

THREE NEW-EAST MEDITERRANEAN MELOIDS (COLEOPTERA, MELOIDAE)

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ABSTRACT

The description of the following three taxa is presented: *Meloe* (*Trapezimeloe*) *bytinskii* sp. nov. (Iran), *Decapotoma* *esfandiarii* sp. nov. (Iran), and *Decapotoma* *argentifera* *bytinskii* ssp. nov. *ab. yerohami* and *ab. salzi* (Israel). The species originate from the eremian zone of Iran and Israel.

The eremian fauna of the Near East is still very unsatisfactorily known. Despite the fact that explorations in this area look back to a past of more than a hundred years, recent investigations, conducted in the wider to narrower eremian zone extending from the eastern shores of the Mediterranean through Israel, Jordania, Iraq, and Iran to Pakistan, still result in discovering many taxa new for science. With respect to the Meloidae, researches made in the territory are far from being closed. Well organized expeditions of entomologists, totally conversant in collecting methods, are greatly needed to cover the blank areas. However, recent years already witnessed significant explorative activities. I should like to point out Professor Dr. H. Bytinski-Salzc's merits in the exploration of the eremian fauna of Israel. Faunistic investigations in Iran also gathered momentum in the last decade, attaining considerable results under the leadership of Dr. E. Esfandiari, Director of the Plant Protection Service in Iran.

In the followings, I submit the description of some new taxa, deriving partly from Dr. Bytinski-Salz's Israelian material, partly from the collections of the research workers of the Iranian plant protection service.

Meloe (*Mesomeloe*) *bytinskii* sp. nov. (Fig. 1).

Holotype: ♂ Iran, Province Gorgan, Gonbad-Cavous, Gollidagh, 25 May 1959, leg. Mirzayan. - Allotype: ♀ idem, 20 May, 1956, leg. Safavi.

♂- Body unicolorous black of a sericeous sheen, but base of femora red to their middle. Head quadratic, eyes comparatively small, reniform, only slightly protruding from convexity of head. Tempora long,argins parallel, longer than diameter of eye, on both sides obliquely truncate, vertex posteriorly impressed in middle. Forehead slightly convex, without median longitudinal suture, irregularly, finely and sporadically punctate, distances between punctures greatly varying but usually one to five times greater than size of punctures themselves. Space between punctures microscopically shadowed, hence with a sericeous sheen, only deflexed margin of tempora and vertex of head shiny. Antennae long and thin, segment I and segments III-X of equal length; segment II hardly half as long as segment III and also much thinner. Segments III-VI nearly equally thick and almost twice longer than wide, gradually attenuating from segment VII; the three penultimate segments

cylindrical, others somewhat flattened, last segment one and a half times longer than segment X, four times longer than wide, fusiform, acuminate. Basal segments roughly punctate, punctures gradually finer apicad, anterior side of segments III-VI shiny. Pronotum wider than head (as 43:40) more than one and a half times wider than long in middle (as 43:28), trapezoidal, widest in posterior third, strongly attenuating in a weak arc anteriorad rounded posteriorad, with semicircularly rounded posterior angles (so that pronotal base appearing lobately projected on both sides). Base of pronotum deeply and accurately emargined, immediately anteriorly to basal margin obliquely impressed so that pronotal base appearing incrassately margined in middle. Anterior margin weakly curved without any trace of margination. Surface rather flat, without median longitudinal furrow; disk hardly punctate in posterior part of pronotum, but irregularly and sporadically punctate (like head) anteriorly and laterally, punctures densely spaced on anterior margin. Interspaces of punctures microscopically shagreened and thus with a sericeous sheen; lateral margin and propleura more shiny. Anterior margin with sparse reddish setae. Elytra with rounded shoulders, laterally gradually deflexing, surface finely and coriaceously rugulose and indistinctly, finely punctate; entire surface microscopically shagreened and thus with a sericeous sheen. Sculpture of abdominal tergites similar to that of elytra, appearing almost wholly glabrous under a low magnification. Sternites more shiny, with rough and scattered punctures and indistinct longitudinal rugulosity. End of last (VI) sternite excised in a V shape, and with two reddish tufts of setae on both sides. Legs robust, tibiae flat, inner side of tibiae straight, outer side arcuate, with black setiform hairs. Outer spur of hind tibiae thicker, apically obliquely truncate. Segments 1 and 2 of tarsus I slightly widened and with yellow setae below, segment 1 in a lateral view emargined from base to middle and hairy only from middle. Segments 1 and 2 of tarsus II with yellow setae terminally below. Segments 1 and 2 of tarsus III laterally compressed, segment 1 with a blunt edge below.

