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Six new species of the genus *Mulsanteus* GOZIS, 1875 from China,  
India and Malaysia  
(Insecta: Coleoptera: Elateridae)

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ABSTRACT. Six new species from Southeast Asia are described and illustrated: *Mulsanteus cameronensis* n. sp. (Malaysia), *M. fujianensis* n. sp. (China), *M. henanensis* n. sp. (China), *M. indicus* n. sp. (India), *M. kerajaanensis* n. sp. (Malaysia), and *M. yunnanensis* n. sp. (China).

Key words: entomology, taxonomy, Coleoptera, Elateridae, *Mulsanteus*, new species, China, India, Malaysia.

#### INTRODUCTION

The fauna of the genus *Mulsanteus* GOZIS, 1875 from Southeast Asia has been studied by the authors of this paper and the results of this study were published recently (SCHIMMEL & TARNAWSKI 2007). However, through colleagues and friends, we received new material of the genus *Mulsanteus* collected in Southeast Asia. Among this material we found some new species which we describe and illustrate below.

#### ABBREVIATIONS AND METHODS

##### ABBREVIATIONS

The following abbreviations are used:

CRG Coll. RIESE, Genova, Italia;

CSV	Coll. SCHIMMEL, Vinningen, Germany;
CTW	Coll. TARNAWSKI, Wrocław, Poland;
NME	Coll. Naturhistorisches Museum Erfurt, Germany.

## METHODS

The examination of the collected material has been executed using a binocular microscope ZEISS Stemi 2000-C with an ocular micrometer. Photographs were taken with a NIKON E4500 camera attached to the microscope through TV2/3" C 0.63x adapter.

Body length of the specimens has been measured from the apical margin of frons up to the apex of elytra, and body width along basis angles of pronotum by using the ocular micrometer.

The examined specimens are fixed on white pasteboard. The genitalia of the males were pulled out of the abdomen, cleaned and fixed beside the body of the specimen using water-soluble transparent glue.

Types of new species have been marked with red labels indicating the type status (holotype or paratype), the gender, and the name of the species and of the author.

## DESCRIPTION OF NEW SPECIES

*Mulsanteus cameronensis* n. sp.

(Figs. 1-2)

## LOCUS TYPICUS

Malaysia: Pahang.

## TYPE MATERIAL

**Holotype** ♂ (CRG): Malaysia: Pahang, Cameron Highland, Tanah Rata, 30 km east of Ipoh, 1500 m, 16.-18.IV.2000, leg. P. CECHOVSKY.

**Paratype** ♀ (CSV): Malaysia: Kelantan, 60 km north-east of Tanah Rata, Tanah Kerajaan, 1000 m, 12.-30.IV.2007, leg. P. CECHOVSKY.

## DIAGNOSIS

Holotype ♂: Cuneate, raised, moderately shiny and bicoloured species: body black; legs, and a oblong humeral macula on each side of elytra chocolate brown; integument crinose, pubescence light-yellowish on pronotum and blackish-brown on elytra, semi-erect, bristly and dense, on pronotum directed towards basis and to lateral sides, on elytra directed towards apex; apices of posterior angles of pronotum with a tuft of longer and protruding bristles; pubescence of antennae with conspicuously long and protruding hairs; dimensions: length: 9.3 mm, width: 2.2 mm.

## DESCRIPTION

Head with sparse umbilicate punctures, interstices once to twice their diameter, pubescence short and directed towards apex; head tapering from centre to apex, frons

slightly raised above base of antennae and completely edged; eyes small, spherical, and little prominent; antennae long, thin and serrate from fourth antennomere on, surpassing posterior angles of pronotum by length of last four antennomeres; second and third antennomeres globular, very short, as long as wide, and slightly extended apically; both antennomeres combined conspicuously shorter than fourth antennomere and each of the following; these are extended and sub-lamellate apically; fourth to tenth antennomere of equal length; last antennomere oblong-elliptic, sub-apically bevelled.

Pronotum campaniform, along median line conspicuously longer than wide posteriorly (length-width ratio: 1.45:1.10), prominently and regularly raised centrally, acute laterally, and with a relatively prominent sloping at basis; posterior angles of pronotum slightly divergent, and with a prominently raised carina; apices of basal angles truncate and bent downward (best visible from lateral view); pronotum without any trace of furrow or depression; punctures of pronotum distant, finely umbilicate and lacrimiform to ovate-oblong, interstices once to twice their diameter, smooth and shiny.

