

## Scientific Note

# New faunistic records of Curculionoidea (Coleoptera: Cucujiformia) from Oman

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**Abstract.** This communication reports on records of fourteen species and three morphospecies from Oman. *Squamapion* sp., *Nanophyes* sp., Schoenherr, 1838, *Hoplopodapion tibesticola* (Alonso-Zarazaga, 1983), *Aegyptobaris arctithorax* (Pic, 1899), *Eumycterus albosquamulatus* Boheman, 1838, *Proeces filum* (Marshall, 1933), *Rhamphus micros* Colonnelli, 2009, *Sharpia sabulicola* Colonnelli, 2009, *Smicronyx* (*Smicronyx*) *rufipennis* Tournier, 1874, *Amblyrhinus cylindricollis* Magnano, 2009, *Mylocerus undecimpustulatus* Faust, 1891, *Cosmogaster cordofanus* (Fåhraeus, 1842), *Hypolixus nubilosus* (Boheman, 1836), *Microlarinus irregularis* Colonnelli, 2009 are from northern Oman and *Araecerus* sp., *Cylindroides bifasciatus* (Quedenfeldt, 1887), *Orfilaia arabica* (Muizon, 1954) from Dhofar in southern Oman.

**Keywords:** Weevil, beetle, Coleoptera, distribution, Arabian Peninsula.

Curculionoidea is a large group of phytophagous Coleoptera. Members of this superfamily are known as “snout beetles” or “weevils”. They are usually characterized by long and slender snout, geniculate antennae generally inserted on the snout and generally compact antennal club. The Curculionoidea fauna of Oman is poorly known with few studies in the literature. For example, Rheinheimer (2003) described *Systates omanicus* (= *Nematocerus omanicus*) and Magnano et al. (2009) reported 4 only species.

Despite the poor knowledge of Omani weevils, several studies have been carried out in areas in the Arabian Peninsula surrounding Oman. Some data on Curculionoidea fauna from Saudi Arabia, Yemen, UAE and a few from Oman have been published previously in Voss (1971); Colonnelli (1985); Wanat (1990); Caldara (1993); Rheinheimer (2003); Harten (2005); Meregalli & Colonnelli (2006); Meregalli (2008) and Magnano et al. (2009). The objective of this paper is to present additional records of Curculionoidea from Oman based on specimens collected in the country since 2018 and deposited in the private collection of the lead author. The lead author will deposit the specimens in the Oman Natural History Museum after death. The specimens were collected by using a sweeping net, an aspirator or by handpicking. The specimens were killed with ethyl acetate. The specimens were collected legally under the Permit n° 6210/10/87 issued by the Ministry of the Environment and Climate Affairs. Species are listed alphabetically in the list below. Records are presented following the standardized format of town, locality name, geographic coordinates, date of collection (day, month, year), number of specimens and collecting method.

In total 27 specimens were collected. Fourteen species and three morphospecies within three families of Curculionoidea are new records for Oman. Anthribidae: *Araecerus* sp., *Cylindroides bifasciatus* (Quedenfeldt, 1887), *Orfilaia arabica* (Muizon, 1954); Brentidae: *Orfilaia arabica* (Muizon, 1954), *Hoplopodapion tibesticola* (Alonso-Zarazaga, 1983), *Nanophyes* sp.; and Curculionidae: *Aegyptobaris arctithorax* (Pic, 1899), *Eumycterus albosquamulatus* Boheman, 1838, *Proeces filum* (Marshall, 1933), *Rhamphus micros* Colonnelli, 2009, *Sharpia sabulicola* Colonnelli, 2009, *Amblyrhinus cylindricollis* Magnano, 2009, *Mylocerus undecimpustulatus* Faust, 1891, *Hypolixus nubilosus* (Boheman, 1836), *Microlarinus irregularis* Colonnelli, 2009,

*Smicronyx* (*Smicronyx*) *rufipennis* Tournier, 1874. The identification of the weevil species was based in the work of Magnano et al. (2009) from UAE. Weevil expert Dr. Enzo Colonnelli from Italy identified 2 species.

