less than pronotum length. Fore tibiae straight, at apex delicately truncate on the outside, clearly widened on the inside, with a spine. Fore femora with a tooth as in $M$. crinitus. On outer part of corbel radially arranged, long, erect scales; on basal part of tarsus a spot of white, oval and adherent scales. Tarsi narrow, long, covered with white setae. Claws connate.

Female terminalia as in Figs 1, 2, 5.
Material examined. Holotype, female: "Type" [round, white, orange border, black print]; "SYN-, TYPE" [as above, blue border]; "Mestorus crini-, tus Type D. S., Dosarroyos Smith." [white, black ink, handwritten - originally as a plate to which the specimen was glued]; "Sharp

Coll., 1905.-313." [white, black print]; "Dos Arroyos, Guerrero, 1000 ft., Sept. H. H. Smith." [white, black print]; "B. C. A., Col., IV. pt. 3., Mestorus, crinitus Sharp" [white, black print, species name and author's name handwritten, black ink]; [terminalia in glycerine]; (BMNH).

Mestorus crinitus Sharp, 1891
(Figs 3, 4, 7, 10)
Mestorus crinitus Sharp, 1891: 148, tab. VI, fig. 13 (type locality: Mexico, Dosarroyos in Guerro, lectotype (present designation) in BMNH).
Mestorus crinitus: Emden and Emden 1939: 231 (catalogue); O'Brien et Wimber 1982: 44 (catalogue).

Material examined. Lectotype, female (present designation): "SYN-, TYPE" [round, white, blue border, black print]; "Mestorus crini-, tus. 2nd. typ. D. S., Mexico Sturm." [white, handwritten, black ink - originally as a plate to which the specimen was glued]; "Mexico., Salle Coll" [white, black ink]; "Ex Coll., J. STURM." [white, black frame, black print]; "Colecterus crinitus." [white, handwritten, red ink]; "167" [beige, black print]; "Mexico., Saym. [?], Lagosto-, mus, crinitus, Mihi" [white, handwritten, black ink, illegible]; "Colocerus, crinitus Sturm, apud Sallé" [white, handwritten, black ink]; "sp. figured." [white, black print]; "B. C. A., Col., IV. pt. 3., Mestorus, crinitus, Sharp" [white, black print, species name and author's name handwritten, black ink]; [terminalia in glycerine]; (BMNH).

## Mestorus adumbratus Fåhraeus, 1840 <br> (Figs 6, 8, 9)

Mestorus adumbratus Fåhraeus, 1840: 911 (type locality: Mexico; type probably in Naturhistoriska Riksmuseet, Stockholm).
Mestorus adumbratus: Sharp 1891: 147 (characters distinguishing it from M. crinitus); Emden 1936: 216 (in key); Emden and Emden 1939: 231 (catalogue); O’Brien et Wimber 1982: 44 (catalogue).

Material examined. Mexico: Juquila, ex collect. Sallé, coll. J. Faust ( $2 \mathrm{ff}, \mathrm{SMTD}$ ).

Mestorus gracilis Sharp, 1891
(Figs 11-14)
Mestorus gracilis Sharp, 1891: 148 (type locality: Mexico, Matamoros Izucar [Izúcar de Matamoros]; holotype in BMNH). Mestorus gracilis: Emden and Emden 1939: 231 (catalogue); O'Brien et Wimber 1982: 44 (catalogue).
Material examined. Holotype, male: "Holo-, type" [round, white with red border, black print]; "Type" [as above, orange border]; "Mestorus, gracilis, Type D. S., Mexico. Höge" [white, handwritten, black ink, originally as a plate to which the specimen was glued]; "Matamoros Izucar, Puebla., Höge." [white, black print]; "B. C. A., Col., IV. pt. 3., Mestorus, gracilis, Sharp" [white, black print, species name and author's name handwritten, black ink]; [terminalia in glycerine]; (BMNH).


Figures 8-14. Mestorus spp. 8, 9. M. adumbratus. 10. M. crinitus. 11-14. M. gracilis: (8) female terminalia, general structure diagramatic; (9) sternite VIII; (10) external appearance of female; (11) spiculum gastrale; (12) tegmen; aedeagus, (13) lateral and (14) dorsal.

## Key to the species of the genus Mestorus

1. Scutellum absent or minute (visible only after the scales have been removed), triangular, completely covered with scales of the same structure and size as on elytra .2 Scutellum oval (Fig.10), clearly protruding above the elytra surface, covered with few very fine scales, several times smaller than those on elytra 3
2. Base of elytra delicately but distinctly keeled, behind it elytra constricted. Head and pronotum loosely covered with adherent creamy or slightly translucent scales. On rostrum and frons a distinct median furrow. Pronotum densely and coarsely punctate, punctures clearly visible without removing scales. Male termanalia as in Figs 11-14 $\qquad$ gracilis
-. Base of elytra not raised collar-like, behind it elytra not constricted. Head and pronotum covered with erect, rather long and strongly compact brown scales. No median furrow on rostrum and frons, even after removing scales. Pronotum clearly punctate, but its sculpture visible only after the scales have been removed. Female terminalia as in Figs 6, 8, 9. adumbratus
3. Eyes small, frons wide, 1.70 x wider than greatest eye diameter. Tarsi rather narrow, claws free. Antennal club elongate oval, 2.64 x longer than wide. Female terminalia as in Figs 3, 4, 7. . crinitus
-. Eyes large, frons narrow, 1.28 x wider than greatest eye diameter. Tarsi narrow, claws connate. Antennal club oval, 2.06× longer than wide. Female terminalia as in Figs 1, 2, 5. mazuri sp. nov.

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