

ABSTRAK

KESTABILAN PERTUMBUHAN POPULASI IKAN LELE DENGAN MODEL LOGISTIK VERHULST

OLEH

ZEFNI APRILIA

Mengetahui kestabilan pertumbuhan populasi ikan lele sangat penting karena dapat membantu memperkirakan jumlah pemanenan dan supaya tidak terjadi kepunahan. Kestabilan pertumbuhan populasi ikan lele dapat diketahui dengan menggunakan Model Logistik Verhulst. Penghitungan dapat dilakukan apabila jumlah populasi awal, ambang batas populasi, laju pertumbuhan populasi, dan daya dukung maksimum diketahui. Pertumbuhan populasi ikan lele akan stabil pada saat jumlah populasi sama dengan daya dukung lingkungannya. Apabila jumlah populasi lebih kecil dari ambang batas populasi, maka pemanenan tidak dapat dilakukan.

Kata kunci: Ikan lele, Konstanta Panen, Model Verhulst, Pertumbuhan Populasi

ABSTRACT

THE STABILITY OF THE CATFISH GROWTH POPULATION BY USING VERHULST LOGISTIC MODEL

By

ZEFNI APRILIA

Knowing the stability of the catfish growth population was very important because it could help to estimate the harvest amount so that there was no extinction. The stability of the catfish growth population could be known by using Verhulst Logistic Model. The computation could be done when the initial population amount, threshold population, growth rate population and carrying capacity was known. The catfish growth population would be stable when the population's amount were same to their carrying capacity amount. On the other hand, if the population's amount was smaller than the threshold population it could be said that harvest could not be done.

Keyword : Verhulst Model, Catfish, Constant Harvesting, Growth Population