

***Lurifax vitreus* Warén & Bouchet, 2001 (Gastropoda, Orbitestellidae), a new record for deep waters of the Tuscan Archipelago (Tyrrhenian Sea, Italy)**

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ABSTRACT

We record a finding of one perfect adult, one young specimen, and other two no-well conserved adults of *Lurifax vitreus* Warén & Bouchet, 2001 (Gastropoda, Orbitestellidae) coming from deep waters of Tuscan Archipelago.

KEY WORDS

Orbitestellidae; *Lurifax vitreus*; Hydrotel vent; Cold Seeps.

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INTRODUCTION

Lurifax vitreus Warén & Bouchet, 2001 was described as a species belonging to the fauna of the resurgence of hot and cold deep sea waters.

The several specimens found came from a very wide distribution area, ranging from the Atlantic ocean ridge hydrothermal vents to the cool "seeps" off New Zealand, with a bathymetry between 850 and 1800 meters (Warén & Bouchet, 2001).

The "cold seep" and "hydrothermal vent" are structures present on the ocean seabeds, supporting biomes completely independent from solar energy. They form as a result of volcanic activity on the ocean floor: the water seeps through cracks in the crust becoming super-heated in contact with magma, being able to reach temperatures of 400 °C, and then goes back getting into the ocean floor (Pérès & Picard, 1964).

In addition to the discoveries that led to the description of *Lurifax vitreus*, we include the findings of a specimen from the coast of Lazio (-600 Terracina: Ardovini & Cossignani (1999, sub *Antimargarita* sp.) and another adult of the same region of Lazio (Smiriglio & Mariottini, 2002) probably coming from the facies CB at a depth of 450-600 meters.

MATERIALS AND METHODS

The shells reported by this note come from the cleaning of commercial fishing nets of trawlers operating in waters off Tuscany in September 2003. The debris was collected at a depth of 470 m.

Examined Material.

Family Orbitestellidae Iredale, 1917

Genus *Lurifax* Warén & Bouchet, 2001

Lurifax vitreus Warén & Bouchet, 2001

Tuscan Archipelago, Capraia Island, 1 adult shell devoid of soft parts, 1 juvenile shell devoid of soft parts, 2 remnants of adult shells.

DISCUSSION AND CONCLUSIONS

In addition to what already reported by the authors on the occurrence of *Lurifax vitreus* in the "Hydrothermal vents and cold seeps" facies and in the White Coral facies (reported as facies CB), we report the discovery of the species in question for the biocenosis of bathyal sludge (reported as bio-



Figure 1. *Lurifax vitreus*, adult specimen, height 4 mm.
 Figure 2. *Lurifax vitreus*, juvenile specimen, height 2.5 mm.

cenosis VB); this assertion is further reflected in the discovery, in the same debris, of species typical of the biocenosis "VB", viz. *Addisonia excentrica* (Tiberi, 1855), *Aporrhais serresianus* (Michaud, 1828), *Dentalium agile* (M. Sars in GO Sars, 1872), *Benthonella tenella* (Jeffreys, 1869), *Abra longicallus* (Chess, 1835).

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