

**THE EFFECTS OF FEED ADDITIVE ON GROWTH, SURVIVAL AND
PIGMENTATION DEVELOPMENT OF JUVENILE FALSE CLOWNFISH
(*Amphiprion ocellaris*)**

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ABSTRACT

A study was done to determine the effects of feed additive on growth, survival and pigmentation of clownfish juveniles. The feed was formulated using fish meal and wheat meal as the major ingredient with carrots as additive added at different weight. D3 which is added with formulated meal and 30 % of carrot produced high carotene content on fish scales which had been analyze by using spectrophotometer, even though carotene content in diets was decreased during storage. Carotenoid did not effect fish growth. The analysis for growth rate had been done using One-Way ANOVA followed by Tukey found that $p>0.05$, where there was no significant difference among the dietary group. This study showed that the influence of carrot in fish pigmentation is caused by carotenoids.

ABSTRAK

Kajian yang dijalankan untuk melihat berkaitan dengan kesan makanan tambahan ke atas tumbesaran, kemandirian dan pigmentasi kepada juvenil ikan. Makanan berformulasi diperbuat daripada bahan-bahan utama seperti makanan ikan dan tepung yang ditambah dengan lobak merah mengikut peratusan berbeza untuk diberi makan kepada ikan. Makanan yang diberikan menghasilkan kandungan karotin yang tinggi kepada sisik ikan terutama dalam D3 iaitu formulasi makanan dengan 30 % lobak, selepas dianalisa menggunakan spektrofotometer, walaupun nilai karotin menyusut dalam makanan. Karotenoid tidak memberikan kesan kepada tumbesaran ikan dan analisis yang dilakukan terhadap kadar tumbesaran dengan menggunakan ANOVA sehala diikuti oleh Turkey menunjukkan bahawa $p > 0.05$. Kajian menunjukkan kebaikan lobak merah dalam pigmentasi ikan adalah disebabkan oleh karotenoid.