Scutellum cuneate, slightly convex apically, laterally straight and acute apically; surface slightly raised, edged basally, punctures dense, fine and umbilicate; pubescence dense, fine and just visible, directed from basis to apex.

Elytra cuneate, after midlength narrowed to apex; the latter cuspidate, with apical tooth; base of elytra slightly smaller than that of pronotum and slightly depressed at scutellum, margins raised, shoulders prominent (winged species); striae of elytra covered with fine and dense, simple punctures, interstices of striae finely punctate, and micro-reticulate, semi-shiny and smooth, not raised; pubescence short, bristly, and directed to apex.

Pro-, meso- and metathorax with dense punctures, interstices raised and shiny; pubescence short and decumbent.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, tibia covered with protruding bristles.

Aedeagus trilobite, median lobe sub-parallel, centrally conspicuously thickened, apically slightly narrowed and bevelled, extending the parameres noticeably; the latter uncinata, and covered with long apical hairs.

Female has a bigger, and corpulent body (dimensions: length: 10.5 mm, width: 2.5 mm) and shorter antennae, surpassing the posterior angles of pronotum by the length of the last two antennomeres.

#### DIFFERENTIAL DIAGNOSIS

*M. cameronensis* is closely allied to *M. germanus*, but may be easily distinguished from this species by the longer and elongate antennae, by the form of pronotum, and that of the aedeagus.

#### ETYMOLOGY

Named after the locus typicus.

## DISTRIBUTION

Malaysia: Pahang; Cameron Highlands.

*Mulsanteus fujianensis* n. sp.

(Figs. 3-4)

## LOCUS TYPICUS

China: Fujian.

