

**A STUDY ON
CRYPTOCEPHALUS PSEUDOREITTERI TOMOV, 1976
(CHRYSOMELIDAE: CRYPTOCEPHALINAE)
WITH ALLOTYPE DESIGNATION**

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[Özdikmen, H., Güven, M. & Turgut, S. 2007. A study on *Cryptocephalus pseudoreitteri* Tomov, 1976 (Chrysomelidae: Cryptocephalinae) with allotype designation. *Munis Entomology & Zoology*, 2 (2): 493-498]

ABSTRACT: Holotype description of a poorly-known species, *Cryptocephalus pseudoreitteri* Tomov, 1976 which is endemic to Turkey and firstly known as only a male from the type locality, is improved and a female specimen from Turkey is designated as allotype to fill the void of the absence of designation of allotype.

KEYWORDS: *Cryptocephalus pseudoreitteri*, allotype designation, Turkey

The genus *Cryptocephalus* Müller, 1764 is represented with many taxa (452 species and subspecies) in Palearctic Region (Lopatin & Dovgailo, 2002). In Turkey, it is also represented with many taxa (Warchalowski, 2003). One of them, described by Tomov from Turkey (Anatolia: Ankara province: Beypazarı) in 1976, is *C. pseudoreitteri*. It belongs to the subgenus *Asionus* Lopatin, 1988 including a few taxa (4 species) in Turkey (Warchalowski, 2003).

The Tomov's description based on only a male specimen collected by K. M. Guichard from 700 m. altitude in 17.05.1960. It has been preserved in Museum of Manchester University. Up to now, any record has not been reported about this species. This work is the first study after original description of *C. pseudoreitteri* Tomov, 1976.

6 specimens (4 male and 2 female) of this species are examined. As a result of this study, the description of holotype is improved by reporting variations among male specimens. Also, a female specimen is designated to be allotype.

As far as being described to a single male, taxonomic position of this species has remained unclear in the absence of females. *C. pseudoreitteri* Tomov, 1976 is re-described in this study, based on the recent collection of additional specimens of both sexes. The female description of *C. pseudoreitteri* Tomov, 1976 is firstly reported by this work.

The samples were collected by sweeping the herbs. The beetles were killed with ethyl acetate or in 70 % alcohol solution and prepared to add the insect collection of the authors in the laboratory. Genitalia were dissected under the microscope. All photos (habitus, genitalia etc.) were captured by using a Leica type MZ-16 stereomicroscope.

RESULTS AND DISCUSSIONS

***Cryptocephalus (Asionus) pseudoreitteri* Tomov, 1976**

(Fig. 1, 2, 3, 4, 5, 6)

Materials:

3 ♂: Turkey: Anatolia (Asian Turkey), Ankara province, Ayaş, Ayaş Beli, Atbayırı district, 1100 m, 18.05.2002, leg. H. Özdikmen & S. Turgut. 1 ♂: Turkey: Anatolia (Asian Turkey), ?Ankara province, leg. H. Özdikmen. 1 ♀: Turkey: Anatolia (Asian Turkey), Ankara province, Ayaş, Ayaş Beli, Atbayırı district, 1100 m, 18.05.2002, leg. H. Özdikmen & S. Turgut. 1 ♀: Turkey: Turkey: Anatolia (Asian Turkey), ?Ankara province, leg. H. Özdikmen.

Tomov (1976) gave a perfect holotype description. It was also consists of ventral and lateral illustrations of male genitalia. He mentioned that *C. pseudoreitteri* is close to *C. reitteri* Weise, 1882 (Fig. 16, 17, 18) and *C. quatuordecimmaculatus* Schneider, 1792 (Fig. 19, 20, 21). He distinguished *C. pseudoreitteri* from *C. reitteri* Weise, 1882 by using form of aedeagus and the occurrence a spine located at front of the hollow in the middle part of the last abdominal sternite. He also said that the spine of *C. pseudoreitteri* is similar to *C. quatuordecimmaculatus* Schneider, 1792 in terms of size and position.

