

KAJIAN KE ATAS PERKEMBANGAN TELUR DAN LARVA
IKAN OSCAR, *Astronotus ocellatus*

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Kajian ke atas perkembangan telur dan larva ikan oscar,
Astronotus ocellatus / Nazlin Ruziah Md. Said.

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**KAJIAN KE ATAS PERKEMBANGAN TELUR DAN LARVA IKAN OSCAR,
*Astronotus ocellatus***

Oleh

NAZLIN RUZIAH BINTI MD. SAID

**Laporan projek ini merupakan sebahagian
daripada keperluan untuk mendapatkan
Ijazah Bachelar Sains Perikanan**

**Fakulti Sains Gunaan dan Teknologi
UNIVERSITI PUTRA MALAYSIA TERENGGANU**

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PENGHARGAAN

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Nazlin Ruziah - UK 0024

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ABSTRACT

A study was done to observe the egg and larva development of Oscar, *Astronotus ocellatus* up to juvenile stage. The aim of the study was to observe the egg and larva development as well as to determine the suitable first feed for larva which could give the highest growth and survival. The eggs were obtained through natural spawning. Morphological observation was done by using a light microscope and further development was drawn by the aid of LUCIDA camera. Three different diets that is *Artemia* nauplii, *Daphnia* and formulated diet (35 % protein) were given to the larva.

The result of the study found that the broodstock spawned at a water temperature between 26.1 – 27.1 °C. The fertilized eggs were not transparent, submerged, ellipsoidal and yellow opaque in colour and without any presence of oil globule. Mean height and length of the egg was 1.61 ± 0.27 mm and 1.88 ± 0.07 mm respectively. Hatching occurred 32 hr. 14 min. after fertilization at water temperature 27.0 – 28.3 °C. Newly-hatched-larvae measured 4.88 ± 0.01 mm in total length with a large ellipsoidal yolk. Larvae reached postlarva stage 36 hour after hatching and consume exogenous food 3 days after hatching. The egg yolk was totally absorbed 4 days after hatching. Larva reached juvenile stage through metamorphosis 12 days after hatching.

The result of the feeding experiment showed that larva fed with *Artemia* recorded the highest survival rate and growth 50 % and 8.69 % respectively while larva fed with *Daphnia* have 42% and 7.47 %/ day respectively. Larva which were fed with artificial diet died on the 10th day of experiment. Based on the finding above it can be said that *Artemia* nauplii are suitable feed for *Astronotus ocellatus* larva first feeding stage which give larva a high survival rate and growth (One-way ANOVA $p < 0.05$).