## TYPE MATERIAL

**Holotype** ♂ (CSV): China: Fujian, Ziyungdongshan, 900-1100 m, 21.-22.VI.2007, leg. J. TURNA.

**Paratypes** 3 ♂♂ (CSV, CTW, NME): Same data as holotype, 2 spm; West Tianmu Shan, 15.VI.2007, 1 spm, leg. D. W. WRASE.

## DIAGNOSIS

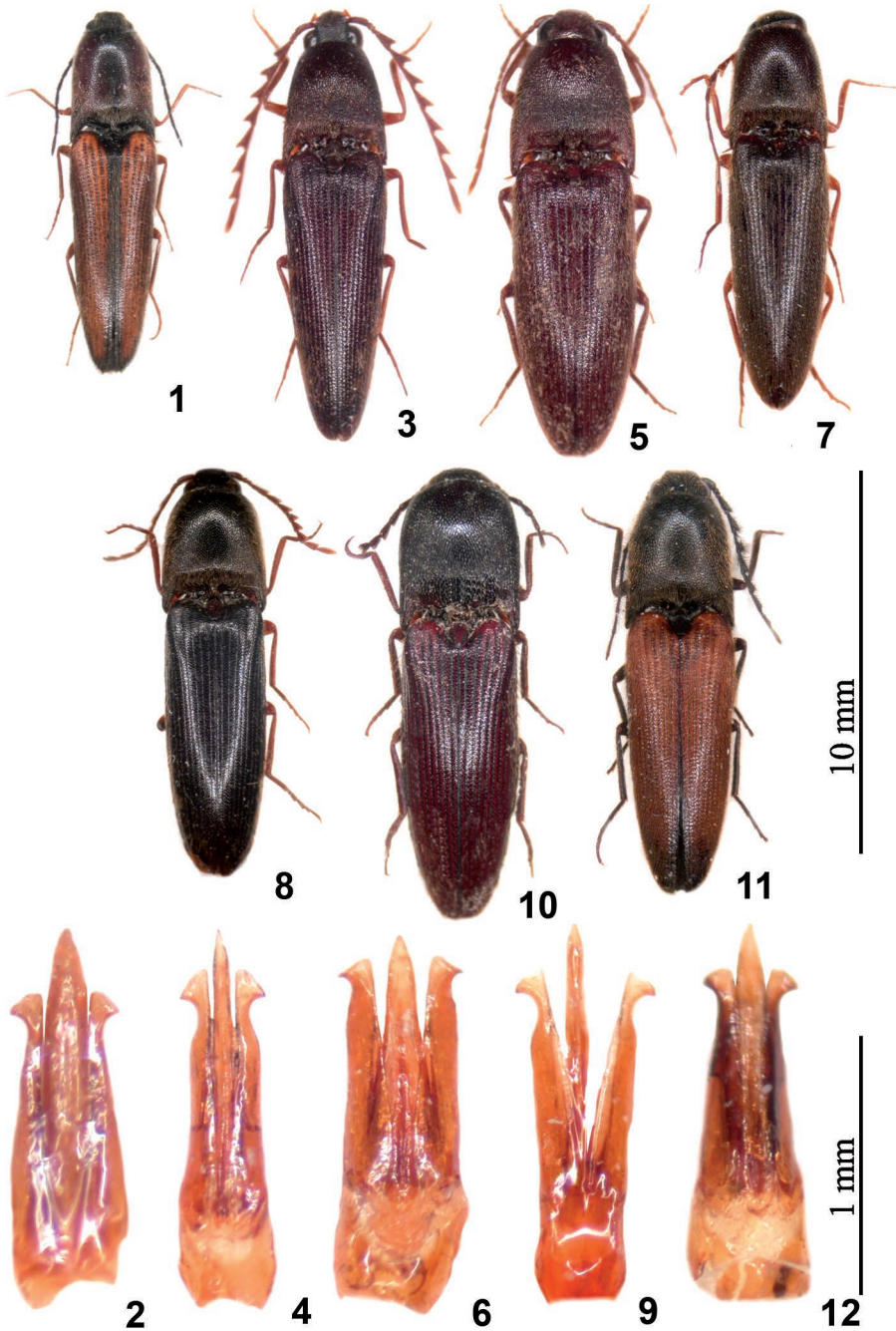
Holotype ♂: Cuneate, moderately shiny and unicoloured species: body chestnut-brown; legs and antennae slightly lighter; integument crinose, pubescence light-yellowish, semi-erect, bristly and dense, on pronotum directed to basis and to lateral sides, on elytra directed to apex; apices of posterior angles of pronotum with a tuft of longer and protruding bristles; pubescence of antennae with conspicuously long and protruding hairs; dimensions: length: 12.8 mm, width: 3.2 mm.

## DESCRIPTION

Head with dense, umbilicate punctures and interstices reduced to small wrinkles, pubescence short and directed to apex; head tapering from centre to apex, frons slightly raised above base of antennae, and completely edged; eyes small, spherical and little prominent; antennae long, thin and serrate from fourth antennomere on and surpassing posterior angles of pronotum by the length of last two antennomeres; second antennomere globular, very short, as long as wide and slightly extended apically; third antennomere slightly shorter than second, semi-globular, truncate apically, second and third antennomere combined conspicuously shorter than fourth and each of following antennomeres; these are extended and serrate apically; fourth to tenth antennomere of equal length; last antennomere oblong-elliptic, sub-apically bevelled.

Pronotum campaniform, along median line slightly longer than wide posteriorly (length-width ratio: 1.18:1.10), prominently and regularly raised centrally, acute laterally and with a relatively prominent slope at basis; posterior angles of pronotum slightly divergent and with a prominently raised carina; apices of basal angles truncate and bent downward (best visible from lateral view); pronotum without any trace of furrow or depression; punctures of pronotum very dense, coarse, umbilicate and lacrimiform to ovate-oblong, interstices wrinkly at whole surface, raised and shiny.

Scutellum cuneate, slightly convex basally, laterally straight and acute apically; surface slightly raised and edged basally, punctures dense, fine and umbilicate; pubescence dense, fine and just visible, directed from basis to apex.



1, 2. *Mulsanteus cameronensis* n. sp., 1 – habitus, 2 – aedeagus. 3, 4. *M. fujianensis* n. sp., 3 – habitus, 4 – aedeagus. 5, 6. *M. henanensis* n. sp., 5 – habitus, 6 – aedeagus. 7-9. *M. indicus* n. sp., 7 – habitus (male), 8 – habitus (female), 9 – aedeagus. 10. Habitus of *M. kerajaanensis* n. sp. (female). 11, 12. *M. yunnanensis* n. sp., 11 – habitus, 12 – aedeagus

Elytra cuneate, after midlength narrowed to apex; the latter arcuate, without inner tooth; base of elytra slightly smaller than that of pronotum and slightly depressed at scutellum, margins raised, shoulders prominent (winged species); striae of elytra covered with dense, fine and simple punctures, interstices of striae finely punctate and micro-reticulate, semi-shiny, and smooth, not raised; pubescence short, bristly, and directed to apex.