♀. - Antennae shorter, exterior side of segments III-VI punctured similarly to all other parts, but segments shorter. Segments 1 and 2 of fore and middle tarsi without yellow setae below, and not widened. End of last sternite hardly emargined.

Length (with deflexed head): ♂ 17 mm, ♀ 25 mm.

I dedicate the new species to my dear colleague Professor Dr. H. Bytinski-Salz, on the occasion of his sixty-fifth birthday.

Merely three Meloë species with red femora have hitherto been known: M. (Taphromeloë) erythrocnemus Pallas, M. (Mesomeloë) xanthomelas Solsky, and M. (Mesomeloë) cinereoovariegatus Heyden. The new species can be easily distinguished from all three of them. The sculpture of M. erythrocnemus Pall. is very rough; head, pronotum, and elytra are all deeply punctate; the head widens behind the eyes, the pronotum is the widest in front, its sides straight, medially with a deep longitudinal furrow and basally with a fingertip-like impression; the femora are red excepting the genu; the antennae are short

and apically expanding. *M. xanthomelas* Sols. is nearly related to the new species, but also its coxae are yellow, and the femora also yellow (excepting the genu), indeed, there is a wide yellow ring preterminally on also the hind tibiae, and the base of the antennae is also yellow; the sculpture is fine, the elytra and the abdominal tergites are merely microscopically shagreened and not rugulose, the pronotum is narrower, its sides parallel to their middle, without a basal oblique impression; the median antennal segments of the male are thicker and cylindrical. The femora of *M. cinereovariegatus* Heyd. are red with only their distal third black; its entire body is covered with greyish and deflexed setae, densely and finely punctate, with glabrous and sericeously shining smooth patches on the pronotal back and the abdominal tergites; segment 1 of tarsi I and II is widened and hairy below.

Decapotoma esfandiarrii sp. nov. (Figs. 2-4)

Holotype: ♂ Iran, Province Khouzestan, Behbahan, Dogonbada, 11. May, 1968. leg. Zairi-Ayatouahi. - Allotype: ♀, from same locality.

♂. - Body tricolorous: head, underside black, pronotum red, elytra yellow with black spots, clypeus, oral parts above and below, antennae and legs yellow, also coxae of fore and middle legs entirely yellow, but only distal end of hind coxae yellow. Above with fine, scattered, deflexed golden yellow setae, underside with dense, deflexed, silvery pubescence. Both elytra with 10 black spots each (Fig. 4): 1 each on shoulder and in inner angle of elytron near scutellum, 1 each in anterior third near suture and on margin, 1 each behind middle near suture and margin and between them, and three again preapically. Spots distinct and not confluent. Head (Fig. 2) wide, eye large and reniform, tempora slightly parallel behind eyes then rounded in a wide arc, also margin of vertex simply arched. Head wider when measured at eyes than on forehead behind them (as 80:75), distance between margin of vertex and suture of clypeus essentially smaller than width of head at tempora (as 56:75). Forehead wide between eyes, slightly convex, in front (at height of curvature of eyes) flatly impressed. Surface very finely and densely punctate, interspaces of punctures smooth and shiny. Antennae (Fig. 2) 10-segmented, short and clavate, reaching middle of pronotum. Segment II round, as wide as long, segment III slightly longer than II (as 7:6) and longer than wide (as 7:6), segment IV shorter than III (as 5:7) and wider than long (as 6.3:5), segments V and VI as long as II, wider than long (as 7:6), segments VII and VIII as long as III, segment IX slightly longer (as 8:7), last penultimate segments gradually widening, proportion of widths as 9:10:12; segment X wide, slightly bent, longer than last 3 penultimate segments combined, slightly wider than segment IX (as 13:12), more than twice longer than wide (as 29:13). Oral parts similar to those of *D. argentifera* Pic. Stipes swollen, medially with an elongated impression; penultimate segment of palpus labialis flat and terminally widened, last segment obliquely truncate. Pronotum almost as long as wide at its base (as 74:80), constricted prebasally, with a blunt knob premedially, here somewhat narrower than head behind eyes (as 70:75). Base of pronotum slightly impressed medially, posterior margin gently concave, without a sharp rim, in front strongly atten-

