

MARSH BULLETIN

The secondary productivity and some reproductive notes on *Limnodrilus hoffmeisteri* (Claparede, 1862) (Oligochaete: Naididae: Tubificinae) productivity in Shatt Al-Arab River, Basrah, Iraq

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A B S T R A C T

Limnodrilus hoffmeisteri is an oligochaete belongs to the Tubificidae family, inhabiting fresh water. It is a common benthic species in the Shatt al-Arab. Samples were collected from twice a month from Shatt Al-Arab River near the confluence of the Ribat River for the period during the period September 2012 to August 2013. The collection was carried out using a cylindrical core with an area of 78.5cm². The weight of adult *L. hoffmeisteri* that carry eggs ranged from 0.140 to 0.439 mg. Maximum length of the species (13.03 mm), dry weight (0.577 mg.) and biomass (2.944 g / m²) were recorded. Annual yield of the biomass (11.801 g / m²), instantaneous growth rate (0.107 g / m² / year) and productivity (0.1592 g / m² / year) were calculated. The species was reared in the laboratory under three different temperature and three different diets. Feeding on oats resulted in higher growth rate while salary lead to earlier maturation.

Keywords: benthos, secondary productivity, adult worms, wet weight.

Introduction

Annelids are a widely distributed invertebrates. The phylum comprises approximately 12,400 species characterized as vermiform and have chaetae or setae. They also have a thin body and consist of a series of similar