Article

Reef fishes of the Mazunte-Bahías de Huatulco reef track, Oaxaca, Mexican Pacific

RAMÓN ANDRÉS LÓPEZ PÉREZ[1*], IMELDA LÓPEZ PÉREZ-MALDONADO[2], ARIADNA MONTSERRAT LÓPEZ ORTIZ[3], LINDA MARGARITA BARRANCO SERVIN[4], JAVIER BARRIENTOS VILLALOBOS[5] & GERADO ESTEBAN LEYTE MORALES[1]

1) Instituto de Recursos, Universidad del Mar. Puerto Ángel. AP 47, CP 70902, Oaxaca, México. * alopez@angel.umar.mx
2) Programa de Biología Marina, Universidad del Mar. Puerto Ángel. AP 47, CP 70902, Oaxaca, México. moly_ags@hotmail.com
3) Programa de Postgrado en Ciencias Marinas y Costeras, Universidad Autónoma de Baja California Sur. AP 19-B, CP 23080. La Paz, B.C.S. México. alopez@uabcs.mx
4) Programa de Postgrado en Ecología Marina, Universidad del Mar. Puerto Ángel. AP 47, CP 70902, Oaxaca, México. linda.barranco@gmail.com.
5) Programa de Postgrado, Instituto de Ecología. Xalapa. AP 63, CP 91070, Veracruz, México. celacanto50@hotmail.com

Abstract

Although fish are one of the most abundant, conspicuous and structurally important inhabitants of reef systems, the group has remained largely ignored from biodiversity accounts on the Oaxaca reef track. Reef icthyofauna composition at 10 sites between Mazunte and Isla Montosa was gathered through stationary visual census techniques during 1998-2008. A total of 112 species belonging to 81 genera, 40 families and 11 orders were recorded. Species richness of the study area is higher than similar reef communities in the Mexican Pacific. Thirty species represent new records for the study area, and some discrepancies were found between local (this study) and regional accounts. Our data suggest that species composition in the area is still incomplete.

Key words: reef icthyofauna, checklist, faunal completeness, Oaxaca, Mexican Pacific

Introduction

During the last decade, studies on the Oaxaca reef system have greatly improved our understanding on biodiversity and community level dynamics on several taxa. In particular, meaningful additions to the biodiversity knowledge of the area have been published on stony corals (Leyte-Morales 1995; 1997; Glynn and Leyte-Morales 1997; Reyes-Bonilla and Leyte-Morales 1998; Cruz-Pinon and Reyes-Bonilla 1999; Reyes-Bonilla *et al.* 2005), echinoderms (Benítez-Villalobos 2001; Benítez-Villalobos 2008), macroalgae (Ramírez-González 2008a), mollusk (Zamorano *et al.* 2006; Ramírez-González 2008b), crustaceans (Carvacho and Haasmann 1984; Ramírez-Luna *et al.* 2002) and polychaetes (Gómez *et al.* 1997; Bastida-Zavala 2008) but many taxonomic groups, both invertebrate and vertebrate, are poorly known or have been largely ignored.

Although reef and reef-related icthyofauna are one of the most abundant and conspicuous inhabitants of the Oaxaca reef system, except for the recent works on reef fish biodiversity and dynamics at Bahía San Agustín (Ramírez-Gutiérrez *et al.* 2007) and Isla Cacaluta (López-Pérez *et al.* 2008), the group is absent from biodiversity accounts. This situation is particularly serious in the area since urbanization and environmental degradation (López-Pérez *et al.* 2002; López-Pérez and Hernández-Ballesteros 2004) is proceeding at a faster rate than data acquisition and analysis (Conanp 2003). The lack of information on coastal and near-shore shallow-water marine biodiversity, particularly on one of the most conspicuous and ecologically relevant groups in coral reefs (Christensen and Pauly 1993; Mumby *et al.* 2004), exert potential negative impacts not only on management and conservation of coral reefs itself, but also on small-scale fisheries and fishing