uating anteriorad from knob and transversely weakly impressed. Surface very finely and indistinctly punctate, interspaces of punctures shiny. Elytra at shoulder one-third wider than base of pronotum, slightly expanding posteriorad, terminally semicircularly rounded, roughly and densely punctate, punctures obsolescing only at end of elytra. Sculpture of underside hardly discernible owing to dense pubescence, metasternum densely and finely punctate. End of last abdominal sternite (VI) excised. Legs thin, exterior side of fore tibiae with long cilia, end of first four tarsal segments of fore legs with very long cilia. Male genitalia: parameres apically acuminate, ventrally widening preapically, apically laterally impressed. Harpagon with two sharp and recurving teeth; tooth at end of ductus ejaculatorius small and obliquely truncate.

♀ - Base of clypeus black, oral parts simple, stipes flat, penultimate segment of palpus labialis not widened, fore tibiae and tarsi without cilia, end of last abdominal sternite not excised.

Length (with protruding head): ♂ 10 mm, ♀ 8 mm.

I dedicate the new species to Dr. E. Esfandiari, Teheran, directing and organizing the faunal investigations in the frame of the Iranian Plant Protection Service.

There is only one known relation, Decapotoma argentifera Pic; however, it differs from the new species by a black head (excepting the clypeus), a very fine and sporadic punctation on the head and the pronotum, a narrower longitudinal impression of the stipes in the male, and differently constructed teeth of the harpagon. The spots of the elytra are similar, but the new species exhibits a black spot also near the scutum.

Decapotoma argentifera bytinski ssp. nov. (Figs. 5-8)

Holotype: ♂ Israel, (Negev): Yeroham, 14 June, leg. Bytinski-Saltz.

- Allotype: ♀, same locality and date. - Paratypes: 25 specimens from the same locality 1 May - 19 August, Gvulot 18 April.

The new taxon stands near the nominate subspecies ranging in the Algerian and Moroccan Sahara: the sculpture, the pattern of the elytra (Fig. 6), and the secondary sexual characters agree, but the two subspecies can be easily distinguished by the following features:

1. (2) Head and pronotum unicolorous yellowish red, together with antennae and oral parts, with a more or less narrow oblique black spot only on forehead between eyes; furthermore gula below on head and end of mandibles dark. Pro- and mesosternum (mostly) on underside, end of abdomen, all legs, also coxae and trochanters of fore and middle legs, but coxae only toward femora of hind legs, yellow ssp. *argentifera* Pic

(1) Head and pronotum completely black, except for oral parts together with upper labrum, as well as antennae and narrow cheeks in front of eyes, clypeus, posterior margin and sital half of lateral margins (from base of fore coxae) of pronotum yellow. Underside entirely black, all legs yellow, but base of all coxae black ssp. bytinskii ssp. nov.

The spots of the elytra may coalesce in diverse extense in the new subspecies. In one of the forms, the marginal and median spots of the apical area are obliquely confluent: ab. yerohami, (Fig. 7); in another one, the median sutural and central spots are obliquely connected: ab. salzi, (Fig. 8). These forms are rare, being represented by one specimen each in the material; the nominate form is the frequent one.

Length: (with protruding head) ♂ 9-12 mm, ♀ 11-12 mm.

