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Redescription of *Macromonycha anatolica* (WEISE, 1900)
(Coleoptera: Chrysomelidae: Cassidinae)

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ABSTRACT. *Macromonycha anatolica* (WEISE, 1900) is removed from synonymy, redescribed based on type material and compared with its only congener *M. apicalis* (GEBLER, 1845).

Key words: entomology, taxonomy, redescription, *Macromonycha anatolica*, Turkey.

WEISE (1900) described *Chiridula anatolica* from southern Turkey. SPAETH (1914 a) transferred it to the genus *Macromonycha*, established earlier (SPAETH 1911) for *Cassida apicalis* GEBLER, 1845 from Middle Asia. In the same paper he synonymized *Cassida olivieri* BOHEMAN, 1854, described generally form "Oriens", with *M. apicalis*. In his paper of 1914a SPAETH suggested that *M. anatolica* was probably only a form of *M. apicalis*. SPAETH and REITTER (1926) in their key to the Cassidinae of the Palaearctic, treated *M. anatolica* as a variety of *M. apicalis*. They suggested also that *Kari brunnea* MAULIK, 1923 described from Palestina was conspecific with *M. anatolica*, being only a form with darker clypeus. Finally, SPAETH and REITTER (1926) treated also *Cassida suberosa* WEISE, 1889 described from Arax Valley and *Cassida suberosa* var. *discoidalis* REITTER, 1891 described from Turkestan as only colour variations of *M. apicalis*. BODENHEIMER (1937) and KISMALI and SASSI (1994) cited *M. anatolica* as a subspecies of *M. apicalis*. I have examined the holotype of *Chiridula anatolica*, syntypes of *Cassida suberosa* and *C. suberosa* var. *discoidalis*, holotype of *Kari brunnea* and numerous specimens of *Macromonycha apicalis* identified by SPAETH and a specimen of *Cassida olivieri* identified by BOHEMAN (types of *C. apicalis* and

C. olivieri probably lost) and in my opinion the genus *Macromonycha* comprises two species: *M. apicalis* (GEBLER, 1845), with *C. olivieri*, *C. suberosa*, *C. suberosa* var. *discoidalis* and *K. brunnea* as synonyms, and *M. anatolica* (WEISE, 1900). This point of view was presented in my world catalogue of *Cassidinae* (BOROWIEC 1999).

Macromonycha apicalis was described in detail in several papers (SPAETH and REITTER 1926, LOPATIN 1977), in MAULIK's (1923) description of *Kari brunnea* there are good figures of dorsal and ventral sides of the body, and tarsus. *M. anatolica* was described only briefly, with no comparative characters to *M. apicalis* and its redescription is given below.

***Macromonycha anatolica* (WEISE, 1900)**

Chiridula anatolica WEISE, 1900 a: 139.

Macromonycha anatolica: SPAETH, 1914 a: 129, 1914 b: 88; SPAETH and REITTER, 1926: 19; BOROWIEC, 1999: 310.