Pro-, meso- and metathorax with dense punctures, interstices raised and shiny; pubescence short and decumbent.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, tibia covered with protruding bristles.

Aedeagus trilobate, median lobe sub-parallel, conspicuously thin, apically slightly narrowed, extending the parameres noticeably; the latter triangular, with a prominent, uncinatate lateral edge and covered with long apical hairs.

Females are unknown.

#### DIFFERENTIAL DIAGNOSIS

*M. fujianensis* is closely allied to *M. hubeiensis*, but may be easily distinguished from this species by the shorter antennae, and by the form of aedeagus.

#### ETYMOLOGY

Named after the locus typicus.

#### DISTRIBUTION

China: Henan.

### *Mulsanteus henanensis* n. sp.

(Figs. 5-6)

#### LOCUS TYPICUS

China: Henan.

#### TYPE MATERIAL

**Holotype** ♂ (CSV): China: Henan, Wanxianshan, 1.VII.2006, 840 m, leg. J. TURNA.

#### DIAGNOSIS

Holotype ♂: Cuneate and moderately shiny, unicoloured species: body chestnut-brown; legs and antennae slightly lighter; integument crinose, pubescence light-yellowish, semi-erect, bristly and dense, on pronotum directed to basis and to lateral sides, on elytra directed to apex; apices of posterior angles of pronotum with a tuft of longer and protruding bristles; pubescence of antennae with conspicuously long and protruding hairs; dimensions: length: 13.3 mm, width: 3.8 mm.

## DESCRIPTION

Head with dense and umbilicate punctures, interstices reduced to small wrinkles, pubescence short and directed to apex; head tapering from centre to apex, frons slightly raised above the base of antennae and completely edged; eyes small, spherical and little prominent; antennae long, thin and serrate from fourth antennomere on, surpassing the posterior angles of pronotum by the length of the last antennomere; second antennomere globular, very short, as long as wide, and slightly extended apically; third antennomere of the same length, but semi-globular, truncate apically; second and third antennomere combined conspicuously shorter than fourth and each of the following antennomeres; these are extended and truncate apically; fourth to tenth antennomere of decreasing length; last antennomere oblong-elliptic, sub-apically bevelled.

Pronotum campaniform, along median line slightly longer than wide posteriorly (length-width ratio: 1.2:1.1), prominently and regularly raised centrally, acute laterally and with a relatively prominent slope basally; posterior angles of pronotum slightly divergent and with prominently raised carina; apices of basal angles truncate and bent downward (best visible from lateral view); pronotum without any trace of furrow or depression; punctures of pronotum very dense, coarse, umbilicate and lacrimiform to ovate-oblong, interstices wrinkled on whole surface, raised and shiny.

Scutellum cuneate, slightly convex basally, laterally straight and acute apically; surface slightly raised and edged basally, punctures dense and umbilicate; pubescence dense, fine, and just visible, directed from basis to apex.

Elytra cuneate, after midway narrowed to apex, the latter arcuate, without an inner tooth; base of elytra slightly smaller than that of pronotum and slightly depressed at scutellum, margins raised, shoulders prominent (winged species); striae of elytra covered with dense, fine and simple punctures, interstices of striae finely punctate and micro-reticulate, semi-shiny and smooth, not raised; pubescence short, bristly and directed to apex.

Pro-, meso- and metathorax with dense and aspirate punctures, interstices raised and shiny; pubescence short and adjacent.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence and fine upholstery, tibia covered with protruding bristles.

Aedeagus trilobate, median lobe sub-parallel, centrally conspicuously thick, apically slightly narrowed and bevelled, extending the paramere noticeably; the latter triangular, with a prominent, uncinatate lateral edge and covered with long apical hairs.

Females are unknown.

