

Notes on the *Mordellistena gemellata* group: two new species and a case of synonymy (Coleoptera, Mordellidae)

by

R. BATTEN

ABSTRACT. — The syntypes of *Mordellistena gemellata* Schilsky are examined. They belong to three species: *Mordellistena gemellata* Schilsky (lectotype designated), *Mordellistena fuscogemellata* Ermisch and *Mordellistena peloponnesensis* n.sp.. The new species is compared with its closest relative, *Mordellistena algeriensis* Ermisch.

The holotype and a paratype of *Mordellistena pseudorhenana* Ermisch are in fact *Mordellistena minima* Costa; consequently the former name is a junior synonym. Other paratypes of *Mordellistena pseudorhenana* Ermisch are described in this paper as *Mordellistena nessebaricus* n.sp..

Mordellistena aypassai Batten is a junior synonym of *Mordellistena longipalpis* Emery.

INTRODUCTION. — Several interesting *Mordellistena* species collected in Greece and the consequent examination of type-material of the *gemellata* group have led to some interesting discoveries: two new species and a synonymy. An additional synonymy is established in the *episternalis* group.

The following abbreviations are used:

AC — author's collection.

HM — Hungarian National Museum, Budapest.

MB — Zoologisches Museum an der Humboldt-Universität, Berlin.

ML — Rijksmuseum van Natuurlijke Historie, Leiden.

SMD — Staatliches Museum für Tierkunde, Dresden.

Mordellistena gemellata group

Group diagnosis.— The species of the *gemellata* group belong to *Mordellistena* s.str., having each of the first four segments of the antenna narrower and shorter than the fifth segment. The *gemellata* group is characterised by having on the hind tibia, apart from the apical ridge, two short lateral ridges more or less parallel to the apical end of the tibia; sometimes there is the beginning of a third ridge.

Discussion. — The six syntypes of *gemellata* Schilsky, 1899 proved to belong to three different species, so that a lectotype designation is necessary. One specimen proved to belong to *fuscogemellata* Ermisch, 1963. Two specimens from Spain, agreeing very well with Schilsky's original description (1899) and with the comparative notes given by Ermisch (1963), are here considered true *gemellata*, and from these a lectotype is selected here. The other three syntypes of *gemellata* from Greece are attributed to a new species which I collected in large numbers.

Mordellistena gemellata Schilsky, 1899

Material examined: Spain: "S. Nevada Kraatz", "♂", red "Type", "Coll. Schilsky", "Zool. Mus. Berlin", ♂, MB; "Sierra Segura, Molinico, 1884, M. Korb", "Coll. Schilsky", red "Type", "Zool. Mus. Berlin", ♀, MB; "♂", orange "Genitalpräparat", handwritten "Chiclana 1890, Andalusien Korb", "*Mordellistena, gemellata* Schilsky, K. Ermisch det. 63", "Staatl. Museum für Tierkunde Dresden", ♂, SMD; "♀", handwritten "Chilten, Andalusien, 1898 Korb", "*Mordellistena, gemellata* Schilsky, K. Ermisch det. 63", "Staatl. Museum für Tierkunde Dresden", ♀, SMD.

Lectotype designation. — Because Schilsky did not expressly designate a holotype in his description, I herewith select the first mentioned specimen from Sierra Nevada as lectotype of *M. gemellata* and the second mentioned specimen from Sierra Segura as paralectotype.

Mordellistena fuscogemellata Ermisch, 1963

Material examined: Gibraltar with handwritten labels except the last two ones "Gibraltar", "D. Staudinger", "♂", "Var?", red "Type", "Zool. Mus. Berlin", ♂, MB. This type of *gemellata* Schilsky obviously belongs to *fuscogemellata* Ermisch. Ermisch designated a holo- and an allotype for his *fuscogemellata*. To prevent an unnecessary synonymy, I have avoided the selection of the present type of *gemellata* as holotype.

Mordellistena peloponnesensis n.sp. (figs. 2, 4, 5)

Description. — Dimensions: ♂ length of body 3.2-4.5 mm (without pygidium); length of elytra 2.-3.1 mm, width at shoulders 0.75-1.1 mm; length of pygidium 1.4-1.7 mm; length of fifth sternite 0.7-1.0 mm, ♀ length of body 3.5-4.7 mm; length of elytra 2.3-3.2 mm, width at shoulders 0.85-1.2 mm; length of pygidium 1.2-1.5 mm; length of fifth sternite 0.6-0.8 mm.

General shape elongate sides slightly convex, at least fourth tergite exposed. Integument black; pubescence yellow-brown with a reddish hue.

