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First record of *Atlanta selvagensis* de Vera & Seapy, 2006 (Gastropoda: Pterotracheoidea) from the Cape Verde Archipelago, Northeast Atlantic Ocean

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RESUMEN: *Atlanta selvagensis*, molusco heterópodo recientemente descrito a partir de muy pocos ejemplares capturados en una muestra de profundidad en el archipiélago de Salvajes (De Vera & Seapy, 2006), se registra ahora para Cabo Verde. La presente cita amplía el rango de distribución atlántico de esta nueva especie al haberse recogido a una latitud más meridional.

Palabras clave: molusco, gasterópodo, Pterotracheoidea, *Atlanta*, Cabo Verde.

ABSTRACT: The heteropod *Atlanta selvagensis* is recorded for the first time from Cape Verde Archipelago. This species was recently described from a limited number of specimens collected from waters around the Selvagens Islands (de Vera & Seapy, 2006). The present record extends the distribution range of this new species.

Key words: mollusc, gastropod, Pterotracheoidea, *Atlanta*, Cape Verde.

INTRODUCTION

Atlanta selvagensis (de Vera & Seapy, 2006) was recently described from eight specimens collected from three samples during Cruise TFMCBMSV/00 to the Selvagens Islands. Based on the limited number of specimens collected, *A. selvagensis* appears to be an uncommon planktonic species. Subsequently, the first author has examined more

than a hundred of plankton samples, collected from a dozen of cruises to the Macaronesian archipelagos, deposited at the Museum of Natural Sciences of Tenerife (TFMC).

This work extends, for the present time, the geographical range of *A. selvagensis* southeastward from the Selvagens Islands to the Cape Verde Archipelago (Figure 1).

MATERIAL AND METHODS

One specimen of *Atlanta selvagensis* was separated from a sample with code 11C05D-19, collected during Cruise TFMCBMVCV/05 to the Cape Verde archipelago aboard the Oceanographic Vessel “*Pixape*” during June, 2005. The sample was obtained by a vertical haul from 1000 m of depth to the surface, using a modified triple WP-2 net system with 200 μ m mesh net. The sample was fixed in 4% formalin-seawater solution, and transferred after one week to 70% ethanol for long-term storage.

Sample Code	Date	Time (start/end)	Latitude, Longitude	Bottom Depth (m)
11C05D-19	11/Jun/2005	13:03 14:13	15° 58' 45.5'' N 23° 07' 20.8'' W	1158

Table I. Characteristics of the station where the specimen of *A. selvagensis* was collected, during Cruise TFMCBMVCV/05 (see de Vera & Seapy, 2006 for cruise code explanation).

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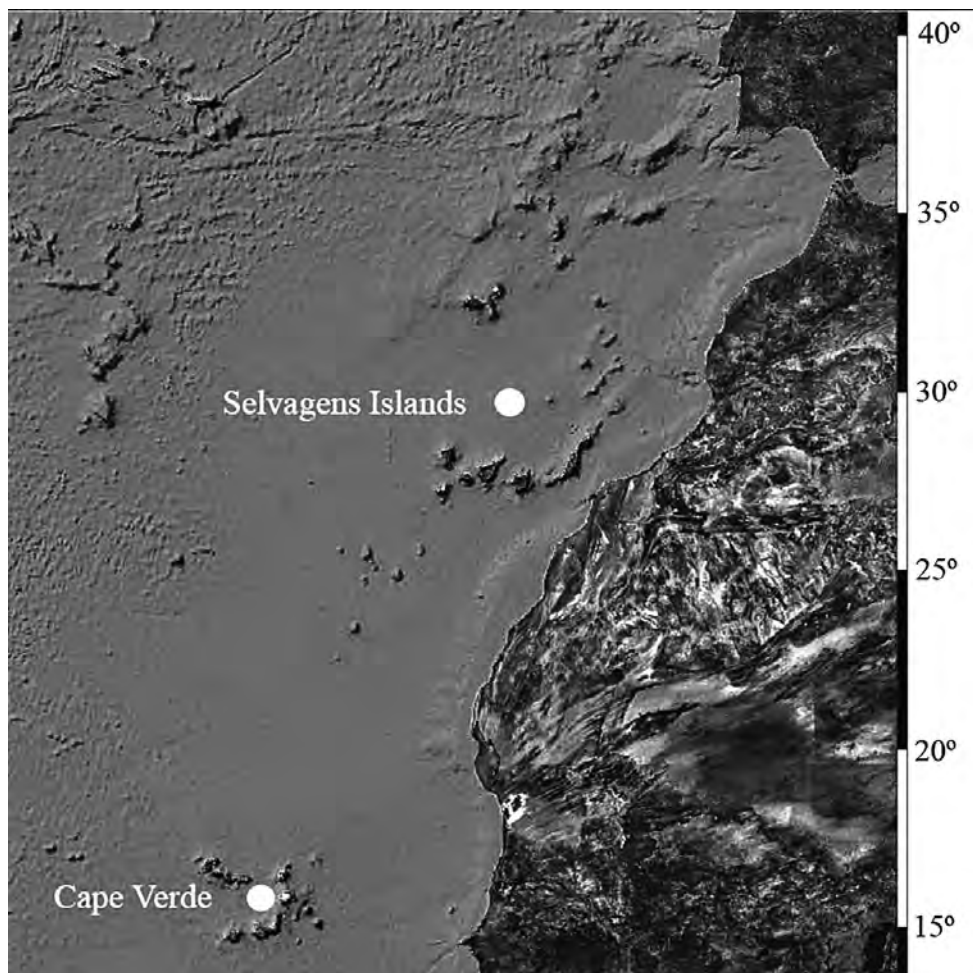


Fig. 1. Actual distribution of *A. selvagensis* in Northeastern Atlantic Ocean. The white dots correspond to the locations where this species has been collected (image modified from Google Earth).

