

## ARTIGO / ARTÍCULO / ARTICLE

# Contribution to the knowledge of the *Globicornis* Latreille, 1829 species (Coleoptera: Dermestidae: Megatominae) from Socotra Island (Yemen).

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**Abstract:** All based on materials from Socotra Island (Yemen), *Globicornis (Socotracornis) subgen. nov.*, *Globicornis (Socotracornis) fallax sp. nov.* and *Globicornis (Globicornis) boswelliae sp. nov.*, are described, illustrated and compared with similar genera and subgenera.

**Key words:** Coleoptera, Dermestidae, Megatominae, *Globicornis*, *Socotracornis subgen. nov.*, Taxonomy, new subgenus, new species, Yemen, Socotra Island.

**Resumen:** Contribución al conocimiento de las especies del género *Globicornis* Latreille, 1829 (Coleoptera: Dermestidae: Megatominae) de la isla de Socotra (Yemen). A partir de material recogido en la isla de Socotra (Yemen), se describen *Globicornis (Socotracornis) n. subgen.*, *Globicornis (Socotracornis) fallax n. sp.* y *Globicornis (Globicornis) boswelliae n. sp.*, y se ilustran y comparan con géneros y subgéneros similares.

**Palabras clave:** Coleoptera, Dermestidae, Megatominae, *Globicornis*, *Socotracornis n. subgen.*, Taxonomía, nuevo subgénero, nuevas especies, Yemen, Socotra.

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## Introduction

The family Dermestidae (Coleoptera) currently contains 1480 species and subspecies worldwide, with 25 species and 7 species known so far from Yemen and Socotra Island, respectively (Háva 2013). The present study is based on dermestid material deposited in the National Museum, Prague. The specimens were recently collected by a Czech expedition to Socotra Island.

## Material and methods

The size of the beetles or of their body parts can be useful in the species recognition and thus, the following measurements were made (in mm):

total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.  
elytral width (EW) - maximum linear transverse distance.

Separate labels are indicated by a slash (/).

Abbreviations:

JHAC: Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-west, Czech Republic.

NMPC: National Museum, Prague, Czech Republic.

## Results

### Subfamily Megatominae

#### Genus *Globicornis* Latreille, 1829

#### Subgenus *Socotracornis* subgen. nov.

**Type species:** *Globicornis (Socotracornis) fallax* sp. nov. (by monotypy).

#### Description.

Body very small, oval TL 1.6-1.9 EW 0.8-1.1 (Fig. 1), head and pronotum unicolorous, elytral cuticle black with brownish-orange fasciae covered by whitish recumbent very narrow scales with intermixed erect, black setation, ventral surfaces covered by whitish setation. Antennae brown with white setae, consisting of 10 antennomeres, terminal antennomere flat and large (Fig. 2). Male genitalia as in Fig. 3.

**Differential diagnosis.** The new subgenus belongs to the "genera group I" (Háva 2004) and is similar to the genera *Globicornis* Latreille, 1829, *Turcicornis* Háva, 2000 and *Dearthrus* LeConte, 1861, but differs from them by the characters mentioned below. The new subgenus differs from the genus *Orphinus* Motschulsky, 1858 and *Thaumaglossa* Redtenbacher, 1867 by the structure of the antennae: the antennae consist of 10 antennomeres in new subgenus and 11 antennomeres in *Thaumaglossa* Redtenbacher, 1867 and *Orphinus* Motschulsky, 1858.