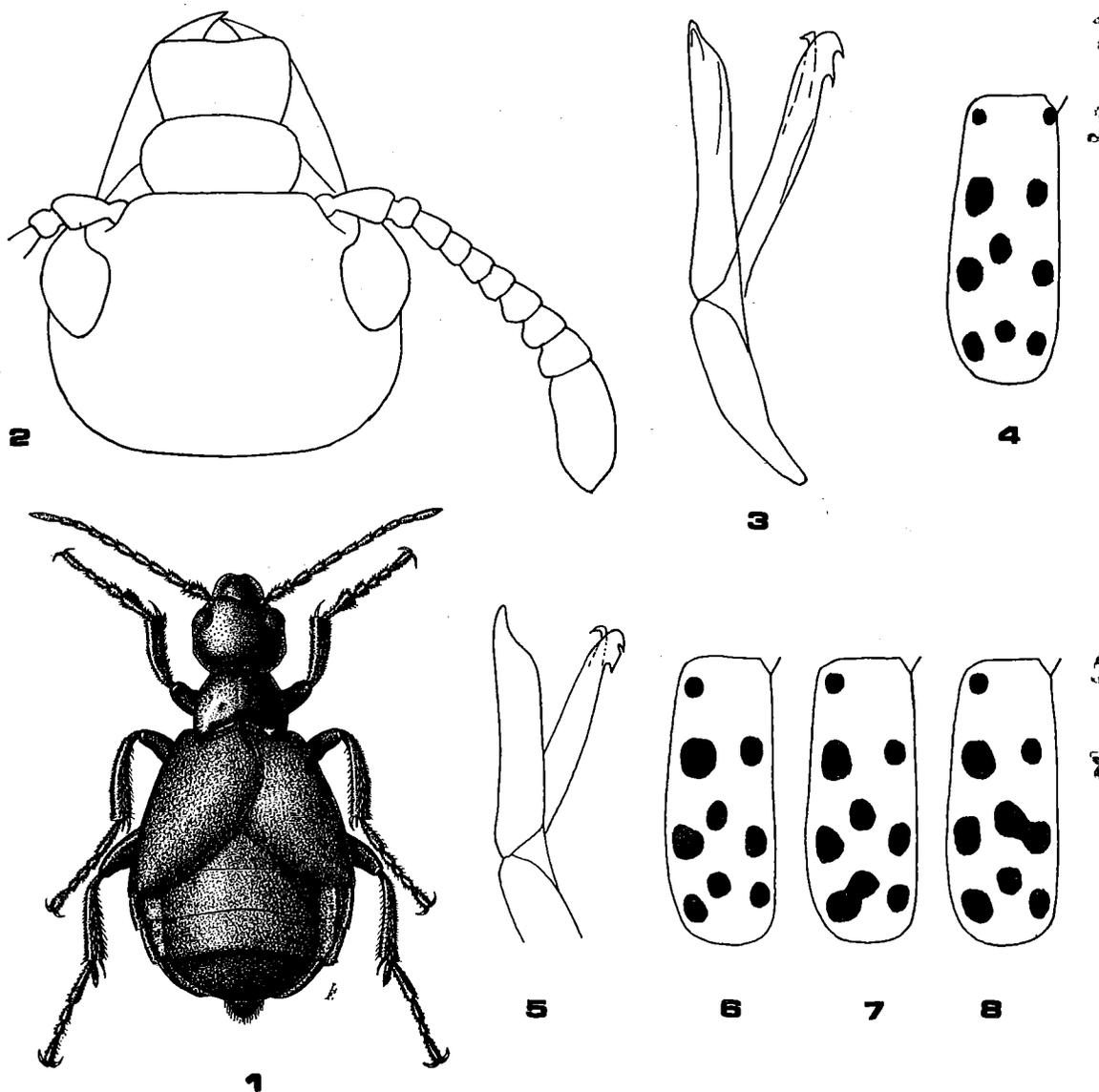


Fig. 1 Meloë (Mesomeloë) bytinskii sp. nov. Habitus

Fig. 2-4 Decapotoma esfandiarii sp. nov. 2: head; 3: male genitalia in lateral view; 4: pattern of elytron.

Fig. 5-8 Decapotoma argentifera bytinskii ssp. nov. 5: male genitalia in lateral view; 6: pattern of elytron of forma typica; 7: pattern of elytron in ab. yerohami; 8: pattern of elytron in ab. salzi.