

RINGKASAN

FARID ADI PRASTYO. Efek *Extracellular Product (ECP) Streptococcus iniae* Terhadap Fisiologi dan Mortalitas Ikan Kerapu Cantang Hibrida (*Epinephelus sp.*). Dosen Pembimbing Prof. Hari Suprpto, Ir., M.Agr dan Rahayu Kusdarwati, Ir., M.Kes..

Kendala yang sering dihadapi pada kegiatan budidaya ikan kerapu digolongkan menjadi empat yaitu disebabkan oleh agen virus, jamur, parasit dan bakteri yang banyak menimbulkan kematian serta agen non-infeksius seperti pakan dan kualitas air. Penelitian ini merupakan isolasi ekstraseluler produk (ECP) terhadap ikan kerapu, dengan melihat besarnya toksisitas yang di timbulkan pada ikan kerapu, kemudian dilakukan pengamatan toksisitas pada ikan kerapu cantang. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 kali ulangan, kontrol negatif diinjeksi pbs, positif diinjeksi *s.iniae* 10^9 , (P1,P2,P3) diinjeksi ECP 24, 48 dan 72 jam, semua perlakuan disuntik sebanyak 0,2 ml. Parameter utama adalah mortalitas dan pengamatan gejala klinis.

Hasil evaluasi toksisitas menunjukkan bahwa semua ECP *Streptococcus iniae* bersifat tidak toksik dan tidak menyebabkan kematian. Sedangkan perlakuan positif menyebabkan terjadinya perubahan anatomi luar, perubahan pola renang, perubahan pola makan dan perubahan histologi serta kematian ikan kerapu.

SUMMARY

FARID ADI PRASTYO. Effect Of Extracellular Product (ECP) *Streptococcus iniae* to Physiology and Mortality of Cantang Hybrid Grouper (*Epinephelus sp.*). Academic Advisor Prof. Hari Suprpto, Ir., M.Agr and Rahayu Kusdarwati, Ir., M.Kes..

Constraints that are often encountered in grouper aquaculture are classified into four, which are caused by agents of viruses, fungi, parasites and bacteria that cause death and many non-infectious agents such as feed and water quality. This research is a product extracellular isolation (ECP) for groupers, by looking at the magnitude of the toxicity that was caused on groupers, then toxicity was observed on the grouper. This study used a Completely Randomized Design (CRD) with 5 treatments and 3 replications, negative controls were pbs detected, positive injected s.iniae 109, (P1, P2, P3) injected ECP 24, 48 and 72 hours, all treatments were injected with 0 , 2 ml. The main parameters are mortality and observation of clinical symptoms.

The results of the toxicity evaluation showed that all ECP of *Streptococcus iniae* were non-toxic and did not cause death. While positive treatment causes changes in external anatomy, changes in swimming patterns, changes in diet and changes in histology and death of groupers.