- |       |  |   |
|-------|--|---|
| 1(4)  | Antennae with 9 antennomeres.  |   |
| 2(3)  | Cuticle bicolorous; elytra with red or orange fasciae or patterns (Palearctic) .....                                     | <i>Globicornis</i> subgenus <i>Pseudomesalia</i> Ganglbauer, 1900 |
| 3(2)  | Cuticle unicolorous; elytra without fasciae or patterns; body narrow (Nearctic) .....                                    | <i>Dearthrus</i> LeConte, 1861                                    |
| 4(1)  | Antennae with 10 antennomeres.   |   |
| 5(10) | Antennal club formed by 3 antennomeres .....   | <i>Globicornis</i> Latreille, 1829                                |
| 6(7)  | Terminal antennomere circular or oval, antennomere IX broad (Palearctic) .....   | <i>Globicornis</i> (s. str.) Latreille, 1829                      |
| 7(6)  | Terminal antennomere large, very flat, oval or slightly triangular.  |   |
| 8(9)  | Body covered by setation; body large, elytra unicolorous; antennomere IX broad (Palearctic) .....                        | <i>Globicornis</i> subgenus <i>Hadrotoma</i> Erichson, 1848       |
| 9(8)  | Body covered by whitish recumbent very narrow scales; body small, elytra bicolorous; antennomere IX narrow (Yemen) ..... | <i>Globicornis</i> subgenus <i>Socotracornis</i> subgen. nov.     |
| 10(5) | Antennae pectiniform, without distinct antennal club (Turkey) .....  | <i>Turcicornis</i> Háva, 2000                                     |

**Etymology.** The compound name is derived from the name of Socotra Island and the ending *-cornis* marking its affinity to the genus *Globicornis*. Masculine gender.

*Globicornis (Socotracornis) fallax* sp. nov.

(Figs. 1-3)

**Type material.** Holotype (♂) labelled: "Yemen, Socotra Island, Aloove area, Aloove vill. Env., *Jatropha unicostata* shrubland, with *Boswellia elongata* trees, 19-20.vi.2012, 12°31,2' N, 54°07,4' E, 221 m." / "Socotra expedition 2012, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg.", (NMPC). Paratype (♂): "Yemen, Socotra Isl., N., Di Lishe beach, 20 m, 2.ii.2010, L. Purchart leg.", (JHAC). Type specimens were labelled with red, printed label bearing the text as follows: "HOLOTYPE (or PARATYPE, respectively) *Globicornis (Socotracornis)* subgen. nov. *fallax* sp. nov. J. Háva det. 2013".

**Description.**

**Male.** Body small, TL 1.6-1.9 EW 0.8-1.1, oval (Fig. 1). Head and pronotum unicolorous, elytral cuticle black with brownish-orange fasciae covered by whitish recumbent very narrow scales with intermixed erect, black setation on black area, ventral surfaces covered by whitish setation. Head coarsely punctate with whitish recumbent very narrow scales. Palpi brown; pubescence on mentum denser. Eyes very large with brown setae, with median margin broadly and deeply emarginate at about anterior 1/3. Ocellus on front present. Antennae consisting of 10 antennomeres, antennomeres I-VIII brown, IX-X dark brown, with white setae, flat and large (Fig. 2). Pronotum on the disc punctate like head, densely foveolate posteriorly, with whitish recumbent very narrow scales. Antennal cavity completely open and occupying entire hypomeron. Scutellum triangular without pubescence. Elytra finely punctate, humeri with one large bump with coarse punctures, elytral cuticle black with brownish-orange fasciae covered by whitish recumbent very narrow scales with intermixed erect, black setation on black area. Legs brown, with white setae. Mesosternum coarsely punctate laterally, otherwise finely punctate, covered by white, short, recumbent pubescence. Abdominal sternites brown with short, recumbent, white pubescence. First visible abdominal sternite with distinct oblique discal striae. Male genitalia as in Fig. 3.

**Female.** Unknown.

**Differential diagnosis.** See the subgenus diagnosis.

**Etymology.** The specific epithet is the Latin adjective *fallax* (=fallacious, misleading).

**Subgenus *Globicornis* Latreille, 1829**

*Globicornis (Globicornis) boswelliae* sp. nov.

(Figs. 4-5)

**Type material.** Holotype (♀): "Yemen, Socotra Island, Dixam plateau, Wadi Dirhor, open woodland with *Boswellia ameero* trees, 340 m, 12°28.0' N 54°00.5' E, 15+20.vi.2012" / "Socotra expedition 2012, J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart leg.", (NMPC). The type specimen was labelled with red, printed label bearing the text as follows: "HOLOTYPE *Globicornis (Globicornis) boswelliae* sp. nov. J. Háva det. 2013".