## DIFFERENTIAL DIAGNOSIS

*M. henanensis* is closely allied to *M. rubuginosus*, but may be easily distinguished from this species by the elongate antennae, by the dimensions of the body, and by the form of the aedeagus.

## ETYMOLOGY

Named after the locus typicus.

## DISTRIBUTION

China: Henan.

***Mulsanteus indicus* n. sp.**

(Figs. 7-9)

## LOCUS TYPICUS

India: Himachal Pradesh.

## TYPE MATERIAL

**Holotype** ♂ (CRG): India: Himachal Pradesh, western Himalayas, Pirpandshal, Range near Kuglu, 1500 m, 21.VII.2003, leg. A. GORODINSKY.

**Paratype** ♀ (CSV): Same data as holotype.

## DIAGNOSIS

Holotype ♂: Cuneate, raised, and moderately shiny, bicoloured species: body chestnut-brown; legs and antennae reddish-brown; integument crinose, pubescence light-yellowish, semi-erect, bristly and dense, on pronotum directed to basis and to lateral sides, on elytra directed to apex; apices of posterior angles of pronotum with a tuft of longer and protruding bristles; pubescence of antennae with conspicuously long and protruding hairs; dimensions: length: 11.5 mm, width: 2.8 mm.

## DESCRIPTION

Head with distant umbilicate punctures, interstices once their diameter; pubescence short and directed to apex; head tapering from centre to apex, frons slightly raised above base of antennae and completely edged; eyes small, spherical and little prominent; antennae long and serrate from fourth antennomere on, surpassing posterior angles of pronotum by the length of last three antennomeres; second antennomere globular, very short, as long as wide and slightly extended apically, third antennomere slightly shorter than second, semi-globular, truncate apically, second and third antennomere combined conspicuously shorter than fourth and each of following antennomeres; those are nearly as wide as long, extended and serrate apically; fourth to tenth antennomere are of the same length; last antennomere oblong-elliptic, sub-apically bevelled.

Pronotum campaniform, along median line slightly longer than wide posteriorly (length/width ratio 1.1:1.0), prominently and regularly raised centrally, acute laterally and with a relatively prominent slope basally; posterior angles of pronotum slightly divergent and with a prominently raised carina; apices of basal angles truncate and bent downwards (best visible from lateral view); pronotum without any trace of furrow or depression; punctures of pronotum dense, coarse, umbilicate and lacrimiform to ovate-oblong, interstices half their diameter on the whole surface, smooth and shiny.

Scutellum cuneate, slightly deflexed basally, laterally straight and acute apically; surface slightly raised and edged basally, punctures dense, fine and umbilicate; pubescence dense, fine and just visible, directed from basis to apex.

Elytra cuneate, after midlength narrowed to apex; the latter arcuate, without inner



tooth; base of elytra slightly smaller than that of pronotum and slightly depressed at scutellum, margins raised, shoulders prominent (winged species); striae of elytra covered with fine and dense, simple punctures, interstices of striae finely punctate and microreticulate, semi-shiny and smooth, not raised; pubescence short, bristly and directed to apex.

Pro-, meso- and metathorax with dense punctures, interstices raised and shiny; pubescence short and decumbent.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, tibia covered with protruding bristles.

Aedeagus trilobate, median lobe sub-parallel, conspicuously thin, apical slightly narrowed and bevelled, extending the parameres noticeably; the latter triangular, with a prominent and uncinatate lateral edge, and covered with long apical hairs.

Female (Paratype) has a bigger body (length: 15.7 mm, width: 3.8 mm) than male (Holotype) and has shorter antennae, which are just reaching apices of basal angles of pronotum.

#### DIFFERENTIAL DIAGNOSIS

*M. indicus* is closely allied to *M. nepalensis*, but may be easily distinguished from this species by the form of antennae and that of the aedeagus. From the similar *M. maceratus* the new species may be distinguished by the denser punctures of pronotum, and by the form of the aedeagus.

#### ETYMOLOGY

Named after the locus typicus.

#### DISTRIBUTION

India: Himachal Pradesh.

### *Mulsanteus kerajaanensis* n. sp.

(Figs. 10)

#### LOCUS TYPICUS

Malaysia: Kelantan.

