

THE STUDY OF ECTOPARASITE IN FRESHWATER FISH
Hampala macrolepidota (SEBARAU) AT PERLOK, JERANTUT, PAHANG

By
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Borang Pengakuan dan Pengesahan Laporan Akhir Projek Ilmiah I dan II

BORANG PITA 8



FAKULTI AGROTEKNOLOGI DAN SAINS MAKANAN

UNIVERSITI MALAYSIA TERENGGANU

**PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK ILMIAH I DAN II**

Adalah ini diakui dan disahkan bahawa laporan ilmiah bertajuk:

The study of ectoparasite in freshwater fish *Hampala macrolepidota* (Sebarau) at
Perlok, Jerantut, Pahang.

oleh..... Nuraini binti Khalil....., No.Matrik UK 13589 telah
diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan
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DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

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ABSTRACT

30 samples of *Hampala macrolepidota* (Sebarau) were obtained from Pusat Pengembangan Akuakultur Perlok at Jerantut, Pahang. To diagnose for ectoparasite, 8 samples of fish were taken during the first sampling and the remaining of 22 samples of fish were used during the second sampling. During diagnosing process, fish weight and length (total, fork and standard length) were measured. Weather condition and also water parameter such as temperature and dissolve oxygen (DO) were monitored. As a result, three types of ectoparasites were found on the fishes. One parasite was identified up to species, that was *Piscinoodinium pillulare* while the other two were known as *Dactylogyrus* sp. and Metacercaria (Digenean larvae). From the study, *Piscinoodinium pillulare* gives the highest number of parasite found with 2366 individuals, followed by *Dactylogyrus* sp. with 346 individuals and the lowest is Metacercaria with 188 individuals. Statistical analysis was done to find the prevalence, percentage abundance and mean intensity for each type of the parasite. The relationship between number of parasite with water quality, weather condition, water treatment, and position of gill arch were also discussed.

ABSTRAK

30 sampel ikan Sebarau (*Hampala macrolepidota*) diperoleh dari Pusat Pengembangan Akuakultur Perlok, Jerantut, Pahang. Untuk memeriksa ektoparasit, 8 sampel telah diambil semasa lawatan pertama dan 22 sampel lagi diambil semasa lawatan kedua dijalankan. Semasa kajian dijalankan, berat dan panjang (panjang keseluruhan, fork dan standard) sampel dan keadaan cuaca serta parameter air seperti suhu dan oksigen terlarut (DO) juga diambil. Salah satu parasit telah dapat dikenal pasti sehingga tahap spesis iaitu *Piscinoodinium pillulare* manakala dua lagi dikenali sebagai *Dactylogyrus* sp. dan *Metacercaria* (larva Digenea). Dari kajian yang dijalankan, *Piscinoodinium pillulare* mencatatkan jumlah parasit yang tertinggi sebanyak 2366 individu, diikuti oleh *Dactylogyrus* sp. sebanyak 346 individu dan yang paling rendah ialah *Metacercaria* sebanyak 188 individu. Analisis statistik dijalankan untuk mengira prevalence, percentage abundance dan mean intensity setiap jenis parasit. Hubungan antara bilangan parasit dengan kualiti air, keadaan cuaca, rawatan air dan juga kedudukan arka insang pada ikan juga dibincangkan.