Giving the same descriptive characters with Tomov (1976) is unnecessary. It is thought that improving the description of holotype by reporting variations among male specimens is more suitable than repeating whole description of *C. pseudoreitteri* Tomov, 1976. The data presented in here is given with various photos of different body parts of *C. pseudoreitteri* Tomov, 1976. Aedeagus is as figures 13, 14, 15, 16, 17. Spermatheca and ductus spermathecae are as figures 11 and 12 respectively. Remaining photos is about external morphological characters.

The examined specimens are different from Tomov's holotype description with following improved characters.

- The length differs from 5.05 to 6.20 mm. We must state that female specimens are always larger than males. The biggest male specimen is 5.55 mm (from 5.05 to 5.55 mm) (Fig. 1). The female specimens are always up to 5.50 mm (from 5.75 to 6.20 mm) (Fig. 2). However, the holotype is male and its length is 6 mm. In this situation, it can be regarded that *C. pseudoreitteri* Tomov, 1976 may be between 5.00-6.50 mm.
- The mandibles are yellowish-red except black apices (Fig. 3, 4).
- Only a male and a female have a yellowish spot in the middle part of clypeus.

- The yellowish-red colored areas of antennae are reduced in some specimens of both sexes.
- In both sexes, the size of median spots and number or quantity of lateral spots indicates variation. The lateral spots deeply or slightly sinuate in some specimens (Fig. 5). Moreover they are entirely separated into two parts in a female specimen (Fig. 6), so the middle part of pronotum has 2 median and 4 lateral black spots.
- In both sexes, scutellum is punctated with a few distinct points.
- In both sexes, small black spot, located at latero-median part of basal part of elytron (non humeral spot) is perfect in some specimens (same as in Fig. 2). However, the spots become just a mark in some specimens (Fig. 1). Furthermore, it entirely disappears in one specimen.
- In a male specimen, ventral parts of front and middle tibiae are red. The remaining parts of front and middle tibiae and the remaining parts of legs are black.
- In some specimens of both sexes, the basal part of the abdomen between metacoxae is yellow-colored (same as in Fig. 4).

Allotype designation: In spite of his good holotype description, female characteristics have not been still known due to the fact that the description is based on a single male specimen as mentioned above. In this case a female specimen is designated to be allotype to fill the void of the absence of designation of allotype.

Allotype 1 ♀: Turkey: Anatolia (Asian Turkey), Ankara province, Ayaş, Ayaş Beli, Atbayırı district, 1100 m, 18.05.2002, leg. H. Özdikmen & S. Turgut.

As male, except a spine located at front of the hollow in the middle part of the last abdominal sternite, female without spin (Fig 7, 8, 9, 10).

Spermatheca: Spermatheca simple, hook-shaped (Fig. 11). Ductus spermathecae in most part spiral and straight part of ductus spermathecae short. Spiral part of ductus spermathecae close to spermatheca (Fig. 12).

ACKNOWLEDGEMENTS

The authors wish to thank Prof. Dr. Andrzej Warchalowski (Poland) for reviewing an earlier draft of the manuscript.