Head almost as long (from point of mandibles to hind margin) as broad, approximately circular, finely and densely punctate, slightly shagreened, hind margin approximately semicircular. Galea short with appendages at the end. Eyes finely granulated, hairy, temporal margin very narrow.

Terminal segment of maxillary palp slender-securiform, in ♂ length/width ratio approximately 2, inner side rounded, broadest in middle, in ♀ a bit broader. Antennal segment 11 in ♂ 1.7, in ♀ 1.5 times segment 10, segments 5-10 1.2-1.25 times as long as broad.

Pronotum as long as broad, broadest just before middle from base, anterior lobe protruding, basal lobe prominent; lateral border in dorsal view moderately convex, in lateral view concave; basal angles rectangular with a rounded edge; punctures clearly impressed. Scutellum triangular with a rounded point.

Elytral length/width ratio ♂ 2.65-2.8, ♀ 2.6-2.7; sides of elytra convex, broadest approximately in middle (fig. 2), apices separately rounded; punctures dense, slightly asperate; pubescence yellow-brown with a reddish hue, densely covering integument. Elytra leaving fourth tergite exposed and in ♂ also part of the third tergite.

Underside with yellowish pubescence; the end of each of the last three sternites is infuscated.

Pygidium approximately twice as long as the fifth sternite and 0.5-0.7 as long as elytra; pygidium in dorsal view broad, convexly attenuated (fig. 2), underside in lateral view concave.

Fore tibia dilated in ♂ and with a fringe of hairs along inner border; hind tibia with 2 lateral ridges (apart from apical one), standing wide apart, first tarsal segment with 3-4 ridges, second one with 2 ridges; outer spur twice as long as inner one.

Parameres, fig. 4; ♀ eighth urosternite, fig. 5.

Material examined: All specimens were caught by the author on flowering *Daucus* in Greece (except the types of Schilsky) in the first decade of July 1977 and 1978, most of them on the peninsula of Pelopónnesos: the ♂ holotype and the ♀ allotype from Skála 9.VII. 1978 in ML, the paratypes: Spárti 2 specimens, Kalamáta 1, Gargaliani 1, Pílos 4, Skála 35, Krokeaí, Neméa 69, Trípoli 6, Gíthion 35, Kardámilis 2, Kallithéa 9, and some Náfpaktos 3, Lamía 1, Agrínion 1, Árta 1 all in AC; "♂", handwritten "Attica Reitter", handwritten "gemellata, *Schils.", "Coll. Schilsky", red "Type", "Zool. Mus. Berlin", ♂, MB; "♀", "Attica Reitter", "Coll. Schilsky", red "Type", "Zool. Mus. Berlin", ♀, MB; "Parnass", handwritten "D. Krüper", handwritten "Var.? thorax!", red "Type", "Zool. Mus. Berlin", ♂, MB.

These three types of *M. gemellata* Schilsky, caught in Greece, are also paratypes of *peloponnesensis* and labelled accordingly by me.

Discussion. — The new species is in its external characters nearest to *M. algeriensis* Ermisch. The differences are:

<i>peloponnesensis</i>	<i>algeriensis</i>
pronotum length/width ratio: 1	0.85
elytra: broadly convex fig. 2	almost parallel fig. 1
in ♂ fourth and part of third tergite exposed	only fourth tergite exposed
pygidium: broad, 2 times fifth sternite	slender, 1.5 times fifth sternite
parameres: broad fig. 4	long fig. 3

I name this new species after the peninsula where I found most of the specimens.

Mordellistena algeriensis Ermisch, 1966 (figs. 1, 3)

Material examined: Algeria: "♂", "Algerie: Algérois, Sidi Ferruch", "6.VI.1954. G. Fagel", red "Typus", "Mordellistena algeriensis, det. Ermisch 1956", "Staatl. Museum für Tierkunde Dresden", ♂ holotype, SMD; "Africa sept.: Algeria Bonira, 12-14-VI.1971, A. Hoffer et J. Horák", "Expeditie "Scarabaeus" (Cs. Společnost entomolégická pri Csav)", "Mordellistena, algeriensis Erm., J. Horák det. 1976", ♂, AC; same labels but: "Aures: Ain Zaatout, 1-4. VI.1971", ♀, AC.

Mordellistena minima Costa, 1854 (= *pseudorhenana* Ermisch, 1978 syn. nov.)

Discussion. — Studying the types of some species of the *Mordellistena gemellata* group being at my disposal, I found differences between the holotype and the paratypes of *M. pseudorhenana* Ermisch. Obviously the holotype belongs to *M. minima* Costa, while some paratypes apparently represent an unnamed species, described further below.

