

SHORT COMMUNICATION

Luria lurida (Gastropoda), a new record for the Pleistocene of Santa Maria, Azores

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The cypraeid gastropod *Luria lurida* (Linnaeus, 1758) is reported for the first time from Pleistocene deposits at the Prainha site, on the island of Santa Maria, Azores archipelago.

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INTRODUCTION

Despite the dominant volcanic nature of the islands and its young geological history, pre-Holocene fossiliferous deposits occur on Santa Maria Island and in the Formigas' islets. Most of the existing literature on the Azorean fossil record, starting from mid 19th century, focuses on the Upper Miocene to Lower Pliocene fossils of marine molluscs from Santa Maria. However, fossils of Pleistocene age are also present (Ávila et al. 2002).

During the last decade of the 20th century, a renewed interest arose for studying these Pleistocene fossil assemblages (García-Talavera 1990; Callapez & Soares 2000; Ávila et al. 2002). This short communication, reporting the occurrence of *Luria lurida* from the Prainha site, is the result of the ongoing research of the

Pleistocene fossil record on Santa Maria, which started in 1998. As a result of this effort, four workshops "Palaeontology in Atlantic Islands" took place on Santa Maria island, in 2002, 2005, 2006 and 2007.

MATERIAL AND METHODS

During the 3rd Workshop "Palaeontology in Atlantic Islands" expedition, held at Santa Maria, from 15 to 25 June, 2006, specimens from the Prainha, Praia do Calhau and Lagoinhas Pleistocene outcrops were collected. For more details, general stratigraphical setting, graphic columnar section, and additional references see Ávila et al. (2002; in press a, b) and Ávila (2005). All samples were given a sequential code number and deposited at the Department of Biology of the

University of the Azores (Ponta Delgada, São Miguel Island). A complete list of the samples is available from the first author (S. Ávila).
Abbreviations: DBUA-F – fossil reference collection of the Department of Biology of the University of the Azores (Ponta Delgada, São

Miguel Island, Azores); DBUA – reference collection of the Recent marine molluscs of the Azores, housed at the Department of Biology of the University of the Azores (Ponta Delgada, São Miguel Island, Azores).

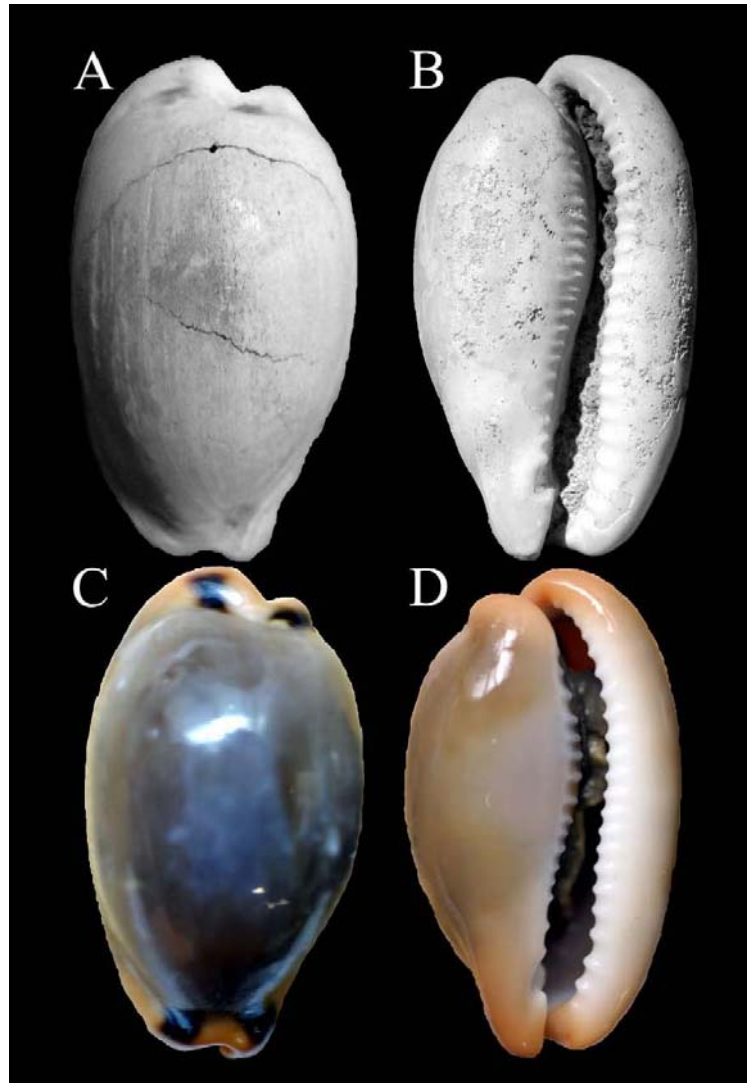


Fig. 1. A, B – *Luria lurida* (Linnaeus, 1758), Pleistocene, DBUA-F 323; Praia do Calhau, Santa Maria Island, basal conglomerate (unit A₁ of Ávila *et al.* 2002), coll. F. García-Talavera, 16-06-2006; Dimensions: 5.3 x 3.0 cm. C, D – *Luria lurida*, Recent, DBUA 835; Ilhéu de São Roque, São Miguel Island, 3-7 m depth, night dive, coll: Sérgio Ávila, 10-06-2001; Dimensions: 4.4 x 2.4 cm.

RESULTS

Material:

A single specimen of *Luria lurida* (Linnaeus, 1758) (Fig. 1), (5.3 x 3.0 cm), was collected by F. García-Talavera at Praia do Calhau (Lat 36°57'06,50"N, Long 25°06'13,92"W), on 16 of June 2006, at the basal conglomerate unit A₁ (Ávila et al. 2002) and labelled as DBUA-F 323 (Fig. 1 A, B). The specimen was located at about 4 cm distance from the B₁ unit (Ávila et al. 2002) which consists of poorly consolidated bioclastic white sands. The thickness of the sand unit in the site of collecting of the *Luria lurida* specimen was about 0.8 m.

Description:

Shell smooth, solid, ovate, elongated. Dorsal face convex, ventral face less convex than the dorsal face, bearing denticles along the outer and inner lips. Aperture narrow. The original colour pattern of the shell is still apparent in the fossil in the form of two dark spots at both ends of the shell. These spots are characteristic of *Luria lurida* colour pattern (Fig. 1).

Larval development: Planktotrophic (Ávila 2005).

Habitat:

In the Azores, *Luria lurida* is usually found active at night, under stones or in caves, commonly at depths of 5 to 15 m (Ávila, pers. obs. in several localities in the islands of Pico and São Miguel). Bathymetry: 1-60 m depth (Poppe & Goto 1991).

Present geographical distribution:

Eastern Atlantic coasts, from southern Portugal southwards to Angola, and the Mediterranean. Also found in Madeira, Selvagens, Azores, Canary islands, Cape Verde, Ascension and Saint Helena Islands (see Ávila 2005, for references).

Fossil record:

The occurrence of *Luria lurida* has been reported from the Pleistocene of Porto Santo island (Madeira archipelago) (Gerber et al. 1989: 24), Selvagens islands, (García-Talavera 1978; García-Talavera & Sánchez-Pinto 2001), Canary islands (Lecointre 1966; García-Talavera et al.

1978), Cape Verde (García-Talavera 1999), Mediterranean (Ruggieri & Buccheri 1968; Vazzana 1988) and Gabon (Nicklès 1952). This is the first record for the Pleistocene of the Azores.

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