

## ABSTRAK

Tumpahan minyak mentah (*crude oil*) merupakan salah satu pencemar yang memberikan dampak terbesar bagi ekosistem laut dan dapat mempengaruhi morfoanatomi serta menyebabkan stres ikan. Tujuan dari penelitian ini adalah untuk mengetahui kondisi morfoanatomi ikan giru (*A. ocellaris*) yang terkontaminasi *crude oil*, mengetahui pengaruh kontaminasi *crude oil* terhadap profil glukosa darah ikan giru (*A. ocellaris*), dan mengetahui hubungan antara kontaminasi *crude oil* dengan profil glukosa darah ikan giru (*A. ocellaris*). Metode yang digunakan pada penelitian ini adalah rangkaian acak lengkap (RAL) dengan 4 perlakuan dan 3 ulangan, yang kemudian dianalisis dengan analisis deskriptif untuk kondisi morfoanatomi, serta analisis *one-way* anova dan regresi eksponensial sederhana untuk profil glukosa darah ikan giru (*A. ocellaris*). Berdasarkan penelitian yang telah dilakukan, kondisi morfoanatomi ikan giru (*A. ocellaris*) mengalami perubahan warna dan kerusakan berupa geripis pada sirip dan adanya bercak cokelat kehitaman pada insang serta *viscera*, selain itu berdasarkan analisis *one-way* anova, *crude oil* dengan konsentrasi berbeda memberikan pengaruh terhadap kadar glukosa darah ikan giru (*A. ocellaris*), sementara berdasarkan hasil analisis regresi eksponensial sederhana, hubungan konsentrasi pencemar *crude oil* dan profil glukosa darah ikan giru (*A. ocellaris*) masuk ke dalam kategori yang sangat kuat.

**Kata Kunci:** *A. ocellaris*, *Crude oil*, Glukosa darah, Morfoanatomi

## ABSTRACT

Crude oil spills are one of the pollutants that have the biggest impact on marine ecosystems and can affect fish morphoanatomy and cause fish stress. The aim of this research is to determine the morphoanatomical condition of clownfish (*A. ocellaris*) contaminated with crude oil, to determine the effect of crude oil contamination on the blood glucose profile of clownfish (*A. ocellaris*), and to determine the relationship between crude oil contamination and the clownfish's (*A. ocellaris*) blood glucose profile. The method used in this research was a completely randomized design (CRD) with 4 treatments and 3 replications, which were then analyzed using descriptive analysis for morphoanatomical conditions, as well as one-way anova analysis and simple exponential regression for the blood glucose profile of clownfish (*A. ocellaris*). Based on research that has been carried out, the morphoanatomical condition of clownfish (*A. ocellaris*) has experienced color changes and damage in the form of cracks on the fins and the presence of blackish brown spots on the gills and viscera. Apart from that, based on one-way anova analysis, crude oil with different concentrations had an influence on the blood glucose of clownfish (*A. ocellaris*), while based on the results of simple exponential regression analysis, the relationship between the concentration of crude oil pollutants and the blood glucose profile of clownfish (*A. ocellaris*) is in the very strong category.

**Key words:** *A. ocellaris*, Crude oil, Blood glucose, Morphoanatomy

