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## **A study on darkling beetles (Coleoptera: Tenebrionidae) from south and southeastern Iran**

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**Abstract:** The fauna of four subfamilies of Tenebrionidae (Coleoptera) including, Lagriinae, Pimeliinae, Opatrinae and Tenebrioninae from south and southeastern Iran is studied in this paper. In a total twenty two species from twenty genera were collected and identified.

**Key words:** Coleoptera, Tenebrionidae, Darkling beetle, Fauna, Iran.

### **Introduction**

Darkling beetles (Coleoptera: Tenebrionidae) with more than 15.000 known species are one of the most common members of the order Coleoptera. These insects can be found in desert or semidesert regions all over the world. They burrow under stones, bark and leaf litter. Many are excellent burrowers and can bury themselves in the sand in a flash to escape the scorching sun. The great majority of these insects are scavengers. In nature, they are quite content to feed on dried or rotting plant residue (MEDVEDEV 1968; NEPESOVA 1980; BOUCHARD et al. 2005). The fauna of Iranian Tenebrionidae was poorly studied so far (MODARRES AWAL 1997; GHAHARI et al. 2010a, b). The objective of this paper is faunistic study of four subfamilies of tenebrionids including, Lagriinae, Pimeliinae, Opatrinae and Tenebrioninae from some regions of south and southeastern Iran.

### **Materials and Methods**

The specimens were collected under stones and on the ground by hand and knock down, sweeping of vegetation and pitfall trap methods from the different regions of south and southwestern Iran (including Bushehr, Fars, Hormozgan, Kerman, Sistan & Baluchestan provinces). Subfamilies and tribes were given in phylogenetic order and species were listed alphabetically within each tribe. The information concerning specific name, describer and description date, locality and date of collection, place/ plant on which the species were collected, determinant and number of species (in brackets) was given. The specimens were examined with a stereoscopic binocular microscope. Classification and nomenclature of darkling beetles suggested by WATT (1974), LAWRENCE & NEWTON (1995), IWAN (2001), SOLDATI & SOLDATI (2003) and MATTHEWS & BOUCHARD (2008) have been followed.

## Results

Upon the results of this research totally 22 darkling beetles from 20 genera, 12 tribes and 4 subfamilies were collected from some regions of south and southeastern Iran as the below list:

### Subfamily *L a g r i n a e*

#### Tribe *C o s s y p h i n i*

##### Genus *Cossyphus* OLIVIER 1795

##### *Cossyphus* (s.str.) *tauricus* STEVEN 1829

M a t e r i a l e x a m i n e d : Bushehr province: Brazjan, (1), under stone, May 2006.  
Kerman province: Rafsanjan, (2), October 2006.

#### Tribe *B e l o p i n i*

##### Genus *Centorus* MULSANT 1854

##### *Centorus turcicus* (KASZAB 1959)

M a t e r i a l e x a m i n e d : Kerman province: Sirjan, (1), under stone, October 2006.

### Subfamily *P i m e l i i n a e*

#### Tribe *T e n t y r i n i*

##### Genus *Calyptopsis* SOLIER 1835

##### *Calyptopsis capnisiformis* REITTER 1903

M a t e r i a l e x a m i n e d : Fars province: Lar, (1), November 2004.

##### Genus *Dailognatha* ESCHSCHOLTZ 1829

##### *Dailognatha crenata* REICHE ET SAULCY 1857

M a t e r i a l e x a m i n e d : Sistan & Baluchestan province: Khash, (1), May 2005.

##### Genus *Tentyria* LATREILLE 1802

##### *Tentyria wiedemanni* MENETRIES 1838

M a t e r i a l e x a m i n e d : Fars province: Jahrom, (1), on the ground, May 2008.

**Tribe S t e n o s i n i**

**Genus *Stenosis* HERBST 1799**

***Stenosis sulcata* MILLER 1861**

M a t e r i a l e x a m i n e d : Bushehr province: Brazjan, (1), under stone, May 2006.

**Tribe P i m e l i i n i**

**Genus *Pachyscelis* SOLIER 1836**

***Pachyscelis musiva* MENETRIES 1832**

M a t e r i a l e x a m i n e d : Sistan & Baluchestan province: Zabol, (2), on the ground,  
November 2007.

