

THE ECOLOGY OF THE GOLDFISH
(Carassius auratus auratus)

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The embryology of false clownfish (*Amphiprion ocellaris*) / Mohd. Firdauz Omar.



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Lihat sebelah

HAK MILIK
PERPUSTAKAAN SULTANAH NUR ZAHIRAH UNT

THE EMBRYOLOGY OF FALSE CLOWNFISH (*Amphiprion ocellaris*)

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This project is submitted in partial fulfillment of the requirement of the degree of
Bachelor of Science in Agrotechnology (Aquaculture)

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
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ABSTRACT

This thesis entitled The Embryology of False Clownfish (*Amphiprion ocellaris*) studied the phases and stages of egg development because of the lack of information's about this species. Sampling schedule was carried every minute as to observe (using a Leica 480 Compound Microscope) the development (in a rate of 2-3 minutes increase after each different stages detected). Fertilized eggs took about seven days or 168 hours to hatch. In this seven days of incubation period, an *A. ocellaris* egg undergoes 15 different development stages which is fertilized egg (00:00), two cell stage (00:02), four cell stages (00:05), eight cell stage (00:21), 16 cell stage (00:33), 32 cell stage (00:51), 64 cell stage (01:36), 128 cell stage (02:25), pre blastula (03:36), Blastula (04:46), Gastrula (07:26), Neurula (21:11), developing Embryo (22:51), Pre Larvae (36:25) and free swim Larvae (166:04). These developing stages were differentiated based on their development on each stage. Result of this experiment can be used for further studies.

ABSTRAK

Tesis ini yang bertajuk The Embryology of False Clownfish (*Amphiprion ocellaris*) adalah mengenai perkembangan yang berlaku di dalam telur-telur sepsis. Penyelidikan ini dilakukan akibat kekurangan data mengenai pekembangan spesis berkenaan. Penyelidikan ini dijalankan di KUSTEM (Kolej Universiti Sains dan Teknologi), Terengganu dengan menggunakan 40 pasang ikan badut (*Amphiprion ocellaris*) yang terpilih yang mana ia telah disediakan oleh pihak KUSTEM. Data yang digunakan dalam thesis adalah dari perkembangan lengkap sebiji telur daripada sepasang ikan badut yang sihat. Pengumpulan data dan pengawasan (menggunakan Leica 480 Compound Microscope) di lakukan setiap minit tetapi masanya akan di tingkatkan apabila telur melepas setiap fasa (kadar 2-3 minit penigkatan jarak Tujuh hari atau 168 jam diperlukan untuk sebiji telur *A. ocellaris* menetas dan fasa-fasa yang terlibat boleh dibahagikan kepada 15 iaitu fertilized egg (00:00), two cell stage (00:02), four cell stages (00:05), eight cell stage (00:21), 16 cell stage (00:33), 32 cell stage (00:51), 64 cell stage (01:36), 128 cell stage (02:25), pre blastula (03:36), Blastula (04:46), Gastrula (07:26), Neurula (21:11), developing Embryo (22:51), Pre Larvae (36:25) and free swim Larvae (166:04). Tesis ini diharap dapat membantu para penyelidik dalam menjalankan eksperimen lebih lanjut terhadap spesis ini.