

ADAPTATION AND GROWTH OF 10 DAYS OLD LARVAE
AND 21 DAYS OLD WORMLES OF BATIK BUNGA,
A 100% SILK CATERPILLAR IN DIFFERENT SCAFFOLD

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**ADAPTATION AND GROWTH OF 10 DAYS OLD LARVAE AND 21 DAYS OLD
JUVENILES OF PATIN BUNGA, *Pangasius sutchi* IN DIFFERENT SALINITY**

NURUL JOHANNA BINTI JEMAIN

**This project is submitted in partial fulfillment of the requirement of the
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ABSTRACT

A study on adaptation and growth of 10 days old larvae and 21 days old juvenile of Patin bunga, *Pangasius sutchi* in different salinity was conducted. For adaptation by direct exposure experiment, 10 days old larvae and 21 days old juveniles were used, while adaptation and growth studies by gradual acclimatization process, 10 days old larvae were used. Salinity used ranging from 0 ppt, 5 ppt, 10 ppt, 15 ppt, 20 ppt, 25 ppt, 30 ppt and 35 ppt. The result showed that the maximum salinity tolerance by direct exposure for 10 days old larvae was 13ppt while for 21 days old juvenile was 16 ppt. By gradual acclimatization process, the larvae were able to adapt until 12 ppt. There was no significant difference in the interaction effect between size factor and salinity tolerance. There was also no significance difference in the interaction effect between growth factor and salinity concentration ($p>0.05$).

ABSTRAK

Kajian penyesuaian dan pertumbuhan larva berumur 10 hari dan juvanil berumur 21 hari Patin bunga, *Pangasius sutchi* dalam kemasinan berbeza telah dijalankan. Untuk penyesuaian melalui pendedahan secara langsung, larva berumur 10 hari dan 21 hari telah digunakan, sementara kajian mengenai penyesuaian dan pertumbuhan secara beransur-ansur, larva berumur 10 hari telah digunakan. Kemasinan yang digunakan berjulat 0 ppt, 5 ppt, 10 ppt, 15 ppt, 20 ppt, 25 ppt, 30 ppt dan 35 ppt. Hasil kajian telah menunjukkan bahawa toleransi kemasinan adalah tinggi dalam kajian pendedahan secara langsung bagi larva berumur 10 hari iaitu 13ppt manakala untuk juvanil berumur 21 hari iaitu 16 ppt. Kesemua larva mati pada saliniti 14 ppt dan 17 ppt bagi juvenil. Melalui perpindahan secara berperingkat, larva berupaya menyesuaikan diri sehingga 12 ppt. Tiada perbezaan signifikan dalam kesan saling tindak di antara faktor saiz dan toleransi kemasinan. Tiada perbezaan dalam kesan saling tindak di antara faktor pertumbuhan dan kemasinan ($p>0.05$).