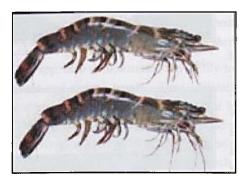
Use of Rapid Enzymatic Methods for Monitoring Quality of Seafood Products



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Use of enzymatic methods through the use of biosensor in the form of oxygen electrode offered excellent alternative methods for determination of histamine in prawns and other seafood products. The experimental results showed there was an increase of histamine during storage as measured by the oxygen electrode signal using the enzyme diamine oxidase within 10 minutes per analysis. Very good correlation of above 0.98 with the high performance liquid chromatography (HPLC) analyzer was obtained for all samples during ambient storage, 10°C and icing. Recovery percentages of about 100% for values of histamine in between 0-200 µg/g were obtained for the freshwater prawns samples.





The use of oxygen electrode also shows the characteristics of high sensitivity, efficiency, reliability and stability comparable to that of the HPLC procedure. Thus suggesting it to be as a rapid method for monitoring not only quality of prawns but in general for monitoring the quality and spoilage of other seafood products.

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