

DETERMINATION OF CHLOROPHYRIFOS, LAMBDA-CYHALOTHRIN AND CYPERMETHRIN IN PEDU LAKE

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ABSTRACT

DETERMINATION OF CHLOROPHYRIFOS, LAMBDA-CYHALOTHRIN AND CYPERMETHRIN IN PEDU LAKE

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This project is carried out to determine the concentrations of chlorophyrifos, lambda-cyhalothrin and cypermethrin in the water of Pedu Lake, Kedah and also to recommend the correct dosage of pesticide for the golf course. All the pesticides were analyzed by gas chromatography. The results obtained indicate a good recovery with percentages of 109-110 %, 45-88 % and 101-103 % for chlorophyrifos, lambda cyhalothrin and cypermethrin respectively. The detection limits of the methods were calculated to be 0.002 ng/ml for chlorophyrifos, 0.172 ng/ml for lambda-cyhalothrin and 0.068 ng/ml for cypermethrin. It can be concluded that the insecticides did not contaminate the water of Pedu Lake since their concentrations were found to be below the detection limit and the MRL (Maximum Residue Limit) of 0.1 ng/ml as recommended by European Union.

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