

Scientific Note

Further records of jewel beetles (Coleoptera: Buprestidae) from Oman

Ali A. Al-Jahdhami 

Ministry of Agriculture and Fisheries Wealth, Department of plant protection, Samad Ashan, Sultante of Oman.

 Corresponding author: entomologistali96@gmail.com

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Abstract. Buprestidae beetles are herbivorous and often strictly associated with their host plant. The knowledge of Buprestidae from Oman is still incipient. Less than 25 species of Buprestidae are reported from Oman so far and this indicates the large blank in our knowledge in this family when compared to recorded species from other neighboring countries in the Arabian Peninsula. In this paper, seven species from four genera and three subfamilies are being new records for Oman. The number of new records in Agrilinae subfamily are four species (*Agrilus* (*Diplolophotus*) *desertus* (Klug, 1829), *Agrilus* (*Micragrilus*) *lituratus* (Klug, 1829), *Agrilus purpuratus* (Klug, 1829), *Agrilus* (*Agrilomorpha*) *venosus* Gory & Laporte, 1837, two from Buprestinae (*Chrysobothris* (*Chrysobothris*) *parvipunctata* Obenberger, 1914, *Melanophila cuspidata* (Klug, 1829)) and one from Chrysochroinae (*Paratassa arabica* Bílý & Volkovitsh, 1996).

Keywords: Arabian Peninsula, *Agrilus*, *Chrysobothris*, *Melanophila*, *Paratassa*.

The jewel beetles (Buprestidae) are a very large family of tiny to large species. This family includes about 15,000 valid (Bellamy 2008). The major center of their diversity are the tropical region. Jewel beetles are easily recognized by their often bright metallic coloration which gives rise to the common name “jewel beetles” (Evans et al. 2007). Most jewel beetles are xylophagous insects, although some species mine leaves and stems while some others live in the roots of herbs or are soil dwellers (Evans et al. 2007). Some species are phloem feeders while others are xylem feeders and feed both in the phloem and within the wood (Evans et al. 2007). Most of the buprestids species attack dying or dead trees and they play an important ecological role as components of the insect community utilizing plant remnants and contributing to the degradation of dead wood (Evans et al. 2007).

Wellso et al. (1976) reported that the most effective method of collecting buprestids is to cage host wood infested with larvae to rear the specimens to the emersion of adults, so that more information is accumulated about the site of adult oviposition and the host range of the species. As they also noted, some species of *Agrilus* Curtis, 1825; *Brachys* Dejean, 1833; *Anthaxia* Eschscholtz, 1829 and *Chrysobothris* Eschscholtz, 1829 can be swept more frequently at the edge of dense deciduous forests than at their interior.

Some data on Buprestidae fauna of the Arabian Peninsula have been published as follow: Saudi Arabia (Blair 1931; Shalaby 1961; Beccari 1971; Bílý 1979; 1980; 1982; 1985; 1990; Walker & Pittaway 1987); Yemen (Curlletti & van Harten 2002; 2004; Bílý et al. 2003; Brechtel 1998; 2000); UAE (Bílý et al. 2011). There are some publications on Buprestidae fauna of Oman (Levey & Volkovitsh 1996; Bílý et al. 2011; Volkovitsh & Prepsl 2017; Volkovitsh 2019a; 2019b). This paper is not complete a full checklist Buprestidae for Oman because most of the specimens were collected only from some locations in northern Oman, and with limited collecting methods like hand net and handpicking. However, this paper aims to present additional records of Buprestidae, with 7 new records of species for Oman.

The specimens were collected using sweeping net, aspirator and handpicking. The collected specimens were killed with ethyl acetate. The specimens were deposited in the private collection of the author. The specimens were collected legally under the Permit n° 6210/10/87 issued by the Ministry of environment and climate affair. Species are listed alphabetically. Records are presented following a standardized format: [town, locality name, geographic coordinates, date of collection

(day, month, year), number of specimens and collecting method.

In total 22 specimens were collected. Among them, seven species of four genera and three subfamilies of (Buprestidae) are being new records for Oman: *Agrilus desertus* (Klug, 1829); *A. lituratus* (Klug, 1829); *A. purpuratus* (Klug, 1829); *A. venosus* Gory & Laporte, 1837 (Agrilinae); *Chrysobothris parvipunctata* Obenberger, 1914; *Melanophila cuspidata* (Klug, 1829); and *Paratassa arabica* Bílý & Volkovitsh, 1996.