### Species list

#### Anthribidae Billberg, 1820

##### Choraginae Kirby, 1819

##### Araecerini Lacordaire, 1865

*Araecerus* Schönherr, 1823

*Araecerus* sp. Fig. 1

**Specimen examined:** Dhofar, Ain Ishat, 17.003 N 53.840 E, 9.ii.2018, 1 ♀, light trap, leg. A. Al-Jahdhami.

**Distribution:** Cosmopolitan species (Alonso-Zarazaga et al. 2017).  
**New record for Oman.**

**Notes:** *Araecerus* species are important storage pests of some crops such as cocoa (Malvaceae) and coffee (Rubiaceae) (Barrere 2008). Both plant families grow in Oman and the Arabian Peninsula. Coffee is cultivated as an economic crop in both Yemen and Saudi Arabia. We collected this species from wadi habitat in the Dhofar region. This fertile region of southern Oman has a microclimate with monsoon rains from the Indian Ocean and lower temperatures during May to September. The biogeography of the Dhofar region is strongly affected by the Afrotropical region (Al-Jahdhami 2021).

#### Anthribinae Billberg, 1820

##### Corrhocerini Lacordaire, 1865

*Cylindroides* Fairmaire, 1886

*Cylindroides bifasciatus* (Quedenfeldt, 1887) Fig. 2

**Specimen examined:** Dhofar, Ain Ishat, 17.003 N 53.840 E, 9.ii.2018, 1 ♂, light trap, leg. A. Al-Jahdhami.

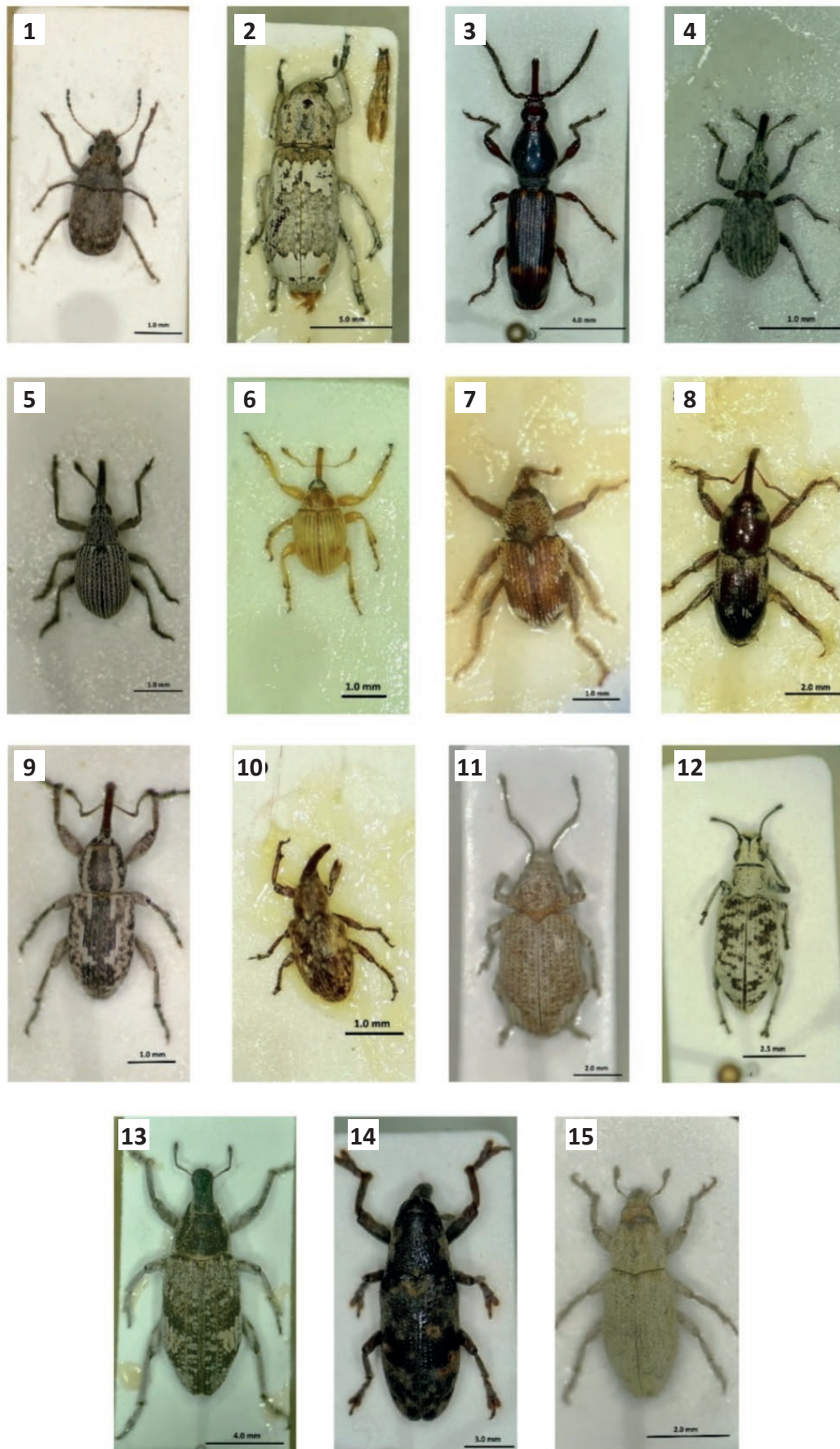
**Distribution:** Saudi Arabia (Alonso-Zarazaga et al. 2017).  
**New record for Oman.**

