

A NEW LONGHORN BEETLE FROM SOCOTRA ISLAND  
(YEMEN)  
(Coleoptera, Cerambycidae)

PIETRO LO CASCIO (\*) and FLAVIA GRITA (\*)

The genus *Iranobrium* Villiers, 1967 belongs to the tribe Oabriini (Villiers 1967) and includes five species, mainly distributed in the Arabian Peninsula and Iran: *I. davatchii* Villiers, 1967 from southern Iran (Hormozgān region); *I. brancuccii* Holzschuh, 1993 and *I. buettikeri* Holzschuh, 1993, respectively, from south-west and central-west Saudi Arabia; *I. abbreviatum* Adlbauer, 2004, from Socotra Island (Yemen). Another species, *I. schmidi* Holzschuh, 1991, described from Thailand, represents the easternmost station and a remarkable disjunction in the geography of this genus. Most of these species are known just from few specimens (Holzschuh 1991, 1993; Adlbauer 2004). During a journey at Socotra Island, we collected a female of *Iranobrium* belonging to a new species, whose description is given in the present paper.

***Iranobrium darwini* n. sp.**

DIAGNOSIS. An *Iranobrium* of medium size, yellowish-ochraceous, winged, with elytra almost entirely covering the abdomen, at first sight closely related to the type-species of the genus, *I. davatchii* Villiers, 1967, but easily recognizable for the shape and length ratio of pronotum. Male unknown.

HOLOTYPE: ♀, Socotra, Wadi Ayheft, 28.II-1.III.2009, P. Lo Cascio & F. Grita leg. Deposited in the Zoological Section of the Natural History Museum of the Florence University, MZUF Coll. n. 14025.

DESCRIPTION. Body length 5.6 mm. Habitus like in fig. 1. Colour yellowish-ochraceous, shiny, with the head slightly darker. Surface smooth,

(\*) Associazione Nesos, Via Vittorio Emanuele, 24 - 98055 Lipari (ME).  
E-mail: plocascio@nesos.org

with extremely fine blond tomentum. Blond small erect setae occur on the fore margin and sides of pronotum, tibiae, tarsi, last sternites, pygidium, and in the upper part of each antennal joint.

Head slightly larger than the elytra on the shoulders, with wrinkled and gathered surface. Frons longitudinally divided; the margin of each lobe slightly darker, getting over the antennal insertion.

Large eyes with coarse facets; from a dorsal view, eyes broader than interocular distance in a ratio as 1 : 2.2. Antennae about one third longer than the body, with scape reaching beyond the fore margin of pronotum; antennal joint 8 reaching the apex of the abdomen. Joints (from the first to the eleventh) in a ratio as 1 - 0.18 - 0.90 - 1 - 1.34 - 1.43 - 1.60 - 1.38 - 1.31 - 1.23 - 1.32. Maxillary palpi long, thin, with the last segment slightly fusiform.

Pronotum dorsally flat, weakly margined both in anterior and posterior sides, with two rounded humped lateral calli. Surface shiny and very granularly densely sculptured. The sides get narrower in the posterior half, and the pronotum is broader than long (1 : 0.9) as well as broader in fore margin than in the hind one (6 : 5). Fore and hind margins are, respectively, straight and scarcely sinuate.

Scutellum small, moderately triangular, tip broadly rounded.

Elytra almost parallel, longer than broader in a ratio as 1 : 2.45, diverging at apex. This latter is narrowed and roundly elongated, reaching completely the third sternite. Surface shiny, irregularly and sparsely punctuate.

Legs long, slender, with femora expanded; the tip of posterior femur reaching the hind margin of elytra. The first segment of hind tarsi is 1.2 longer the whole length the two following segments. Tibiae with small erected setae, progressively denser from the fore to the hind ones.

The first sternite is flattened in the middle, while the second has a weak roundish impression truncated at the posterior margin; both these areas are sparsely covered by erect hairs, short and strongly thickened on their base.

COMPARATIVE NOTES. The new species can be easily distinguished from the other *Iranobrium* occurring in the Turano-Arabian area for the shape of pronotum, slightly broader than long and much more restricted at the base than at the apex. It also differs from *I. abbreviatum* Adlbauer, 2004, the unique species so far recorded on Socotra Island, for the length of elytra, that in this latter are strongly abbreviated. In *I. darwini* n. sp. is



Fig. 1 – *Iranobrium darwini* n. sp. (holotypus ♀): habitus in dorsal and ventral view.

lacking the large velvety tomentose pad on the first and second sternites that characterizes *I. brancuccii* Holzschuh, 1993, *I. buettikeri* Holzschuh, 1993, and *I. schmidi* Holzschuh, 1991.

**BIOLOGY AND DISTRIBUTION.** Biology unknown. The only collected specimen was attracted at light, in a sheltered valley located about 400 m a.s.l. The vegetation of the site consists of semi-evergreen woodland, where *Euphorbia arbuscula* Balf. f., *Boswellia* spp., *Sterculia africana* (Lour.) Fiori, *Jatropha uncostata* Balf. f., *Tamarindus indica* L. and *Ziziphus spina-christi* (L.) Willd. result the most common tree or shrub species. The species seems to be endemic of Socotra Island.

DERIVATIO NOMINIS. In the bicentenary of Charles Darwin's birth, we are glad to dedicate him the new species, as a little homage both for his positive and indisputable influence in the modern way of thinking and for his appreciable work as explorer and researcher of island life.