Agrilinae Laporte, 1835

Agrilini Laporte, 1835

Agrilus Curtis, 1825

Agrilus (*Diplolophotus*) *desertus* (Klug, 1829) (Fig. 1)

Specimens examined: Samad Ashan, Arrowdha 22.8591 N 58.1971 E, 7.v.2018, 1 ♂ 2 ♀, hand net, leg. A. Al-Jahdhami.

Distribution: Algeria, Chad, Djibouti, Egypt, Iran, Israel, Jordan, Libya, Morocco, Saudi Arabia, Tunisia, UAE and Yemen (Bellamy 2008; Bílý et al. 2011; Jendek 2016). New recorded for Oman.

Agrilus (*Micragrilus*) *lituratus* (Klug, 1829) (Fig. 2)

Specimens examined: Samad Ashan, Arrowdha 22.8591 N 58.1971 E, 7.v.2018, 2 ♂ 2 ♀, hand net, leg. A. Al-Jahdhami.

Distribution: Algeria, Chad, Egypt, Iran, Israel, Jordan, Libya, Mauritania, Morocco, Saudi Arabia, Senegal, Sudan, Tunisia, UAE and Yemen (Bellamy 2008; Bílý et al. 2011; Jendek 2016). New record for Oman.

Agrilus (*Duttus*) *purpuratus* (Klug, 1829) (Fig. 3)

Specimens examined: Samad Ashan, Arrowdha 22.8591 N 58.1971 E, 16.v.2018, 1 ♂ 1 ♀, hand net, leg. A. Al-Jahdhami.

Distribution: Algeria, Chad, Democratic Republic of the Congo, Egypt, Iran, Israel, Jordan, Kenya, Libya, Morocco, Saudi Arabia, Syria, Tanzania, Tunisia, Yemen (Bellamy 2008; Jendek 2016). New recorded for Oman.

Agrilus (*Agrilomorpha*) *venosus* Gory & Laporte, 1837 (Fig. 4)

Specimens examined: Samad Ashan, Arrowdha 22.8591 N 58.1971 E, 14.v.2018, 2 ♂ 5 ♀, hand net, leg. A. Al-Jahdhami.

Distribution: Algeria, Benin, Chad, Eritrea, Ethiopia, Iran, Kenya, Morocco, Saudi Arabia, Senegal, Somalia (Bellamy 2008; Jendek 2016). New recorded for Oman.