**Genus *Pimelia* FABRICIUS 1775**

***Pimelia (Eurypimelia) testudo* KRAATZ 1865**

M a t e r i a l e x a m i n e d : Hormozgan province: Haji-Abad, (1), March 2005.

***Pimelia (Eurypimelia) timarchoides* MENETRICS 1836**

M a t e r i a l e x a m i n e d : Fars province: Jahrom, (1), on the ground, May 2008.

**Genus *Trachyderma* LATREILLE 1829**

***Trachyderma lima* (PETAGNA 1819)**

M a t e r i a l e x a m i n e d : Fars province: Darab, (1), April 2007.

**Subfamily O p a t r i n a e**

**Tribe D e n d a r i n i**

**Genus *Dendarus* DEJEAN 1821**

***Dendarus (Pandarinus) armeniacus* BAUDI 1876**

M a t e r i a l e x a m i n e d : Kerman province: Kahnooj, (2), on the ground, November 2008.

***Dendarus (Pandarinus) dalmatinus* GERMAR 1824**

M a t e r i a l e x a m i n e d : Hormozgan province: Minab, (2), March 2005.

**Tribe P e d i n i n i**

**Genus *Colpotus* MULSANT & REY 1853**

***Colpotus sulcatus asiaticus* KOCH 1944**

M a t e r i a l e x a m i n e d : Sistan & Baluchestan province: Saravan, (1), on the ground, October 2007.

**Genus *Pedinus* LATREILLE 1796**

***Pedinus* (s.str.) *quadratus* BRULLÉ 1832**

M a t e r i a l e x a m i n e d : Kerman province: Rafsanjan, (1), on the ground, October 2006.

**Tribe O p a t r i n i**

**Genus *Lobodera* MULSANT & REY 1859**

***Lobodera* (*Penthomegus*) *iners* MÉNÉTRIÉS 1832**

M a t e r i a l e x a m i n e d : Fars province: Darab, (1), on *Astragalus* sp., April 2007.

**Genus *Opatroides* BRULLÉ 1832**

***Opatroides curtulus* FAIRMAIRE 1892**

M a t e r i a l e x a m i n e d : Sistan & Baluchestan province: Saravan, (1), on weeds, October 2007

**Genus *Opatrum* FABRICIUS 1775**

***Opatrum* (s.str.) *sabulosum* (LINNAEUS 1761)**

M a t e r i a l e x a m i n e d : Bushehr province: Brazjan, (1), under stone, May 2006. Kerman province: Kahnooj, (2), on weeds, November 2008.

**Subfamily T e n e b r i o n i n a e**

**Tribe B l a p t i n i**

**Genus *Blaps* FABRICIUS 1775**

***Blaps jeannei* FERRER & SOLDATI 1999**

M a t e r i a l e x a m i n e d : Kerman province: Kerman, (2), under stone, October 2008.

### **Tribe Helopini**

#### **Genus *Probaticus* SEIDLITZ 1896**

##### ***Probaticus (Pelorinus) corrugatus* SEIDLITZ 1896**

Material examined: Fars province: Eghlid, (3), on *Laurus* sp., April 2008.

#### **Genus *Raiboscelis* ALLARD 1876**

##### ***Raiborcelis coelestinus* (WALTL 1838)**

Material examined: Sistan & Baluchestan province: Nikshahr, (1), October 2005.  
Kerman province: Sirjan, (2), October 2006.

### **Tribe Cylindronotini**

#### **Genus *Cylindronotus* FALDERMANN 1837**

##### ***Cylindronotus (Odocnemis) tuberculiger* REICHE 1857**

Material examined: Sistan & Baluchestan province: Nikshahr, (2), on the ground,  
November 2007.

### **Tribe Tribolini**

#### **Genus *Tribolium* MACLEAY 1825**

##### ***Tribolium (Eusomostene) confusum* JACQUELIN DE VAL 1868**

Material examined: Kerman province: Kahnooj, (2), light trap, November 2008.

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### **Zusammenfassung**

In vorliegender Studie wurde die Fauna von 4 Unterfamilien von Tenebrionidae (Coleoptera) einschließlich Lagriinae, Pimeliinae, Opatrinae und Tenebrioninae aus dem südlichen und südöstlichen Iran untersucht. Insgesamt konnten 22 Arten aus 20 Gattungen nachgewiesen werden.

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