**Notes:** Based on our observations, this species seems to be restricted to the microclimate of Dhofar region which is adjacent to Yemen.

#### Brentidae Billberg, 1820

#### Brentinae Billberg, 1820

**Brentini Billberg, 1820***Orfilaia* Haedo Rossi, 1955*Orfilaia arabica* (De Muizon, 1954) Fig. 3**Specimen examined:** Dhofar, Ain Ishat, 17.003 N 53.840 E, 9.ii.2018, 2 ♀, light trap, leg. A. Al-Jahdhami.**Distribution:** Only previously known from Yemen (Alonso-Zarazaga et al. 2017). **New record for Oman.****Notes:** This species seems to be restricted to the microclimate of the Dhofar region adjacent to Yemen.**Apioninae Schönherr, 1823****Apionini Schönherr, 1823***Hoplopodapion* Solari, 1933*Hoplopodapion tibesticola* (Alonso-Zarazaga, 1983) Fig. 4**Specimen examined:** Al Mudhaibi, Al waryiah, 22.986N 58.292E, 1 ♀, 21.vi.2019, hand net, leg. A. Al-Jahdhami.**Distribution:** Algeria, Chad (Hoffmann 1962) and UAE (Magnano et al. 2009). **New record for Oman.****Notes:** This species reproduces on xeric habitats such as the flowers of *Tamarix* and *Reaumuria* (Tamaricaceae), and on *Calligonum* (Polygonaceae) (Magnano et al. 2009). We collected this from *Tamarix* from wadi habitat.*Squamapion* Bokor, 1923*Squamapion* sp. Fig. 5**Specimen examined:** Al Mudhaibi, Samad Ashan, 22.856N 58.122E, 1 ♀, 30.v.2020, attracted to light, leg. A. Al-Jahdhami.**Distribution:** Asia, Europe, Africa (Alonso-Zarazaga et al. 2017). **New record for Oman.****Notes:** The species of *Squamapion* from UAE could not be named, due to the lack of recent revision of the difficult genus *Squamapion* (Magnano et al. 2009). The biology of all members of *Squamapion* are known to live on Lamiaceae (Magnano et al. 2009).**Nanophyinae Gistel, 1848****Nanophyini Gistel, 1848***Nanophyes* Schönherr, 1838*Nanophyes* sp. Fig. 6**Specimens examined:** Al Mudhaibi, Al-Khadhra, 22.778N 58.008E, 3 ♂ 1 ♀, 14.iii.2020, hand net, leg. A. Al-Jahdhami.**Distribution:** Asia, Europe, Africa (Alonso-Zarazaga et al. 2017). **New record for Oman.****Notes:** The specimens of *Nanophyes* from UAE is not identified to species level; due to the systematics of this widespread genus, which are hard to differentiate (Magnano et al. 2009). The specimen was collected from flowers of *Tamarix* (Tamaricaceae). We believe this species reproduces on flowers of *Tamarix* due to the high number of *Nanophyes* found in this plant from different localities in northern Oman.**Curculionidae Latreille, 1802****Conoderinae Schönherr, 1833****Baridini Schönherr, 1836***Aegyptobaris* Pic, 1899*Aegyptobaris arcithorax* (Pic, 1899) Fig. 7**Specimens examined:** Al Mudhaibi, Samad Ashan, 22.827N 58.151 E, 1 ♀, 3.v.2019, handpicking, leg. A. Al-Jahdhami.**Distribution:** Egypt (Hustache 1938) and UAE (Magnano et al. 2009). **New record for Oman.****Notes:** Larvae of *A. arcithorax* induce galls on stems of *Portulaca oleracea* (Magnano et al. 2009). This member of Portulacaceae is widespread across Oman.**Neosharpiini Hoffmann, 1956***Eumycterus* Schönherr, 1838*Eumycterus albosquamulatus* Boheman, 1838 Fig. 8**Specimen examined:** Al Mudhaibi, Samad Ashan, 22.827N 58.151 E, 1 ♀, 3.v.2019, handpicking, leg. A. Al-Jahdhami.**Distribution:** Afghanistan, Algeria, Cyprus, Ethiopia, Greece, Iran, Iraq, Jordan, Lebanon, Syria, Tunisia, Turkey, Turkmenistan, Uzbekistan (Normand 1937; Hustache 1938; Zumpt 1938; Voss 1959; Korotyaev2002) and UAE (Magnano et al. 2009). **New record for Oman.****Notes:** We collected this specimen from wild vegetation in a wadi habitat near date palm gardens.