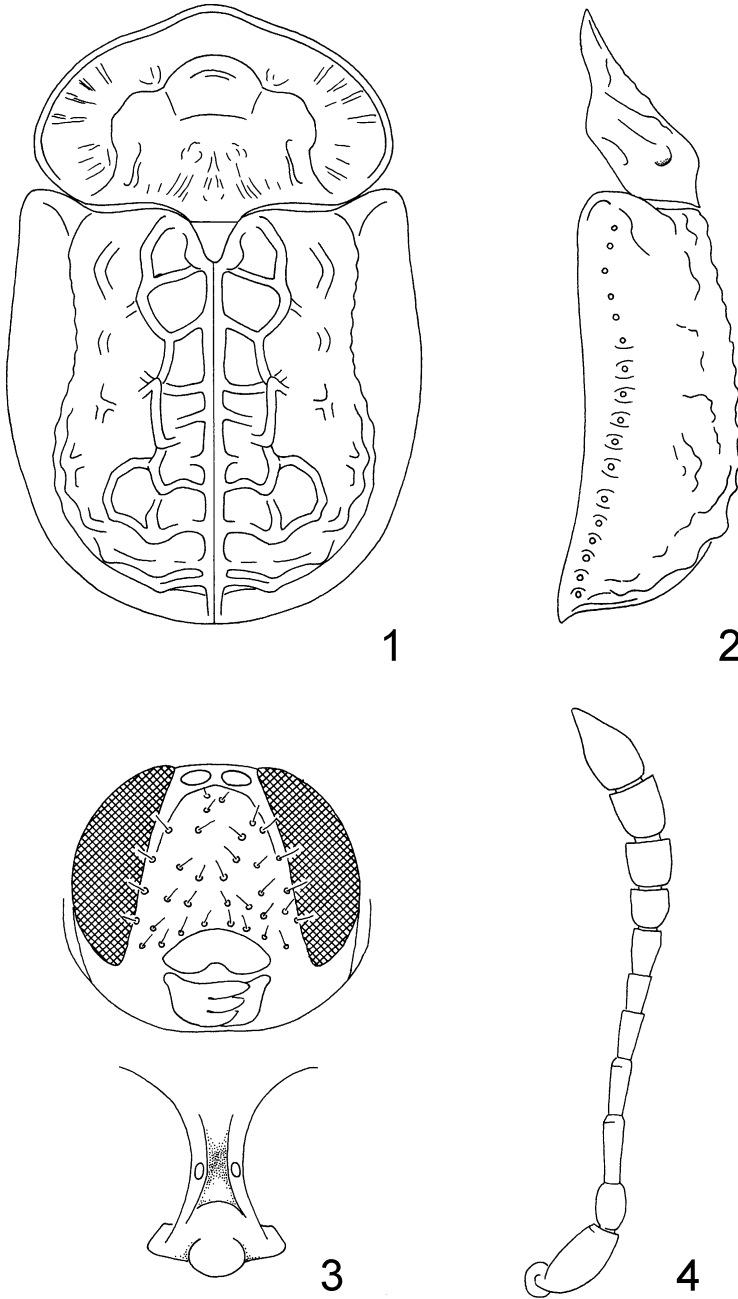
Macromonycha apicalis ssp. *anatolica*: BODENHEIMER, 1937: 149; KISMALI and SASSI, 1994: 153.

DIAGNOSIS

M. anatolica at first glance differs from *M. apicalis* in stouter body (length/width ratio 1.49, in *apicalis* 1.56-1.64). Clypeus in *M. anatolica* is narrower, roughly equal in length and width, while in *M. apicalis* it is transverse, 1.17-1.30 times wider than long. The tubercles at base of pronotal disc in *M. anatolica* are higher, and thus the impression between them appears deeper than in *M. apicalis*. The lateral impressions of pronotal disc in *M. anatolica* are deep, with the upper margin bordered by a distinct fold, while in *M. apicalis* they are shallow, with no upper fold. The elytral sculpture in *M. anatolica* is very irregular, with the first costa high and distinct but the second costa reduced to three irregular folds, and the third costa completely obsolete while in *M. apicalis* the three costae are always complete, the second usually as high or only slightly lower than the first, and the third costa distinctly lower than the second (I have observed geographical variation in elytral sculpture of *M. apicalis*, in populations from Iran costae are very regular with very low third costa, in populations from Middle Asia costae are less regular but with quite high third costa, in populations from Azerbaijan costae are the most irregular, but not as irregular as in *M. anatolica*, with distinct third costa; pale coloured specimens have elytral sculpture less developed than dark forms). The tubercles on slope in *M. anatolica* are distinctly higher than in all populations of *M. apicalis*.

DESCRIPTION

Length: 5.5 mm, width: 3.7 mm, length of pronotum: 2.1 mm, width of pronotum: 3.3 mm, length/width ratio: 1.49, width/length ratio of pronotum: 1.57. Body elongate oval (fig. 1), elytra widest in the middle, sides moderately rounded (in *M. apicalis* elytra are much parallelsided).



1-4. *Macromonycha anatolica*: 1 - body in dorsal view, 2 - body lateral, 3 - head and prosternum, 4 - antenna

Pronotum and elytra uniformly yellowish (like in *M. apicalis* ab. *suberosa*), only basal margin of pronotum and basal denticles of elytra black. Clypeus dark brown, prosternal collar brown, rest of ventrites yellowish, including legs. Basal antennal segments 1-4 yellow, segments 5-6 partly infusate, segments 7-11 black.

