

A NEW SPECIES OF METRIAULACUS SCHWARZ, 1901 FROM MAHARASHTRA, INDIA

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ABSTRACT:

A new species of *Metriaulacus Schwarz 1901* has been described from Maharashtra *M. bicolor n:sp.* is an addit the two previously known species viz. *m. gobius Candeze, 1960* and *M. badiipennis Candeze. 1860.*

Key words : *Metriaulacus, Antennae and Elytra*

INTRODUCTION

Family Melanotinae is characterized by having complete frontal carina across front of the frons. Second antennomere shorter than the third. Prosternum with distinct chin piece. Pronotosternal sutures excavate but not deep enough to accommodate antennae. *Metriaulacus Schwarz* is characterized by having pronotum frontal carina; posterior angles of pronotum uni or bicarinate; pronotosternal sutures broad, deep along their entire length, carinate along hypomerall border.

Candeze (1860) placed *M. gobius* and *M. badiipennis* under *Melanotus*. Later Schwarz (1901) placed them under *Metriaulacus* with *M. nigrolaterus* as a type specimen (Hyslop, 1921)

M. bicolor n. sp. was collected from moist deciduous forest of North Western Ghats at Supegaon, Dist. Raigad, Maharashtra.

Material examined . Holotype @ & - India : Maharashtra state, Supegaon 50 km south of Mumbai, 18. VIII. 2003. Paratypes 1@ & and 1B & - same place, 15.VII.2006. 1@& - same place. 22-24.VI.2006, O. Safranek (CPG; CRG).

MATERIAL AND METHODS

Body measurements. Body length is measured along the midline from the anterior margin of the frons to the apex of the elytra, body width across the broadest part of the beetle.

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studied, to which we are deeply indebted, are abbreviated as follows :

CPG Platia coll., Gatteo (Italy), CRG Riese coll., Genoa (Italy), CAT Amol Coll., Thane (India)

Diagnosis : The species is distinctly differentiated from other species by coppery color of its elytra. From *M. gobius* it is differentiated by having unicarinate posterior angles while the later having bicarinate angles. *M. bicolor n.sp.* have two colored body while *M. badiipennis* having single colored body.

Key to the species of *Metriaulacus Schwarz, 1901* known from India

Size. Male. 12.3 mm; width 3 mm. Female. Length 12.8-15.5 mm; width 3-3.8 mm.

Body (Fig. 1) : Elongate, head, thorax and scutellum black. Elytra coppery. Legs deep

1	Posterior angles of pronotum unicarinate	2
-	Posterior angles of pronotum bicarinate gobius (Candeze)	-
2	Bicoloured body : head, pronotum and scutellum black; elytra dark orange-coloured bicolor n. sp.	3
-	Unicoloured body : dark brown only with posterior third of elytra lighter, ferruginous badiipennis (Candeze)	-

Abbreviations. The names of institutions, museums and collections containing the material

Fig. 1 . *Metriaulacus bicolor* n.sp.

brown. Sides tapering posteriorly to rounded apex. Punctuation single. Pubescence yellow, lighter on the under side.

Head : Black, inclined, partially covered by pronotum; anterior margin brown, glabrous with blunt side angles. Head width including eyes slightly greater than the half of pronotal width. Frons flat with frontal carina complete; carina projected anteriorly upto almost head length; frontal margins along eyes concave, punctures coarse, umbilicate, with shortest, shining interstices. Eyes bulging, superficial facets visible. Frontoclypeal region raised and then declivous to the base of the labrum. Labrum simple, black, densely pubescent. Mandibles black median tooth on incisor margin. Maxillary palpi brown, very long, terminal segment hatchet shaped. Labial palp brown, moderate in length, terminal segment largest.

Antennae : Deep brown, serrate, in male reaching beyond apex of by the last two segments and in female reaching beyond middle of thorax but not reaching posterior projection. Vestiture begins on fourth segment. Antennal insertions distinct, carinate above and inserted in large oval socket. First antennomere dark, narrow at the base, anterior margin arcuate, three times longer than second. Second antennomere smallest, spherical. Third antennomere shorter than the fourth, cylindrical. Second and third antennomeres, taken together, as long as fourth. Fourth antennomere longer than the fifth. Fourth and fifth antennomere with blunt, serration. Sixth to tenth antennomere serrate. Two pairs of long

setae at the distal end of each antennomere. Eleventh antennomere longer than tenth with three pairs of setae, obliquely truncate with blunt apex.

Pronotum : Black, longer than broad, slightly convex, posteriorly declivous in posterior half; single, shallow punctuation; sparse, long yellow pubescence. Anterior margin slightly convex; anterior angles produced covering less than quarter of eyes at most. Sides narrow gradually in anterior half with lateral carina complete; carina deflexed towards ventral margin of eye. Punctures deep, simple to slightly umbilicate, on disc with intervals on average equal to their diameters, gradually denser towards sides. Posterior projections black, slightly divergent, pointed, tips inwardly curved, unicarinate, carina short, parallel to lateral margins. Posterior margin arcuate with broad, short, bifid sublateral incisions.

Scutellum : Black, oval, longer than broad, declivous anteriorly. Disc slightly depressed in the middle; sparse, shallow punctuation, smooth at center, and yellow pubescence. Anterior margin slightly emerginate. Anteriorly broad at base and narrow dorsally. Sides subparallel ending posteriorly end broadly rounded.