#### TYPE MATERIAL

**Holotype** ♀ (CRG): Malaysia: Kelantan, 60 km north-east of Tanah Rata, Tanah Kerajaan, 1000 m, 12.-30.IV.2007, leg. P. CECHOVSKY.

**Paratypes** 3 ♀♀ (CRG, CSV): Same data as holotype, 3 spm., leg. P. CECHOVSKY.

#### DIAGNOSIS

Holotype ♀: Cuneate, raised, moderately shiny and tricoloured species: body black; elytra, legs, antennae and basis of pronotum dark reddish brown, apices of fourth to

eleventh antennomere yellow; integument barbellulate, pubescence light-yellowish, semi-erect, bristly and dense, on pronotum directed to basis and to lateral sides, on elytra directed to apex; apices of posterior angles of pronotum with a tuft of longer and protruding bristles (which may be abraded in some specimens); pubescence of antennae with conspicuously long and protruding hairs; dimensions: length: 13.6 mm, width: 3.6 mm.

#### DESCRIPTION

Head with dense, umbilicate and lacrimiform punctures, interstices half their diameter, pubescence short and directed to apex; head tapering from centre to apex, frons slightly raised above base of antennae and completely edged; eyes spherical and little prominent; antennae long, thin and serrate from fourth antennomere on, reaching the posterior angles of pronotum; second and third antennomere globular, very short, as long as wide, and slightly extended apically; both antennomeres combined conspicuously shorter than fourth antennomere and each of the following; these are extended and serrate apically; fourth to tenth antennomere of equal length; last antennomere oblong-elliptic, sub-apically bevelled.

Pronotum rectangular-campaniform, along median line conspicuously longer than wide posteriorly (length-width ratio: 1.1:0.9), conspicuously and regularly raised centrally, straight laterally, and with a very prominent slope basally; posterior angles of pronotum slightly divergent and with a very prominently raised carina; apices of basal angles truncate and bent downward (best visible from lateral view); pronotum without any trace of furrow or depression; punctures of pronotum very dense, umbilicate and lacrimiform to ovate-oblong, interstices conspicuously raised, reduced to small wrinkles which being costiform and shiny.

Scutellum cuneate, slightly convex apically, laterally straight, and acute apically; surface slightly raised and edged basally, punctures dense, fine and umbilicate; pubescence dense, fine, and just visible, directed from basis to apex.

Elytra cuneate, after midway narrowed to apex; the latter cuspidate, without an apical tooth; base of elytra slightly smaller than that of pronotum and slightly depressed at scutellum, margins raised, shoulders prominent (winged species); striae of elytra covered with fine, dense and simple punctures, interstices of striae finely punctate, and micro-reticulate, semi-shiny and smooth, not raised; pubescence short, bristly and directed to apex.

Pro-, meso- and metathorax with dense punctures, interstices raised and shiny; pubescence short and decumbent.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, tibia covered with protruding bristles.

Males are unknown.

#### DIFFERENTIAL DIAGNOSIS

*M. kerajaanensis* is closely allied to *M. kubani*, but may be easily distinguished from this species by the longer and costiform interstices of punctures of pronotum.

From the similar *M. henanensis* the new species may be distinguished by the black pronotum with reddish-brown basis and by the yellow apices of antennomeres fourth to eleventh.

## ETYMOLOGY

Named after the locus typicus.

## DISTRIBUTION

Malaysia: Kelantan.

***Mulsanteus yunnanensis* n. sp.**

(Figs. 11-12)

## LOCUS TYPICUS

China: Yunnan.

## TYPE MATERIAL

**Holotype** ♂ (CRG): China: Yunnan, Jinghong env., 600 m, 12.VI.2006, leg. R. NOVAK.

**Paratypes** 2 ♂♂, 2 ♀♀: Same data as holotype, 1 spm (CSV); Laos: Qa Tai, Phongsali province, 2416 m, 19.-30.V.2008, 1 spm (CSV), leg. JINGKE; Phongsali province, mt. Phounamyomg, Khoa, 20.-28.VI.2009, 1 spm (CRG), leg. S. KHAMPHILAVONG; Myanmar: Lahe, Sagaing province, 1.-19.VI.2009, 1 spm (CSV), leg. JINGKE.