**Description.**

**Female.** Body TL 2.4 EW 1.4, tricolorous (Fig. 4). Head black with orange-brown frontal area; finely punctate, with long, yellow pubescence. Palpi brown; pubescence on mentum denser. Eyes very large with brown setae. Ocellus on front present. Antennae light brown with yellow, erect setae, with 10

antennomeres, antennal club with 3 antennomeres, terminal antennal segment large, circular (Fig. 5). Pronotum orange-brown, punctate on the disc like head, densely foveolate posteriorly, with long yellow, recumbent pubescence. Scutellum shining, triangular without pubescence. Elytra finely punctate, with long, white and black, recumbent pubescence; cuticle dark brown; each elytron with one transverse yellowish fascia anteriorly and yellowish apical part covered by yellow pubescence (Fig. 4). Legs light brown, with yellow, short pubescence. Mesosternum coarsely punctate laterally, otherwise finely punctate, covered by yellow, short, recumbent pubescence. Pygidium brown, coarsely punctate with short, recumbent, yellow pubescence. Abdominal sternites with short, recumbent, yellow pubescence.

**Male.** Unknown.

**Differential diagnosis.** The new species differs from *Globicornis (Socotracornis) fallax* sp. nov. by the colour and setation of body; from other species belong to the nominotypical subgenus *Globicornis* differs by the colour patterns on elytrae, bicolorous head and structure of antennae.

**Etymology.** Named according to the tree *Boswellia ameero* Balfour (Burseraceae).

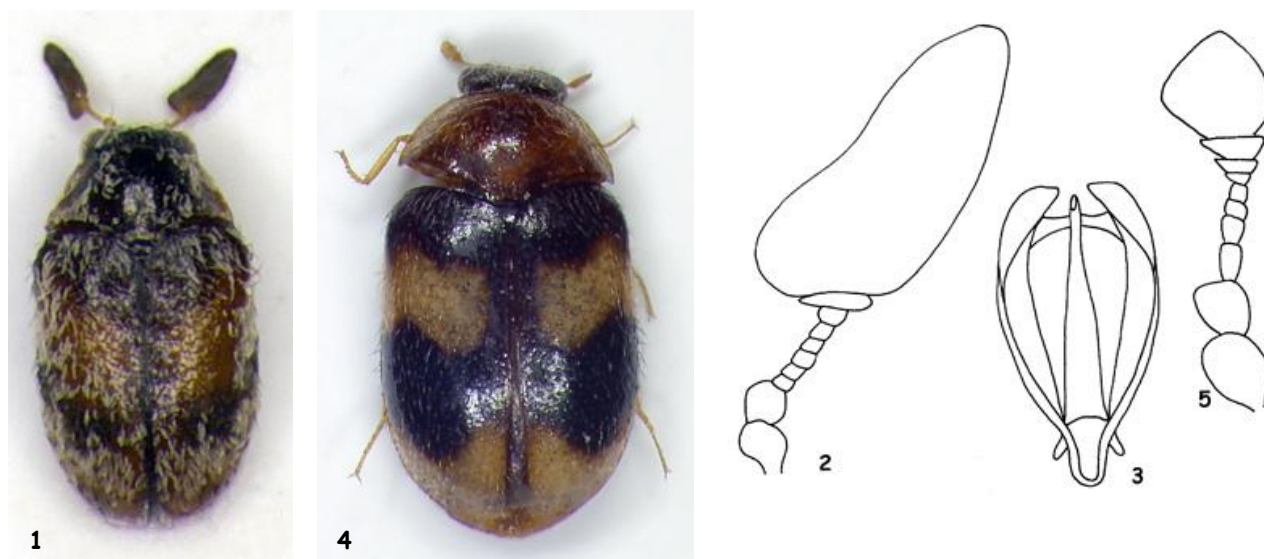
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**Figs. 1-3.** - *Globicornis (Socotracornis) fallax* sp. nov.: 1. - Habitus, dorsal aspect; 2. - Antenna of male; 3. - Aedeagus.  
**Figs. 4-5.** - *Globicornis (Globicornis) boswelliae* sp. nov.: 4. - Habitus, dorsal aspect; 5. - Antenna of female.