Buprestinae Leach, 1815

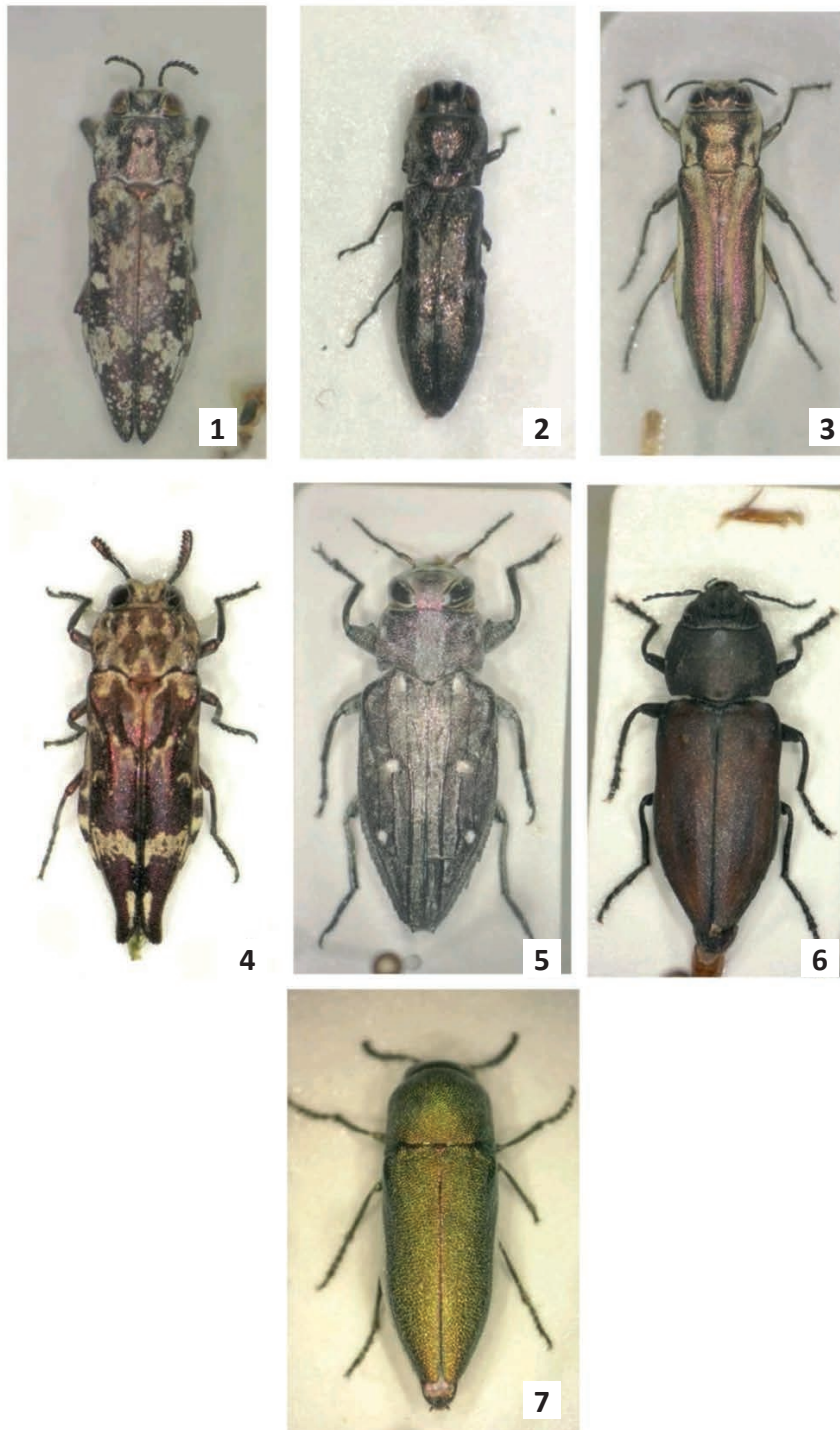
Chrysobothrini Gory & Laporte, 1837

Chrysobothris Eschscholtz, 1829*Chrysobothris (Chrysobothris) parvipunctata* Obenberger, 1914 (Fig. 5)**Specimens examined:** Samad Ashan, Arrowdha 22.8591 N 58.1971 E, 18.v.2020, 1 ♂ 1 ♀, hand net, leg. A. Al-Jahdhami.**Distribution:** Afghanistan, India, Iran, Iraq, Pakistan, Turkmenistan, UAE (Bílý et al. 2011). New recorded for Oman.

Melanophilini Bedel, 1921

Melanophila Eschscholtz, 1829*Melanophila cuspidata* (Klug, 1829) (Fig. 6)**Specimens examined:** Samad Ashan, Arrowdha 22.8591 N 58.1971 E, 11.iv.2019, 2 ♂ 1 ♀, hand picking, leg. A. Al-Jahdhami.**Distribution:** Croatia, Cyprus, Egypt, Ethiopia, France, Georgia, Greece, Iran, Iraq, Israel, Italy, Jordan, Kazakhstan, Kyrgyzstan, Lebanon, Libya, Afghanistan, Albania, Algeria, Armenia, Azerbaijan, Bosnia-Herzegovina, Bulgaria, Chad, Macedonia, Malta, Morocco, Nigeria, Portugal, Romania, Senegal, Slovenia, Spain, Sudan, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, UAE, Uzbekistan (Bílý et al. 2011). New recorded for Oman.**Chrysochroinae Laporte, 1835**

Paratassini Bílý & Volkovitsh, 1996

Paratassa Marseul, 1882*Paratassa arabica* Bílý & Volkovitsh, 1996 (Fig. 7)**Specimens examined:** Bidiya, near industrial zone, 22.4670 N 58.8619 E, 15.iii.2019, 1 ♀, leg. A. Al-Jahdhami.**Distribution:** Saudi Arabia. New recorded for Oman.

Figures 1-7. Habitus of Buprestidae: 1. *Agrilus (Diplolophotus) desertus* (Klug); 2. *Agrilus (Micragrilus) lituratus* (Klug); 3. *Agrilus purpuratus* (Klug); 4. *Agrilus (Agrilomorpha) venosus* Gory & Laporte; 5. *Chrysobothris (Chrysobothris) parvipunctata* Obenberger; 6. *Melanophila cuspidata* (Klug); 7. *Paratassa arabica* Bílý & Volkovitsh.

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