

Coastal Fishes of São Tomé and Príncipe islands, Gulf of Guinea (Eastern Atlantic Ocean)—an update

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Table of contents

Abstract	2
Introduction	2
Material and methods	2
Results	3
Torpedinidae	3
Dasyatidae	4
Muraenidae	4
Congridae	5
Ophichthidae	6
Ophichthinae indet.	6
Clupeidae	6
Bythitidae	6
Mugilidae	7
Syngnathidae	7
Scorpaenidae	8
Serranidae	8
Apogonidae	10
Epigonidae.....	11
Carangidae	11
Lutjanidae	12
Haemulidae	12
Sciaenidae	13
Monodactylidae	13
Pomacanthidae	14
Chaetodontidae	14
Pomacentridae	14
Labridae	14

Scaridae	15
Ammodytidae	16
Blenniidae	16
Gobiesocidae	17
Callionymidae	17
Gobiidae	17
Eleotridae	21
Sphyraenidae	22
Bothidae	22
Soleidae	22
Cynoglossidae	22
Tetraodontidae	22
Discussion	43
Acknowledgements	45
References	45

Abstract

Here we report 59 new records of shore fishes for São Tomé and Príncipe islands (Gulf of Guinea), Eastern Atlantic Ocean. Ten of these are new species still to be described, including a new genus of a gobiid fish that lives in association with an axiid shrimp. A large proportion of the shore fishes of São Tomé and Príncipe occur on both sides of the Atlantic and many have their sister-species in the western Atlantic. To a lesser degree, there are also affinities to the western Indian Ocean.

Key words: Eastern Central Atlantic, marine biodiversity, reef fish, amphi-Atlantic species

Introduction

Afonso *et al.* (1999) summarized the state of knowledge of the coastal marine fishes of São Tomé and Príncipe; they reported the presence of 185 species. Here we report 59 additional species recorded during an expedition in February 2006 sponsored by the National Geographic Society (principal investigator S.R. Floeter) and two previous expeditions (August 2002, February 2004) by the first author, as well as species caught during two multidisciplinary expeditions sponsored by the California Academy of Sciences in March–April 2001 (see Drewes & Wilkinson 2004) and in April–May 2006. We also include species identified from underwater photos taken by Jean Louis Testori and Pedro Vasconcelos. In addition, we include the information that has appeared on shore fishes from São Tomé and Príncipe since the publication of Afonso *et al.* (1999).

The fish fauna of the archipelago of São Tomé and Príncipe is of special interest because the easterly flowing Equatorial currents (the seasonal Equatorial Counter Currents and the subsurface Equatorial Undercurrent) link the western Atlantic and the eastern Atlantic at this latitude. The marine invertebrate fauna of São Tomé and Príncipe is known to consist of a mix of the two faunal regions (Scheltema 1971, 1995; Laborel 1974; Wirtz 2001, 2003, 2004).

Material and methods

Observations were made while snorkeling or SCUBA diving. Specimens were caught under water or from tide pools with hand nets using quinaldine and the ichthyocide rotenone. A minnow seine was used in river mouths. Additional specimens were obtained from local fishermen, who had caught them with beach seine nets or with hook and line, and from the fish market of São Tomé City.