RESULTS AND DISCUSSION

Phylum MOLLUSCA

Class GASTROPODA CUVIER, 1797

Subclass PROSOBRANCHIA MILNE EDWARDS, 1848

Superorder CAENOGASTROPODA COX, 1960

Superfamily PTEROTRACHEOIDEA RAFINESQUE,
1814

Family ATLANTIDAE RANG, 1829

Genus *Atlanta* LESUEUR, 1817*Atlanta selvagensis* de Vera and Seapy, 2006

Specimen small, with a diameter of 0.9 mm. Keel mostly absent and shell partially dissolved (figs. A-B); presumably resulting from the acidity of the formalin fixative. Primary features that distinguish this specimen as *A. selvagensis* are the number of spire whorls (3 and $\frac{3}{4}$; fig. A), the very low, conical spire with incised sutures, the violet pigmentation of the sutures (fig. C-D) and the type of eyes (fig. A). With regard to spiral sculpture on the spire whorls, the first two are smooth, and at the beginning of the third whorl a thin spiral ridge appears near the suture that continues in the first quarter of the whorl. From this point, up to 3 spiral ridges appear, but tend to disappear towards the end of the third whorl, leaving the surface of the fourth whorl smooth.

Further analysis using the SEM -not recommended yet since it is a unique museum collection piece of a scarce species in the world- would allow seeing the complete spiral sculpture of this specimen. The authors didn't remove the operculum for the same reason. Nevertheless, observations of the shell spire using the compound microscope coincide completely with the original description of the species (de Vera & Seapy, 2006).

Despite the examination by the senior author of hundreds of samples deposited in the TFMC, only the one specimen reported here was discovered. More specifically, analysis of planktonic molluscs from the previous cruises to Cape Verde carried out by TFMC in 1998, has not contributed new specimens of *A. selvagensis* (de Vera et al., *in preparation*).

In the original description of *A. selvagensis* (de Vera and Seapy, 2006), noted that "it is not plausible that this species is restricted to the Selvagens archipelago", since the Selvagens Islands are immersed in the Macaronesian biogeographic area (in the descending oriental branch of the Gulf Stream, known as Canary Stream). The hypothesis of its presence at least along the North Atlantic Ocean turns out to be reinforced by the current record.

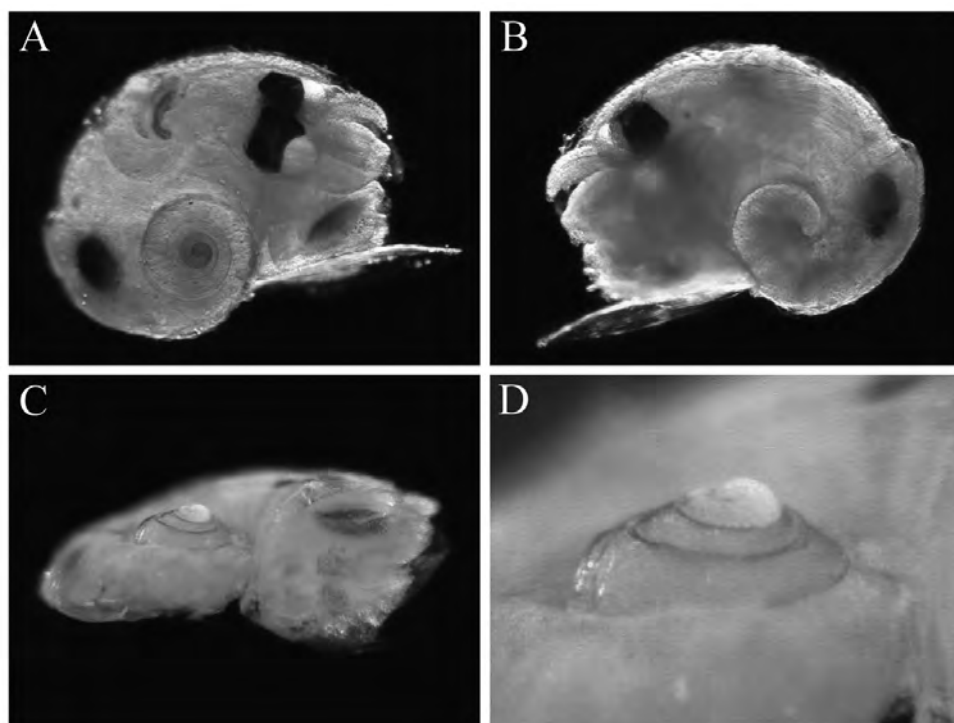


Fig. 2. Details of *Atlanta selvagensis* specimen collected in Cape Verde. A: Right lateral view; B: Left lateral view; C: Apertural view; D: Spire detail.

LITERATURE CITED

- DE VERA, A. & R. R. SEAPY (2006). *Atlanta selvagensis*, a new species of heteropod mollusc from the Northeastern Atlantic Ocean (Gastropoda: Carinarioidea). *Vieraea* 34: 45-54.