The holotype of *pseudorhenana* from Hungary and the paratype from Yugoslavia have the external characters of *minima*. The conspecificity of these species is confirmed by the galea and the parameres. Consequently the name *pseudorhenana* is a junior synonym of *minima*.

M. minima is described from Naples, its distribution is mediterranean.

M. minima belongs to the *micans* group and normally has 3 ridges on the hind tibia, though specimens of this group frequently lack the third ridge and then seem to belong to the *gemellata* group (Batten, 1977).

Material examined. — Hungary: "♂", "Erd, Csiki", handwritten: "Mordellistena, nana, Motsch.", orange "Genitalpräparat", "Holotypus 1978 ♂, handwritten: Mordellistena pseudorhenana, Ermisch", handwritten: "pseudorhenana" (on the other side: "Anaspis, frontalis, det. J. Frivaldski"), red "Typus", ♂, HM; Yugoslavia (Dalmatia): "Lesina, Herz. 914", "Paratypus 1978", handwritten: "Mordellistena, pseudorhenana, Ermisch", ♀, HM.

M. minima is new to the Hungarian fauna (Kaszab, 1979).

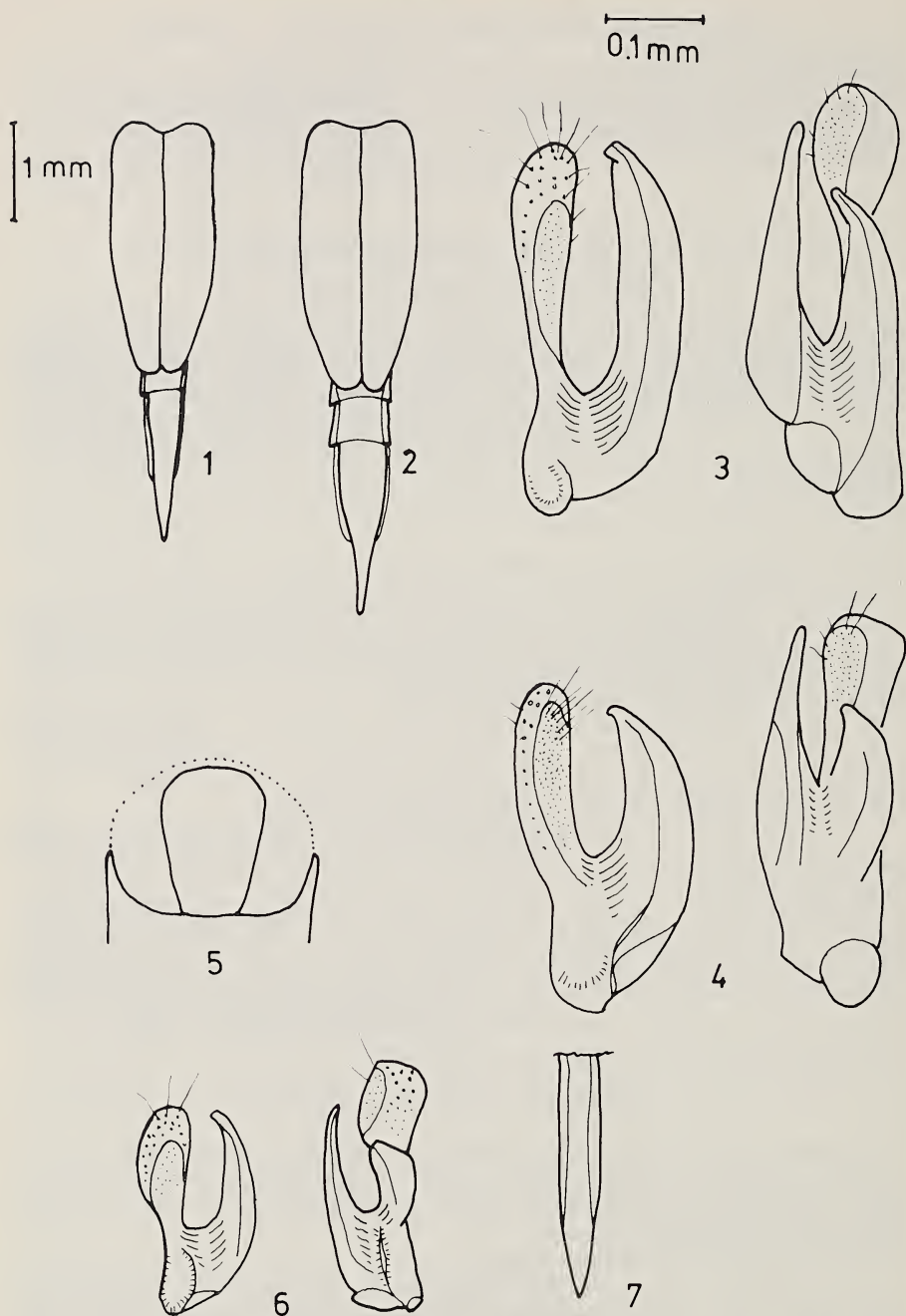
Mordellistena nessebaricus n.sp. (figs. 6, 7)

