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Occurrence of the Mardi Gras wrasse, *Halichoeres burekae* (Teleostei: Labridae) in the Alacranes Reef, off northern Yucatan Peninsula

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Abstract

The Mardi Gras wrasse, *Halichoeres burekae*, is a planktivorous fish considered to be endemic to the Gulf of Mexico and recently described. It was previously known only from the Flower Gardens Banks National Marine Sanctuary (USA) and Veracruz, (Mexico). We recorded *Halichoeres burekae* (initial female [50–70 mm TL] and terminal male [60–90 mm TL] phases) in the Alacranes Reef, a reef platform located off northern Yucatan Peninsula, southern Gulf of Mexico. This fish is relatively common in shallow (2 m) and deep (25 m) waters in the Alacranes Reef, where it forms small (15 individuals) to large (200 individuals) aggregations. This record represents a range extension for *H. burekae* and indicates a general lack of knowledge about the southern Gulf of Mexico reef fish fauna.

Key words: Reef fish, Mexico, new record, Labroidei, Gulf of Mexico

Introduction

In the Western Atlantic, reef associated fishes of the genus *Halichoeres* comprise at least 14 valid species, five of which were recently described (Randall & Böhlke 1965, Rocha & Rosa 2001, Randall & Lobel 2003, Rocha 2004, Luiz Jr. *et al.* 2009) including one from Belize (*Halichoeres socialis*) and another one from the Western Gulf of Mexico (*Halichoeres burekae*). This latter species was recently described by Weaver & Rocha (2007) from the East Flower Gardens Bank, in the Flowers Gardens Bank National Marine Sanctuary (USA), in the Gulf of Mexico off the coast of Texas. *Halichoeres burekae* was previously collected in the Stetson Bank (northwestern Gulf of Mexico) and photographed in reefs off Veracruz (Mexico), southwestern Gulf of Mexico.

In this work we recorded, through underwater visual censuses conducted for surveying fish spawning aggregations, the occurrence of *Halichoeres burekae* in small and large aggregations from numerous locations and depths in the Alacranes Reef, southern Gulf of Mexico, off northern Yucatan Peninsula.

Materials and methods

Alacranes Reef (22°31’28N, 89°42’44W) is the largest and easternmost reef complex on the Campeche Bank (Fig.1), southern Gulf of Mexico. It is a shallow-water, semi-elliptic reef platform (maximum length and width 27 km and 15 km, respectively) rising above the general surface of the continental shelf from depths of 50 m, and located 135 km off the Yucatan Peninsula of Mexico (Korniker & Boyd 1962, Bonet 1967, Jordán-Dahlgren & Rodríguez-Martínez 2001). The platform includes a long, C-shaped reef which contains a shallow windward side, a deeper and less sharply defined belt of reef growth outlining the leeward margin, and a multitude of “patch” reefs of various shapes and sizes in the enclosed reef lagoon. Prevalent winds come from

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