



Helminths of the white ibis, *Eudocimus albus* (Aves: Therskiornithidae) in Mexico.

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Abstract

Eight species of helminths are reported from the intestine of 52 white ibis [*Eudocimus albus* (Linnaeus)] collected in 14 localities along the Mexican coasts of the Gulf of Mexico, and the Pacific Ocean. Three trematodes, *Parastrigea cincta* Brandes, 1888; *Parastrigea diovadena* Dubois & Macko, 1972, and *Patagifer lamothei* Dronen & Blend, 2008, one cestode *Cyclusteria ibisae* Schmidt & Bush, 1972 and four acanthocephalan species *Hexaglandula corynosoma* Travassos, 1915, *Arhythmorhynchus frassoni* Molin, 1858, *Southwellina hispida* Van Cleave, 1925, *Ibirhynchus dimorpha* García-Varela, Pérez-Ponce de León, Aznar & Nadler, 2011, were found. Four of these species were recorded for the first time in the white ibis, raising the number of helminth species that parasitize this bird to 57 along its distributional range. Additionally, 4 of the helminth species are recorded in Mexico for the first time.

Key words: white ibis, *Eudocimus albus*, Trematoda, Cestoda, Acanthocephala, new host records, new geographical records, Mexico

Introduction

The distributional range of the white ibis, *Eudocimus albus* (Linnaeus), extends from Virginia, on the East coast of the U.S.A., southwards through Louisiana, Texas, Florida, the Caribbean, and along both coasts of Mexico and Central America, reaching coastal areas in the north of South America (Howell & Webb 1995; American Ornithologist' Union 1998; Peterson & Chalif 2000). This bird species inhabits marshes, mangroves, lakes, and lagoons feeding upon crustaceans, amphibians, mollusks, small fishes, and insects. Previous reports of the helminth fauna of the white ibis, mainly in Southeastern U.S.A., indicate a high species richness, with 53 species, including 28 trematodes, 20 nematodes, 3 cestodes, and 2 acanthocephalans (Lumsden 1961; Schmidt & Bush 1972; Bush *et al.* 1973; Schmidt 1973; Bush & Forrester 1976; Dronen & Blend 2008; Pérez-Álvarez *et al.* 2008). The white ibis is widely distributed in Mexico, however, only three isolated reports have been published describing a few components of the helminth fauna of this bird (Ortega-Olivares *et al.* 2008; Pérez-Álvarez *et al.* 2008; García-Varela *et al.* 2011). Considering the paucity of information about the helminth fauna of the white ibis in Mexico, the main objective of this paper is to present the results of a survey on the helminth parasite fauna of this bird collected from 14 localities from both coasts of Mexico.

Material and methods

Fifty-two adult white ibis were collected between October, 2006 and December, 2010 in 14 Mexican localities, 6 located along the Pacific Ocean slope (n=23), and 8 along the Gulf of Mexico (n=29) (Table 1; Fig. 1). Hosts were captured with a shotgun, under the collecting permit FAUT 0202 issued by the Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT). Birds were dissected, the intestinal tract and other organs were removed from the body, placed in Petri dishes separately, with saline 0.75%, and examined under a dissecting microscope a few