Elytra : Coppery colored, densely pubescent; flat. Elytra anterior margin projected, irregular, slightly straight in proximal half, depressed in distal half; anterior angles distinct, projecting. Sides tapering posteriorly rounded to rounded apex. Striatopunctate; stria suture shallow with round punctuation separated by one diameter; interstitial ridge flat with minute, deep punctuation. Striae tapering posteriorly. Epipleura short, rounded at base.

Prosternum : Black, long, declivous anteriorly, convex; pubescence silvery; median glabrous between procoxae equal to procoxal diameter. Anterior margin glabrous, distinct and arcuate. Chin piece raised to almost 30 to the prosternal plane. Pronotosternal sutures broad, straight, narrowing posteriorly towards mid anterior margin of procoxae; glabrous, carinate along hypomerall border and deep for almost entire length; not deep enough to accommodate antennae. Prosternum not carinate around procoxae; broad, convex between procoxae, covering procoxae slightly. Prosternal projection black, broad, densely pubescent, posterior to procoxae longer

than the procoxal diameter with sides parallel, ending in broad round apex.

Mesosternum : Black, densely pubescent, declivous anteriorly. Portion ahead of mesocoxal cavity depressed along margin of the cavity. Mesosternal cavity very broad; sides parallel in anterior half, posteriorly broaden and ends in broad round; cavity not reaching middle of mesocoxae; floor of the cavity brown, glabrous, projected truncately ahead of anterior margin of mesosternum. Mesosternum broad between mesocoxae, projected beyond the cavity, truncate, distinct from metasternum; separated from metasternum separated by deep notch. Mesocoxal cavity open to mesepisternum and mesepimeron.

Metasternum : Black, covered by shallow, single punctation and silvery pubescence, flat medially, declivous laterally; truncate between mesocoxae. Metaventral discrimen complete, indistinct. Metasternum not marginate around mesocoxae; slightly produced between metacoxal plates.

Metacoxal plate : Black, densely pubescent, single round punctation. Strain in middle. Anterior margin anteriorly oblique. Posterior margin oblique, straight. Posterior angles indistinct. Plates broad till middle the narrows.

Legs : Deep brown. Coxae black. Trochanter size pro < meso < meta. Protrochanter black; meso and metatrochanter deep brown, broad. Protrochantin not visible; meso and metatrochantin visible. Protrochanter anterior margin less than the half of the posterior margin; attachment to femur distinctly oblique. Mesotrochanter anterior margin almost equal to the half of the posterior margin; attachment to the femur oblique. Metatrochanter attachment to metafemur obliquely horizontal. Pro and mesofemur anterior margin convex. Metafemur anterior margin straight. Tibia with silvery pubescence on outer side. Tibia with black tibial spur and orange spiniform setae apically. Tarsi 5-5-5; deep brown; overall tarsomeres length first > fifth > second > third > fourth; tarsomeres obliquely truncate distally. First tarsomere length pro < meso < meta. Tarsomeres one to four with long silvery, dense pubescence appearing like spongy pads. First to four with orange spiniform setae apically. Tarsi densely pubescent. Metatarsal length smaller than metatibia. Claws pectinate without setae at base. Claws blades curved in distal half. First pectinii longer than rest.

Male genitalia as in figure 2 & 3

Female genitalia brown. Stylus and coxite equally sclerotized. Stylus broad distally with pair of setae at apex. Apex rounded. Coxite broad at base. Outer margin taper till middle steadily. Posterior half slender, broad distally. Apex blunt. Not divided into two pieces. Setae before stylus. Genitalia with typical triangular appearance.

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Fig 2. Male genitalia of *Matriaulacus gobius*.sp. Dorsal view.

Fig. 3. Head of the right paramere of *Metriculacus gobius* n.sp. Dorsal view.

Prosternum (Fig. 4) with distinct chin plate. Pronotum sutures thick, tapering posteriorly. Prosternal projection posterior to procoxae longer than the procoxal diameter; apex rounded.

Mesosternal cavity broad medially; tapering posteriorly to rounded apex. Meso-sternum projected behind the cavity. Metasternum with distinct discrimen.

Metacoxal plate rounded in middle, tapering outwards, posterior angle broad (Fig. 5). Legs light brown. Tibia with two distinct, pointed subequal spurs. Tarsi without any modification below. Metatarsi slightly longer than the metatibia. Claws light brown, simple, without basal setae; blades slender, curved in distal half. Claws with median hairs.

Male genitalia (Figs. 6, 7) : Median lobe very long with sides parallel tapering to nipple shaped apex. Parameres broad, at base narrowing anteriorly. Paramere apex rounded with sub apical projection laterally. Basal struts extending beyond anterior margin of the parameres. Basal piece very long almost half of the total length of the genitalia; sides slender, slightly convex; anterior margin convex with distinct anterior angles.

MATERIAL EXAMINED

Holotype (male) India : Maharashtra, Raigad district, Supegaon, on light, 24. V. 2006 (CAT), leg. A. Patwardhan (in light). Paratypes (6 Males, 4 Females) : India : Maharashtra, Raigad district, Supegaon, on light, 24. V. 2006 (CAT, CSV), leg. A. Patwardhan (in light).

The holotype is deposited in CAT. The paratypes (5 males, 3 females) are deposited in CAT. One male and one female in CSV.

ETYMOLOGY

The species is dedicated to Sudhir Tandel.

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