Pronotum elliptical, with maximum width in $3/5$ length, sides broadly rounded, without corners. Disc strongly convex but without distinct borders, at top with pair of tubercles and deep impression between them, on sides with deep impression bordered in upper part by fold. Area above head shallowly impressed. Surface of disc at base with longitudinal striation, on other part of disc irregular, partly granulate, partly wrinkled. Explanate margin very broad, distinctly impressed in area lateral to head and below lateral impressions of disc. Surface of explanate margin with low radial folds.

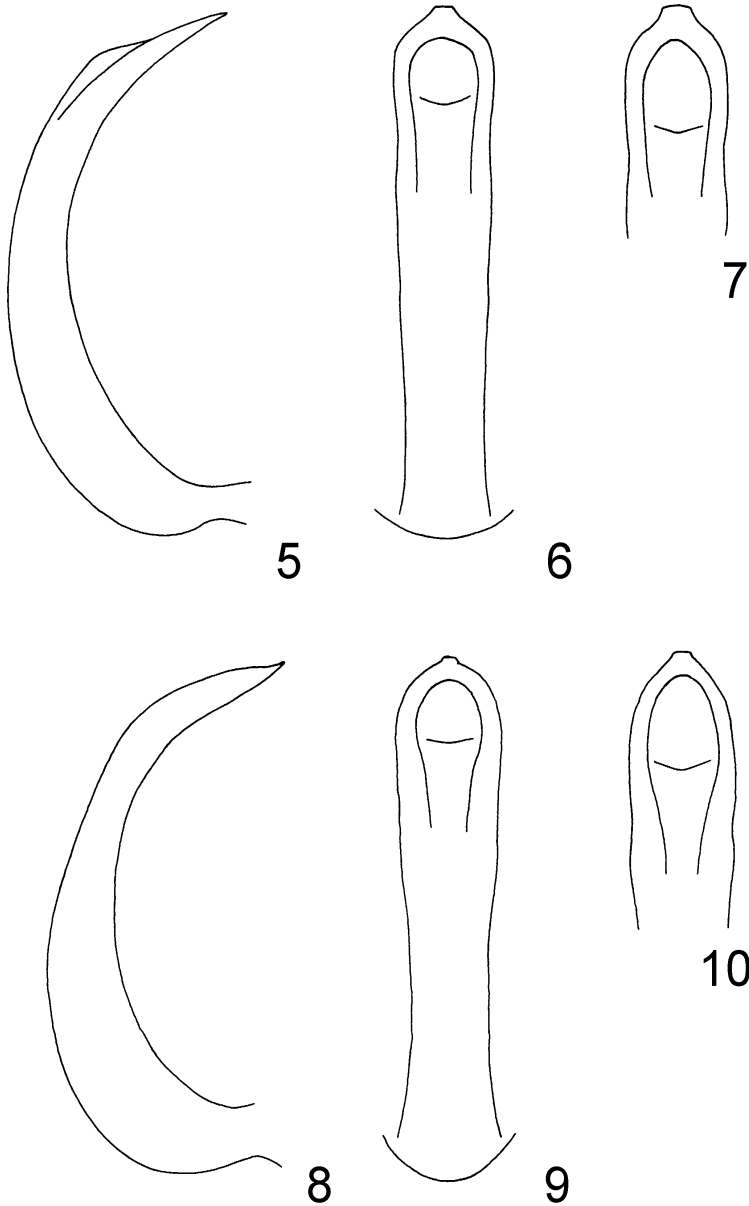
Scutellum triangular, without grooves or granules. Base of elytra only slightly wider than pronotum, humeri slightly protruding anterad, rounded. Basal margin of elytral disc with row of moderate black denticles (slightly larger than in common European *Cassida denticollis* Suffr.). Disc in anterior half depressed, in posterior half feebly convex, with top of convexity in $3/5$ length (fig. 2). Suture elevated, third interval elevated, forms irregular costa, connected by five to six transverse folds with elevated suture. Costa on sixth interval reduced to three separate folds or tubercles, no third costa. On slope elevated intervals form several folds and tubercles. Puncturation between sculpture moderately coarse, appears irregular, only three submarginal rows regular, but between submarginal and marginal row, in posterior half of disc, there are several additional punctures. Marginal row with coarse punctures, c. twice coarser than in submarginal row. Flat parts of elytral disc glabrous. Explanate margin almost horizontal, but narrow, in the widest part c. as wide as three marginal intervals together. Surface with coarse punctures, arranged in deep transverse sulci. Whole surface of elytra covered with very short, white, clavate setae, the longest and well visible along elytral margin and on slope.

