MEASURING THE MERCURY CONTENTS IN OYSTER TISSUES (*Crassostrea iredalei*) FROM SETIU LAGOON

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Lihat sebelah

MEASURING THE MERCURY CONTENTS IN OYSTER TISSUES (*Crassostrea iredalei*) FROM SETIU LAGOON

By

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ABSTRAK

Kajian yang dijalankan di Kampung Gong Batu, Kuala Setiu merupakan suatu kajian untuk menentukan kandungan merkuri di dalam tisu tiram (*Crassostrea iredalei*) dan mengkaji mengenai hubungan antara kandungan merkuri dengan saiz. Analisis untuk menentukan kepekatan merkuri dijalankan dengan menggunakan spektrometer serapan atom pemelowapan sejuk dan juga LECO AMA 254 penganalisa merkuri terkini. Kandungan merkuri di dalam tiram adalah di bawah pengesanan bagi spektrometer serapan atom pemelowapan sejuk. Dengan menggunakan LECO AMA 254 penganalisa merkuri terkini, kandungan merkuri dalam tiram adalah di dalam julat 0.001 μg/g dan 0.2 μg/g . Kandungan merkuri di dalam tiram tidak berkolerasi dengan saiz tiram bagi sampel yang dikutip pada bulan Ogos tetapi berkolerasi dengan saiz bagi sampel tiram yang dikutip pada bulan Oktober. Data menunjukkan bahawa tiada impak yang bahaya kepada kesihatan manusia bagi had merkuri yang direkodkan di dalam tiram yang diternak (*Crassostrea iredalei*) dan ini seterusnya menunjukkan bahawa tiram-tiram daripada Kuala Setiu adalah selamat untuk pemakanan manusia.

ABSTRACT

The focus of this study in Kampung Gong Batu, Setiu Lagoon was the determination of mercury content in oyster (*Crassostrea iredalei*) tissues and to study the relationship of mercury content with size. Mercury was analyzed by cold vapour atomic absorption spectrometry and LECO AMA 254 advanced mercury analyser. The mercury content of oysters was below the detection limit of cold vapour atomic absorption spectrometry (CVAAS). Using the LECO AMA Advanced Mercury Analyser (MA), mercury content of oysters was measured to be between 0.001 μg/g and 0.2 μg/g. Hg content of oysters were not correlated with size of oyster for samples collected in August but were significantly correlated with size for samples collected in October. The data indicate no major threat to public health from levels of mercury recorded in cultured oyster, (*Crassostrea iredalei)*, thereby indicating that oysters from the Setiu Lagoon is safe for human consumption.