**Cossoninae Schönherr, 1825****Proecini Voss, 1956***Proeces* Schönherr, 1838*Proeces filum* (Marshall, 1933)**Specimens examined:** Northern Oman (no precise location).**Distribution:** Democratic Republic of Congo and UAE (Magnano et al. 2009). **New record for Oman.****Notes:** *Proeces filum* breeding inside dead petioles of oil palm *Elaeis guineensis* (Arecaceae) and it is strongly considered to have been introduced into the UAE in conjunction with the cultivation of that plant (Magnano et al. 2009). We found this species on a sticky trap accidentally hung on date palm (*Phoenix dactylifera*) fronds for dubas bug monitoring. Unfortunately, collection details were not fully documented at the time. This is the second report of this introduced species in Arabian Peninsula. We believe it is reproducing on date palm due to the similarity of the two plant host family.**Curculioninae Latreille, 1802****Rhamphini Rafinesque, 1815***Rhamphus* Clairville, 1798*Rhamphus micros* Colonnelli, 2009**Specimen examined:** Alkhoudh, Oman Botanical Garden, 23.559N 58.129E, 1 ♀?, 18.ix.2018, Light trap, leg. Asma Al-Jaradi.**Distribution:** UAE (Magnano et al. 2009). **New record for Oman.****Notes:** This species is previously known only from UAE, collected by beating branches of *Acacia tortilis* (Fabaceae). Larvae biology shows *Rhamphus* species are leafminers, and their small size is most probably an adaptative response to the selective pressure in extremely dry climates (Magnano et al. 2009). This specimen was collected by light trap from Oman Botanical Garden. There are several species of *Acacia* grow in the garden, but the *Acacia tortilis* is the most abundant.**Smicronychini Seidlitz, 1891***Sharpia* Tournier, 1873*Sharpia sabulicola* Colonnelli, 2009 Fig. 9**Specimen examined:** Al Mudhaibi, Samad Ashan, 22.856N 58.122E, 1 ♀, 25.v.2020, attracted to light, leg. A. Al-Jahdhami.**Distribution:** UAE (Magnano et al. 2009). **New record for Oman.****Notes:** This species was previously only known from UAE from the base of grazed *Convolvulus prostratus* (Convolvulaceae), growing on sandy dunes (Magnano et al. 2009).*Smicronyx* (*Smicronyx*) *rufipennis* Tournier, 1874 Fig. 10**Specimen examined:** Al Mudhaibi, Samad Ashan, 22.856N 58.122E, 1 ♀, 25.v.2020, hand picking, leg. A. Al-Jahdhami.**Distribution:** Northern Africa, Sudan, Camerun, Congo (Hoffmann 1965) and UAE (Magnano et al. 2009). **New record for Oman.****Notes:** All members of *Smicronyx* of the nominotypical subgenus whose biology is known live on Cuscutaceae, and just a few of them live on Gentianaceae, as most probably develops on *Cuscuta planiflora* in UAE (Magnano et al. 2009). We collected this specimen from date palm gardens, which the *Cuscuta planiflora* is common.**Entiminae Schönherr, 1823****Cyphicerini Lacordaire, 1863***Amblyrhinus* Schönherr, 1826*Amblyrhinus cylindricollis* Magnano, 2009 Fig. 11**Specimen examined:** Alkhoudh, Oman Botanical Garden, 23.559N 58.129E, 1 ♀?, 18.ix.2018, Light trap, leg. Asma Al-Jaradi.**Distribution:** UAE (Magnano et al. 2009). **New record for Oman.****Notes:** This species is described from UAE and the host plant is unknown. We observed this species on the branches of *Acacia tortilis* (Fabaceae), but we are not certain this was the host plant.**Cyphicerini Lacordaire, 1863***Myllocerus* Schönherr, 1823*Myllocerus undecimpustulatus* Faust, 1891 Fig. 12**Specimen examined:** Alkhoudh, Oman Botanical Garden, 23.559N