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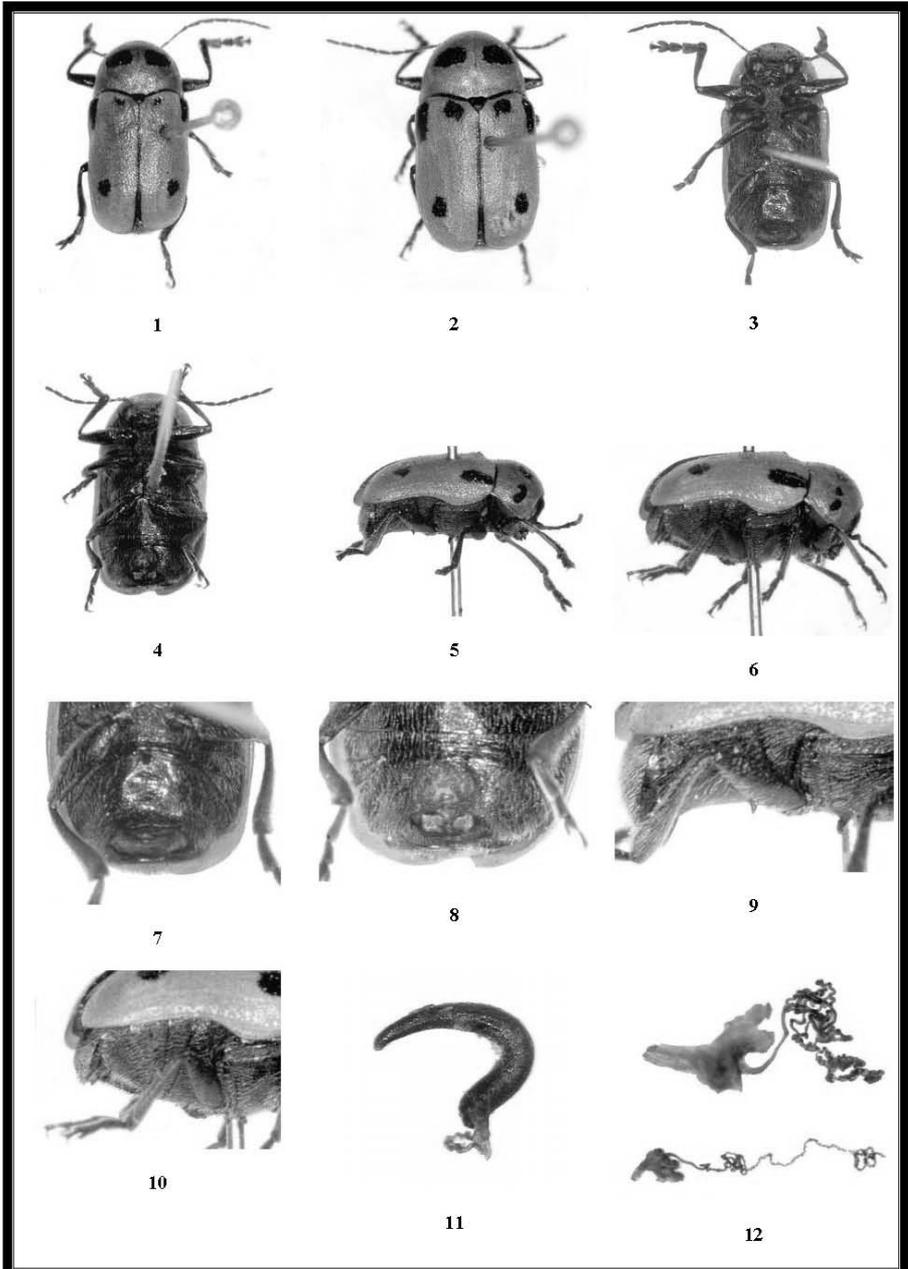


Plate I: Figures 1. Dorsal view of male, 2. Dorsal view of female, 3. Ventral view of male, 4. Ventral view of female, 5. Lateral view of male, 6. Lateral view of female, 7. Ventral view of last abdominal sternite of male, 8. Ventral view of last abdominal sternite of female, 9. Lateral view of abdomen of male, 10. Lateral view of abdomen of female, 11. Spermatheca, 12. Ductus spermathecae.