Head broad, eyes large, gena very short. Clypeus c. as wide as long, clypeal lines visible only in apical part, surface flat, glabrous, with several coarse punctures. Labrum with shallow median emargination. Venter of pronotum with short antennal groove, bordered externally by obtuse fold. Prosternal collar on each side without lateral plate. Prosternal process very narrow, less expanded apically than in *M. apicalis*, in anterior part with shallow median sulcus, apically with broad tubercle (fig. 3).

Antennae stout, segments c 8-10 as wide as long. Length ratio of antennal segments: 100:64:90:78:64:50:57:52:57:70:135, segment 3 c. 1.4 times longer than segment 2 (fig. 4). Tarsi typical for the genus (see excellent fig. in MAULIK 1923). Claws simple.

Male genitalia as in figs 5-7. In lateral view aedeagus is stouter before middle than in *M. apicalis*, gradually narrowed from base to apex (fig. 5), while in

M. apicalis aedeagus is distinctly constricted in apical 1/3 length (fig. 8). In dorsal view aedeagus before apex is more constricted in *M. anatolica* than in its congener.



5-10. Male genitalia: 5-7 - *Macromonycha anatolica*, 8-10 - *M. apicalis*; 5, 8 - lateral, 6, 9 - dorsal, 7, 10 - dorsal side of apex

MATERIAL EXAMINED

Holotype: "Kilikisch. Taurus, Nordseite, v. Bodemeyer" "Asia minor, Ali-Hotscha Tal, v. Bodemeyer" (Zoologisches Museum, Humboldt Universität, Berlin).

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REFERENCES

- BODENHEIMER, F. S., 1937. Prodrum Faunae Palaestine. Mém. Inst. d'Égypte, **33**: 1-286.
- BOHEMAN, C. H., 1854. Monographia Cassidarum. Tomus secundus. Holmiae, 506 pp. + 2 tab.
- BOROWIEC, L., 1999. A world catalogue of the *Cassidinae* (Coleoptera: Chrysomelidae). Biologica Silesiae, Wrocław, 476 pp.
- GEBLER, F.A., 1845. Charakteristik der von H. SCHRENK in den J. 1841-1843 in den Steppen der Dsüngorei gefundenen neuen Coleopterenarten. Bull. Acad. St. Pet. Classe Phys.-mat., **1845**, 3: 97-106.
- KISMALI, A., SASSI, D., 1994. Preliminary list of *Chrysomelidae* with notes on distribution and importance of species in Turkey. II. Subfamily *Cassidinae* SPAETH. Türk. Entomol. Derg., **18**: 141-156.
- MAULIK, S., 1923. New Cryptostome beetles. Proc. Zool. Soc. Lond., **1923**: 599-608.
- REITTER, E., 1891. Neue Coleopteren aus Europa, den angrenzenden Ländern und Sibirien, mit Bemerkungen über bekannte Arten. Deutsch. Entomol. Zeitschr., **1891**: 17-36.
- SPAETH, F., 1911. Beschreibung neuer Cassididen nebst synonymischen Bemerkungen. VIII. Verh. Zool.-Bot. Ges. Wien, **61**: 239-277.
- , 1914 a. Über die paläarktischen Cassiden mit besonderer Berücksichtigung jener von Asien. Verh. Zool.-Bot. Ges. Wien, **64**: 128-147.
- , 1914 b. *Chrysomelidae*: 16. *Cassidinae*. In: W. JUNK, S. SCHENKLING, Coleopterorum Catalogus, Pars 62, Berlin, 182 pp.
- SPAETH, F., REITTER, E., 1926. Bestimmungs-Tabellen der europäischen Coleopteren. 95 Heft. *Cassidinae* der palaearktischen Region. Troppau, 68 pp.
- WEISE, J., 1889. In: E. REITTER, Coleopterologische Ergebnisse der im Jahre 1886 und 1887 in Transcaspien von Dr. G. RADDE, Dr. A. WALTER und A. KONCHIN ausgeführten Expedition. Verh. naturforsch. Ver. Brünn, **27** (1888): 95-133.
- , 1900. Neue Coleopteren aus Kleinasien. Deutsch. Entomol. Zeitschr., **1900**: 132-140.