NOTES. Among the characters indicated in the description of the genus *Iranobrium*, Villiers (1967) included the pronotum slightly longer than broad. The new species differs from the other so far described showing an inverse ratio in sizes of pronotum, trait that could render problematic its placement in this genus. However, all the other morphological characters of *I. darwini* correspond well to the differential ones reported by Villiers (1967) in order to distinguish this genus from the other closely related Obriini: eyes broader than the pronotum and short interocular distance; frons transverse and sulcated, as high as large; lateral calli in the pronotum; elytra shorter than the abdomen, flattened and diverging behind; delicate legs; size of antennal joints; last segment of maxillary palpi fusiform. Moreover, the new species strongly resemble the general habit of the other ones referred to the same genus. Concerning the occurrence of two different species of *Iranobrium* in the same island, it sounds remarkable, considering that the Cerambycidae assemblage of Socotra results less rich compared to other coleopteran families (Wranik 2003; Neumann et al. 2004), even if, for instance, the genus *Sybrinus* Gahan, 1900 includes two (or probably three) different specific and infraspecific endemic taxa (Gahan 1900, 1903; Neumann et al. 2004). Anyway, Socotra is considered a globally significant centre of biological diversity (Di Micco De Santo & Zandri 2004), where high rates of differentiation within the same genus are known for several faunal and floristic groups, such as some reptiles (Gekkonidae and Leptotyphlopidae), the land snails of genus *Achatinelloides*, or the frankincense trees belonging to *Boswellia* (Thulin & Al-Gifri 1998; Neubert 2005; Rösler & Wranik 2006).

ACKNOWLEDGEMENTS. We would like to thank Dr. Karl Adlbauer (Landesmuseum Joanneum, Graz), who gives us useful information and suggestions for the correct identification at generic rank of our material. We are also sincerely grateful to Prof. Bruno Massa (University of Palermo) for his "endless work" providing us important literature on *Iranobrium*.

#### RIASSUNTO

*Un nuovo cerambicide dell'isola di Socotra (Yemen) (Coleoptera, Cerambycidae).*

Viene descritto *Iranobrium darwini* n. sp. dell'isola di Socotra. La nuova specie si differenzia dalle altre del genere principalmente per le proporzioni del pronoto, leggermente più largo che lungo, e per l'assenza di un'area fortemente tomentosa nel primo e nel secondo sternite.

#### SUMMARY

*Iranobrium darwini* n. sp. from Socotra Island is described and compared with the other species of the genus. The main differences are in the shape of pronotum, slightly broader than long, and in the absence of velvety tomentose pad on first and second sternites.

#### REFERENCES

- ADLBAUER, K. 2004. A new species of *Iranobrium* (Coleoptera: Cerambycidae: Oabriini) from Socotra Island. *Fauna of Arabia*, 20: 431-433.
- DI MICCO DE SANTO, T. & E. ZANDRI. 2004. Main features of the Socotra Archipelago and ongoing conservation efforts. *Fauna of Arabia* 20: 9-26.
- HOLZSCHUH, C. 1991. 63 neue Bockkäfer aus Asien, vorwiegend aus China und Thailand (Coleoptera: Disteniidae und Cerambycidae). *FBVA Berichte, Schriftenreihe der Forstlichen Bundesversuchsanstalt Wien*, 60: 5-71.
- HOLZSCHUH, C. 1993. Cerambycidae (Coleoptera) of Saudi Arabia: Part II, Prioninae and Cerambycinae. *Fauna of Saudi Arabia*, 13: 110-129.
- GAHAN, C. J. 1900. The Expedition to Sokotra. XI. Description of the new genera and species of Coleoptera. *Bulletin of the Liverpool Museums*, 3(1): 8-13.
- GAHAN, C. J. 1903. Arthropoda. Insecta: Coleoptera. I. The Beetles of Sokotra, pp. 263-288. In: H. O. Forbes (ed.). *The Natural History of Sokotra and Abd-el-Kuri. A Monograph of the Islands. Special Bulletin of the Liverpool Museums, Liverpool*.
- NEUBERT, E. 2005. The continental malacofauna of Arabia and adjacent areas, V. Revision of the family Cerastidae in the Soqotran Archipelago, II: The genera *Achatinelloides* G. Nevill 1878 and *Microscintilla* Neubert 2002, with description of a new genus and species (Gastropoda: Pulmonata: Cerastidae). *Archiv für Molluskenkunde*, 134(2): 223-259.
- NEUMANN, V., K. GEDEON & K. ADLBAUER. 2004. Bockkäferfauna (Coleoptera, Cerambycidae) von Sokotra (Jemen). *Mitteilungen der Deutsche Gesellschaft für Allgemeine und angewandte Entomologie*, 14: 137-140.
- RÖSLER, H. & W. WRANIK. 2006. The reptiles of the Socotra archipelago with special remarks on the slender blind snakes (Leptotyphlopidae: *Leptotyphlops*), pp. 125-128. In: M. Vences, J. Köhler & W. Böhme (eds.). *Herpetologia Bonnensis II. Proceedings of the 13<sup>th</sup> Congress of the Societas Europaea Herpetologica*. Bonn.
- THULIN, M. & A. AL-GIFRI. 1998. The Frankincense Trees (*Boswellia* spp.) of Soqotra. 1, pp. 107-113. In: H.J. Dumont (ed.). *Proceedings of the First International Symposium on Soqotra Island: Present and Future*. United Nations Publ., New York.
- VILLIERS, A. 1967. Contribution a la faune de l'Iran. I. Coléoptères Cerambycidae. *Annales de la Société Entomologique de France*, 3(2): 327-379.
- WRANIK, W. 2003. *Fauna of the Socotra Archipelago. Field guide*. Universität Rostock, Rostock, 542 pp.