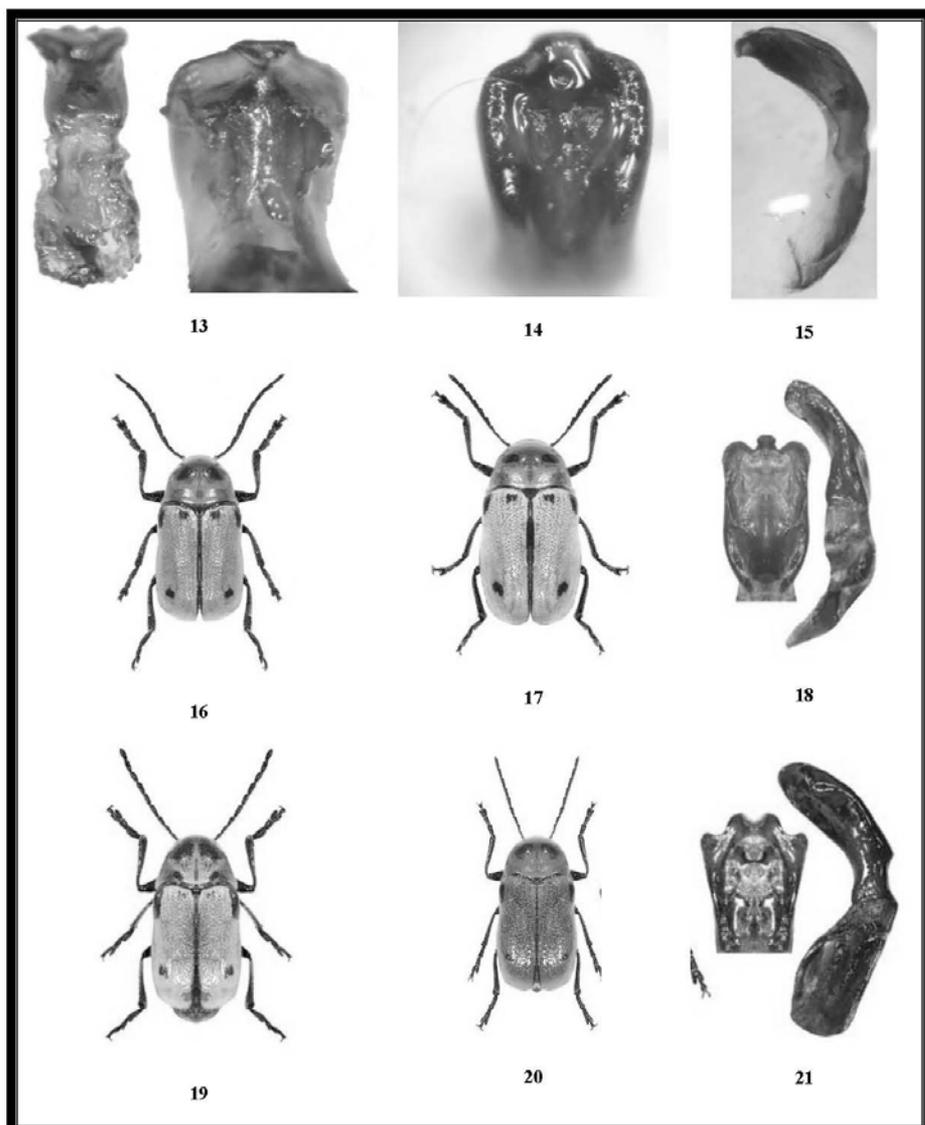


Plate II: Figures 13. Dorsal view of aedeagus, 14. Ventral view of apex of aedeagus, 15. Lateral view of aedeagus, 16. Dorsal view of male of *Cryptocephalus reitteri* Weise, 1882, 17. Dorsal view of female of *Cryptocephalus reitteri* Weise, 1882, 18. Apex and lateral view of aedeagus of *Cryptocephalus reitteri* Weise, 1882, 19. Dorsal view of male of *Cryptocephalus quatuordecimnatus* Schneider, 1792, 20. Dorsal view of female of *Cryptocephalus quatuordecimnatus* Schneider, 1792, 21. Apex and lateral view of aedeagus of *Cryptocephalus quatuordecimnatus* Schneider, 1792 (all photos of *Cryptocephalus reitteri* Weise, 1882 and *Cryptocephalus quatuordecimnatus* Schneider, 1792 are provided from Borowiec, 2006).