## DIAGNOSIS

Holotype ♂: Cuneate, raised, and moderately shiny, bicoloured species: body black; elytra chocolate brown, apex black; integument crinose, pubescence light-yellowish on pronotum and blackish-brown on elytra, semi-erect, bristly and dense, on pronotum directed to basis and to lateral sides, on elytra directed to apex; apices of posterior angles of pronotum with a tuft of longer and protruding bristles; pubescence of antennae with conspicuously long and protruding hairs; dimensions: length: 10.8 mm, width: 2.8 mm.

## DESCRIPTION

Head with dense and umbilicate punctures, interstices half their diameter, pubescence short and directed to apex; head directed from centre to apex, frons slightly raised above base of antennae and completely edged; eyes small, spherical, and little prominent; antennae moderately long and serrate from fourth antennomere on, surpassing the posterior angles of pronotum for the length of the last antennomere; second and third antennomere globular, very short, as long as wide, and slightly extended apically; both antennomeres combined are conspicuously shorter than fourth and each of the following; these are extended apically; fourth to tenth antennomere of the same length; last antennomere oblong-elliptic, sub-apically bevelled.

Pronotum campaniform, along median line conspicuously longer than wide posteriorly (length-width ratio: 1.1:0.9), prominently and regularly raised centrally, acute laterally and with a relatively prominent slope basally; posterior angles of pronotum slightly divergent and with a prominently raised carina; apices of basal angles truncate and bent downward (best visible from lateral view); pronotum without any trace of furrow or depression; punctures of pronotum dense, roughly umbilicate and ovate-oblong, interstices half their diameter, smooth, microreticulate and shiny.

Scutellum cuneate, slightly convex basally, laterally straight, and acute apically; surface slightly raised and edged basally, punctures dense, fine and umbilicate; pubescence dense, fine, and just visible, directed from basis to apex.

Elytra cuneate, after midlength narrowed to apex; the latter cuspidate, with an apical tooth; base of elytra slightly smaller than that of pronotum and slightly depressed at scutellum, margins raised, shoulders prominent (winged species); striae of elytra covered with dense and simple punctures, interstices of striae finely punctate and micro-reticulate, semi-shiny, and smooth, not raised; pubescence short, bristly, and directed to apex.

Pro-, meso- and metathorax with dense punctures, interstices raised and shiny; pubescence short and decumbent.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, tibia covered with protruding bristles.

Aedeagus trilobite, median lobe sub-parallel, centrally conspicuously thickened, apically slightly narrowed, extending parameres noticeably; the latter dolabriform and covered with long apical hairs.

Females are unknown.

#### DIFFERENTIAL DIAGNOSIS

*M. yunnanensis* is closely allied to *M. pejchai*, but may be easily distinguished from this species by the denser and rougher punctures of pronotum, by the black antennae, the darker elytra, and by the form of the aedeagus.

#### ETYMOLOGY

Named after the locus typicus.

#### DISTRIBUTION

China: Yunnan.

Laos: Phongsali province.

Myanmar: Sagaing province.

A KEY TO THE SPECIES OF THE GENUS *MULSANTEUS* FROM CHINA

1. Elytra black ..... *M. wudangshanensis* SCHIMMEL & TARNAWSKI, 2007.
- Elytra brown or yellowish-brown ..... 2.
2. Elytra brown ..... 3.
- Elytra chocolate brown with black apex ..... *M. yunnanensis* n. sp.
3. Antennae serrate from fourth antennomere on ..... 4.
- Antennae dentate from fourth antennomere on ..... 5.
4. Antennae exceeding posterior angles of pronotum by the length of the half of the last antennomere; punctures of pronotum fine with interstices 1-1.5 their diameter ..... *M. anchastinus* (CANDÈZE, 1881).
- Antennae exceeding posterior angles of pronotum by the length of the last antennomere; punctures of pronotum rough with interstices reduced to small wrinkles ..... *M. henanensis* n. sp.
5. Pronotum brown, antennae exceeding posterior angles of pronotum by the length of the last two antennomeres ..... *M. fujianensis* n. sp.
- Pronotum blackish ..... 6.
6. Antennae 4-10 concave apically .... *M. shaanxiensis* SCHIMMEL & TARNAWSKI, 2007.
- Antennae 4-10 sublamellate apically ..... *M. hubeiensis* SCHIMMEL & TARNAWSKI, 2007.

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