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STUDY ON EMBRYONIC, INCUBATION PERIOD AND LARVAE DEVELOPMENT OF IKAN PATIN (*Pangasius sutchi*)

Intan Faraha Bt A.Ghani

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

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE UNIVERSITI MALAYSIA TERENGGANU 2007

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ABSTRACT

This study was carried out to observe the stages of *Pangasius sutchi* embryo, incubation period and their larvae development. Fertilization rate for *Pangasius sutchi* is 87.59% and as for the hatching rate is 86.14%. The fertilized eggs are adhesive and spherical with a yellowish or greenish-brown egg capsule. The yolk sac is yellowish brown in color. The incubation period ranges from 24-35 h at a temperature 20-30°c. The newly hatched larvae are transparent, lacking pigmentation and approximately between 3.111-3.243 mm in length. Eye pigments and hearts started to work 12-15 hours after hatched. One day old pro-larvae, the mouth become well developed, barbules are elongated and look liked tiny thread. The yolk sac is fully absorbed during the 3 days old pro-larval stage. At the end, after two weeks the young fry is well developed, and is an adult appearance, that is measuring up to 26.765-26.910 mm in length. The survival rate for these larvae is 56% at the end of this experiment

ABSTRAK

Kajian ini dijalankan untuk mengkaji perkembangan embrio, tempoh pengeraman dan perkembangan larvae *Pangasius sutchi*. Kadar persenyawaan adalah 87.59% dan kadar penetasan adalah 86.14%. Telur yang tersenyawa melekat dan berbentuk bulat dengan warna kekuningan ataupun hijau-coklat. Kantung telur berwarna coklat kekuningan. Tempoh pengeraman berada dalam jangkamasa 24-35 jam dengan suhu 20-30°c. Larva yang baru menetas adalah lutsinar, tidak mempunyai pigmen, dan panjang adalah diantara 3.111-3.243 mm. Pigmen mata dan jantung mula befungsi 12-15 jam selepas penetasan. Pro-larva yang berumur satu hari, mulut mula terbentuk, barbul mula memanjang dan kelihatan seperti jarum kecil. Kantung telur mula habis digunakan dan gigi palatin mula terbentuk pada hari ketiga selepas penetasan. Dua minggu selepas penetasan, pro-larva mula membentuk menjadi anak ikan yang menyerupai ikan dewasa dan berukuran sehingga 26.765-26.910 mm. Kadar hidup anak ikan sehingga hari ke 21 adalah 56%.