Figs. 1-15. Habitus of Curculionoidea: 1. *Araecerus* sp.; 2. *Cylindroides bifasciatus* (Quedenfeldt, 1887); 3. *Orfilaia arabica* (De Muizon, 1954); 4. *Hoplopodapion tibesticola* (Alonso-Zarazaga, 1983); 5. *Squamapion* sp.; 6. *Nanophyes* sp.; 7. *Aegyptobaris arctithorax* (Pic, 1899); 8. *Eumycterus albosquamulatus* Boheman, 1838; 9. *Sharpia sabulicola* Colonnelli, 2009; 10. *Smicronyx* (*Smicronyx*) *rufipennis* Tournier, 1874; 11. *Amblyrhinus cylindricollis* Magnano, 2009; 12. *Myllocerus undecimpustulatus* Faust, 1891; 13. *Cosmogaster cordofanus* (Fåhræus, 1842); 14. *Hypolixus nubilosus* (Boheman, 1836); 15. *Microlarinus irregularis* Colonnelli, 2009.

58.129E, 1♀, 18.ix.2018, Light trap, leg. Asma Al-Jaradi.

**Distribution:** India, Bangladesh, Pakistan (Ramamurthy & Ghai 1988) and UAE (Magnano et al. 2009). **New record for Oman.**

**Notes:** A polyphagous weevil, which occasionally damages cultivated economic crops or ornamental plants (Ramamurthy & Ghai 1988). We found this species in Oman Botanical Garden and a mango garden. Certainly, it is a pest on several plants in Oman.

### Lixinae Schönherr, 1823

#### Cleonini Schönherr, 1826

*Cosmogaster* Faust, 1904

*Cosmogaster cordofanus* (Fåhræus, 1842) Fig. 13

**Specimens examined:** Al Mudhaibi, Samad Ashan, 22.827N 58.151 E, 2♀, 25.v.2020, handpicking, leg. A. Al-Jahdhami.

**Distribution:** Saudi Arabia, Sudan, Djibouti, Ethiopia, Niger, Senegal (Faust 1904; Hustache 1925; Csiki 1934; Marshall 1950) and UAE (Magnano et al. 2009). **New record for Oman.**

**Notes:** This species is found mostly in cultivated areas, and seems to be polyphagous.

#### Lixini Schönherr, 1823

*Hypolixus* Desbrochers des Loges, 1898

*Hypolixus nubilosus* (Boheman, 1836) Fig. 14

**Specimens examined:** Al Mudhaibi, Samad Ashan, 22.827N 58.151 E, 1♂ 1♀, 25.v.2020, handpicking and light trap, leg. A. Al-Jahdhami.

**Distribution:** Egypt, Jordan, Syria, Iraq, Sudan, Cyprus, Ethiopia, Chad, Niger, Senegal, Togo, Congo (Csiki 1934; Marshall 1950) and UAE (Magnano et al. 2009). **New record for Oman.**

**Notes:** This species was attracted to a light trap and was found on the branches of *Acacia tortilis* (Fabaceae).

*Microlarinus irregularis* Colonnelli, 2009 Fig. 15

**Specimens examined:** Al Mudhaibi, Samad Ashan, 22.827N 58.151 E, 1♂ 2♀, 3.v.2019, handpicking, leg. A. Al-Jahdhami.

**Distribution:** UAE (Magnano et al. 2009). **New record for Oman.**

**Notes:** This species is described from UAE, collected under the prostrate branches of *Tribulus pentandrus* (Zygophyllaceae) (Magnano et al. 2009). We found this species from this same plant host in Oman.

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## Authors' contributions

Ali A. Al-Jahdhami performed species identification, reviewed the literature and wrote the manuscript. All authors performed data collection.

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