Description. — Dimensions: ♂: length of body 2.6 mm without pygidium; length of elytra 1.9 mm, width at shoulders 0.75 mm; length of pygidium 1.1 mm; length of fifth sternite 0.55 mm. ♀: length of body 3.3 mm; length of elytra 2.2 mm, width at shoulders 0.85 mm; length of pygidium 0.9 mm; length of fifth sternite 0.45 mm.

Integument black, pubescence yellow-gray.

Head width/length ratio 1.2, fine and densely punctate, blue and yellow shagreened, hind margin convex. Galea short, with appendages at the end. Eyes finely granulated, hairy, temporal margin very narrow. Terminal segment of maxillary palp slender, approximately securiform, length/width ratio 2.1, inner side slightly rounded just before middle from base. Antennal segments 5-10 in ♂ 1.3 times as long as broad, in ♀ 1.1 times.

Pronotum: width/length ratio 0.85, broadest just behind middle from base, anterior lobe approximately rounded, basal lobe prominent; lateral borders in dorsal view convex, in lateral



Figs. 1, 3, *Mordellistena algeriensis* Ermisch, Algeria, Sidi Ferruch, holotype; 2, 4, 5, *M. peloponnesensis* n.sp., Greece (Lakonia) Skála, holo- and allotype; 6, 7, *M. nessebaricus* n. sp. Bulgaria, Nessebar, holotype. — 1, 2, elytra and pygidium; 3, 4, 6, parameres innerside, right paramere on left hand, left paramere on right hand; 5, posterior part of female eighth urosternite from dried specimen; 7, distal end of penis. — 1, 2, same scale; 3-7, same scale.

view concave; basal angle rectangular with a pointed edge; punctures shallowly impressed, blue and yellow shagreened.

Elytral length/width ratio 2.5-2.6, sides of elytra slightly convex, respective apices rounded, punctures slightly asperate, shagreened, pubescence slightly covering integument.

Pubescence of underside sparsely yellow-gray.

Pygidium/fifth sternite ratio 2; pygidium in ♂ 0.6 times elytra, in ♀ 0.4; pygidium in ♂ slender in dorsal view, broader in ♀, evenly attenuated, in lateral view underside concave.

Fore tibia in ♂ dilated with a fringe of very short hairs along innerborder, in lateral view upperside convex; hind tibia — apart from apical ridge — in ♂ with 2 lateral ridges, the 3 ridges at equal distance, the last situated in the middle of the tibia, in ♀ there is the beginning of a third ridge; first tarsal segment with 3 ridges, second one with 2 ridges; outer spur approximately twice as long as inner one.

Parameres, end of penis, figs. 6, 7.

I name this species *nessebaricus* after the place whence Ermisch described several new species.

Material examined. — Bulgaria: "♂", "Bulgarien, U. Nessebar, 20.6-6.7.65, K. Ermisch leg." "Paratypus", handwritten: "Mordellistena, pseudorhenana, Ermisch", "Staatl. Museum für Tierkunde Dresden", ♂, SMD; "♀", "Bulgarien, Nessebar 7.VI.64, K. Ermisch leg.", "Paratypus", handwritten: "Mordellistena, pseudorhenana, Ermisch", "Staatl. Museum für Tierkunde Dresden", ♀, SMD. These specimens are respectively the holo- and allotype of *nessebaricus* n.sp.

The new species can be separated from *minima* by the following characters:

<i>nessebaricus</i>	<i>minima</i>
antennal segments 5-10: ♂ 1.3, ♀ 1.1 times as long as broad	approximately square
pronotum in lateral view: concave	approximately straight
basal angles of pronotum: rectangular with a pointed edge	obtuse with a rounded edge
galea: short with appendages at the end	long and slender, ending in a very fine point
parameres: fig. 6	Batten (1977: fig. 20)

For characters of *minima* see also Batten (1977) couplet 6x.

Mordellistena longipalpis Emery, 1891 (= *aypassai* Batten, 1978, syn. nov.)

Coming across the description of *M. longipalpis* Emery, 1891 I understood that Emery described his *longipalpis* from the same locality from *M. aypassai* was found. According to the description the conclusion can only be that *M. aypassai* is a junior synonym of *M. longipalpis*.

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Sprencklaan 3, 4333 HC Middelburg, the Netherlands.

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