
Population Structure of Wahoo, *Acanthocybium solandri*, in the Western Atlantic, Caribbean Sea, and Gulf of Mexico

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Wahoo (*Acanthocybium solandri*) is a pelagic marine fish that inhabits tropical and subtropical waters worldwide. In the western Atlantic, wahoo are an economically important component of both commercial and recreational fisheries. Despite this importance, little information on the population structure of wahoo exists. Our research project examines the population structure of wahoo in the western Atlantic, Caribbean Sea, and Gulf of Mexico. Total DNA (tDNA) was extracted from gill or muscle tissue from 20 individual fish from each of 11 locations throughout the study region ($n = 220$). Polymerase Chain Reaction (PCR) using universal primers was used to amplify the sixth intron of the nuclear lactate dehydrogenase gene (*ldhA6*). PCR products were direct sequenced and haplotypes were recorded for each region. The data was analyzed using PAUP v4.0b and Arlequin v2.0 genetic analysis software packages. Analysis of the *ldhA6* intron provides new resolution of wahoo population genetic structure in the greater western Atlantic.

KEY WORDS: Wahoo, *Acanthocybium solandri*, population structure

Populacion Estructura de Wahoo, *Acanthocybium solandri*, en el Atlantico Oeste, el Caribbean Sea, y el Golfo de Mexico

Wahoo (*Acanthocybium solandri*) es un pelagic pes marino que vive en aguas mundiales en sonas tropicales y subtropicales. En el Atlantico oeste, wahoo son un componente importante economico para la industria comercial y para la pesca recreacional. Poca informacion en la estructura de la poblacion de wahoo existe. El proyecto de nos otros examina la estructura de la poblacion de wahoo en el Atlantico oeste, el Caribe, y el Golfo de Mexico. El DNA total fue sacado de gills y musculos de 20 peses individuales de 11 locaciones durante la region de estudio ($n = 220$). Usando primers universales Polymerase Chain Reaction (PCR) fue usado para amplificar el sexto intron de el nuclear lactate dehydrogenase gene (*ldhA6*). Productos de PCR ocurrian en una subsecuencia directa y haplotipos fueron escritos para cada region. La informacion fue analizada usando PAUP v4.0b y Arlequin v2.0 packets de software analisis genetica. Analisis de el *ldhA6* intron da nueva resolucion de estructura genetica de poblaciones en el gran Atlantico oeste.

PALABRAS CLAVES: Wahoo, *Acanthocybium solandri*, poblacion estructura