ABSTRACT

(LITERATURE REVIEW)

ANALYSIS OF FORMALIN CONTENT IN FOOD WITH SPECTROPHOTOMETRY MNAETHOD AND CHROMOTROPIC ACID REACTION

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Formalin is the commercial name for a 35-40% solution of formaldehyde in water. Formalin can kill viruses, bacteria, fungi and parasites, has been widely used as a disinfectant with wide efficiency. Foods that are often found to contain formaldehyde are chicken pieces, wet noodles, meatballs, tofu and fish. The purpose of this study was to determine whether the food contained formalin and how the spectrophotometric method with chromotropic acid reagent could be used to detect the presence of formalin in food.

In this literature review, the three journals analyzed the formalin content in food using the spectrophotometric method with chromotropic acid reagent in a quantitative test.

The results from this literature review are obtained : maximum waveform obtained: 567-580 nm, linearity : r: 0.9939-0.9998, detection limit: 0.0058-2.55 ppm, accuracy: 73.26-87.3930 % while the formalin content obtained: 74.7595-173.2 ppm.

Although not all foodstuffs contain formaldehyde, the spectrophotometric method with chromotropic acid reagent can be used as a method to detect the presence of formaldehyde in foods and their preparations.

Keywords : formalin, food, spectrophotometry vis, chromotropic acid.