



## Fishes of La Venta River in Chiapas, Mexico

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### Abstract

Although Chiapas is recognized as home to some of the most interesting fishes in Mexico, there are still regions of the state that are poorly surveyed. Our objective was to document the fish species in La Venta River, as well as that of some of its largest tributaries and Netzahualcóyotl Reservoir. To this aim, field collections were made during three consecutive years and preserved specimens from the ichthyological collection at El Colegio de la Frontera Sur, San Cristóbal, Chiapas were reviewed. We identified 42 species including new records for the state of Chiapas (3 species), the Grijalva River watershed (3 species), and Netzahualcóyotl Reservoir (2 species). Species composition differed between the upper and lower portions of La Venta River, most likely due to historical factors, and the physical and chemical differences between the two areas. The species composition of the upper parts of La Venta River was distinctive within the watershed but similar to neighboring hydrologic systems, suggesting that this area was recently connected to other rivers. Our results revealed that the Grijalva River-Tuxtla Gutiérrez watershed is species rich and may be important for describing the distribution patterns of several groups of fishes in Mexico.

**Key words:** Biogeography, Grijalva, Poeciliids, Cichlids, Selva El Ocote, New records

### Introduction

A combination of factors in the state of Chiapas, Mexico, has cultivated a high diversity of fishes (Fig. 1). Among the most important factors are its location, which is directly influenced by both the Pacific and Atlantic slopes and represents a transition zone between North and South America. This region is also affected by constant and complex tectonic and volcanic activities, creating a wide array of freshwater habitats. All of these factors have led to the evolution of many endemic fish species, particularly in the Grijalva-Usumacinta watershed, which is considered the second most biologically important in Mexico (Miller 1986).

Over the years, several studies have documented the ichthyofauna of the state of Chiapas. In 1976, Velasco-Colín reported 74 freshwater fish species. In 1987, Lozano-Vilano & Contreras-Balderas reported 135 species in continental waters. Finally, Rodiles-Hernández (2005) and Rodiles-Hernández *et al.* (2005a) documented 205 and 207 species, respectively. Although these studies resulted in an extensive increase in our knowledge of the state's ichthyofauna, recent discoveries (e.g. family Lacantuniidae in Rodiles-Hernández *et al.* 2005b) substantiate the need for continued studies particularly in areas that are little explored. Such is the case in the Grijalva River-Tuxtla Gutiérrez watershed, located in the Norte Mountains geographical region (Mülleried 1957; Helbig 1976).