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**OCCURRENCE OF DERMATITIS AMONG PADDY FIELD
FARMERS IN FOUR VILLAGES IN THE KOTA BHARU
AREA, KELANTAN**

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ABSTRACT

Dermatitis has been plaguing the farmers in the Kota Bharu area, Kelantan since the early 1990s. It was a serious problem and in certain areas farmers were forced to abandon rice growing and opt for tobacco cultivation, hence resulting in decrease in rice production. In Malaysia dermatitis, most probably cercarial dermatitis, is an important cause of economic loss to many paddy farmers because fields are left uncultivated due to sores on the farmers hands and feet. A survey was undertaken to investigate the occurrence and prevalence of dermatitis amongst the paddy field farmers in the Kota Bharu area and to determine the cause of dermatitis. The results obtained in this study indicate that dermatitis is occupation specific, occurring mainly amongst paddy field farmers with a prevalence rate of 47.9 %. The most likely form of dermatitis amongst paddy field farmers are cercarial dermatitis. The paddy field farmers are usually infected during the preparation of the fields and during the transplanting stage. The water sources for irrigation are mainly from the river and irrigation canal and water source is highly associated ($\chi^2=8.440$, $df = 3$, $p = 0.038$) to the infection. The rearing of ducks($\chi^2 = 4.561$, $df = 1$, $p = 0.033$) and cows($\chi^2 = 9.118$, $df = 1$, $p = 0.003$) are also related to the occurrence of dermatitis and increase the risk of infection. Ducks and cows are the hosts to schistosomes and the cercariae of these schistosomes are known to cause cercarial dermatitis amongst humans. The ducks and cows are the most likely source of cercariae causing dermatitis amongst the farmers in the Kota Bharu area.

ABSTRAK

Penyakit dermatitis telah membebankan pesawah-pesawah di daerah Kota Bharu, Kelantan sejak awal 1990-an. Keadaan ini menjadi semakin serius dan penduduk di kawasan tertentu terpaksa mengabaikan penanaman padi mereka dan menguruskan tanaman tembakau sehingga menyebabkan pengeluaran padi semakin berkurangan. Di Malaysia, dermatitis jenis 'cercarial' menjadi punca utama kemerosotan ekonomi pesawah-pesawah kerana sawah padi dibiarkan tanpa diuruskan dan ini adalah disebabkan oleh kudis pasa tangan dan kaki pesawah-pesawah. Satu tinjauan telah dibuat untuk mengkaji kewujudan ('occurrence') dan prevalens dermatitis di kalangan pesawah-pesawah di daerah Kota Bharu. Keputusan yang didapati menunjukkan dermatitis itu adalah spesifik terhadap jenis pekerjaan dan kebanyakannya berlaku di kalangan pesawah-pesawah dengan kadar prevalens, 47.9%. Dermatitis di kalangan pesawah-pesawah adalah berkemungkinan besar dermatitis jenis 'cercarial'. Pesawah-pesawah biasanya dijangkiti semasa proses penyediaan sawah padi dan semasa proses mengubah. Sumber utama air untuk pengairan adalah diperoleh dari sungai dan taliair. Kedua-dua sistem pengairan ini berkemungkinan besar merupakan sumber utama penjangkitan ($\chi^2=8.440$, $df = 3$, $p = 0.038$). Penternakan itik and lembu juga berkaitan dengan kewujudan dermatitis dan ini meningkatkan risiko penjangkitan dermatitis kerana itik ($\chi^2 = 4.561$, $df = 1$, $p = 0.033$) dan lembu ($\chi^2 = 9.118$, $df = 1$, $p = 0.003$) merupakan perumah kepada 'schistosomes' yang menyebabkan jangkitan dermatitis 'cercarial' di kalangan manusia. Ini berkemungkinan besar juga merupakan sumber 'cercariae' yang menyebabkan dermatitis di kalangan pesawah-pesawah.

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Plate 1: Paddy Fields that have been converted to Tobacco Farm Example 1

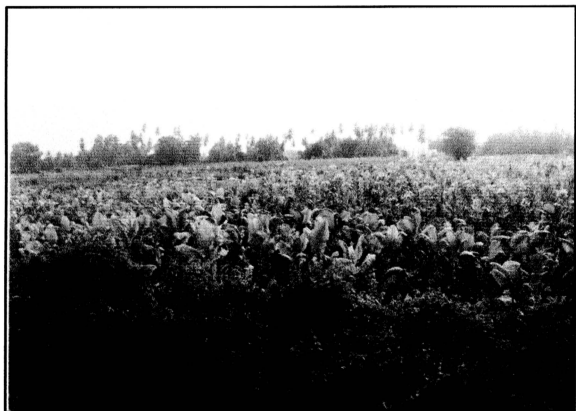


Plate 2: Paddy Fields that have been converted to Tobacco Farm Example 2

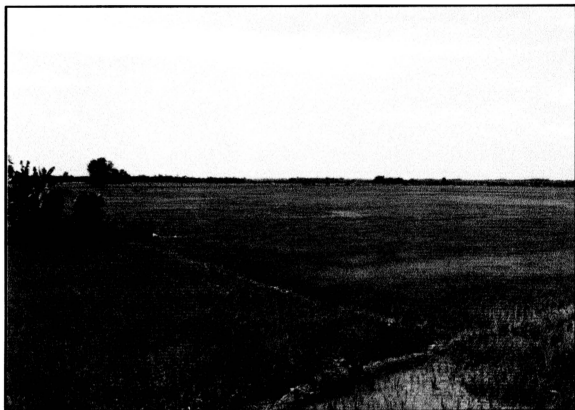


Plate 3: Paddy Fields in Kampung Tok Junuh



Plate 4: Paddy Fields in Kampung Alor Bakat



Plate 5: Paddy Fields in Kampung Serdang Muda



Plate 6: Paddy Fields in Kampung Serdang Surau (Serdang Tua)



Plate 7: The Water Source for Farming for all Four Villages is from the Same Source Example 1

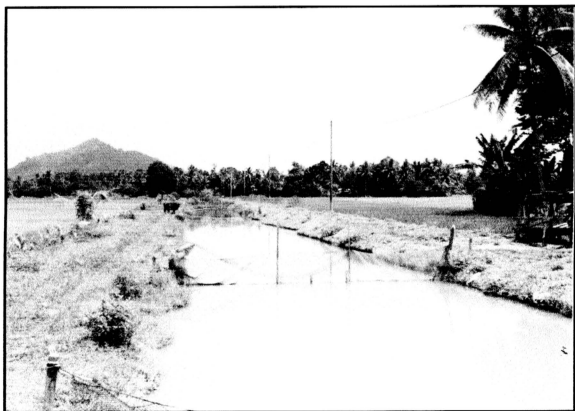


Plate 8: The Water Source for Farming for all Four Villages is from the Same Source Example 2



Plate 9: Snails Being Collected for Identification