

**EFFECT OF PRETREATMENT ON FISHY FLAVOR AND ODOR  
OF GELATIN EXTRACTED FROM SUTCHI CATFISH (*Pangasius  
sutchi*) SKIN**

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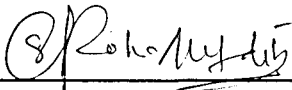
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This Final Year Project Report entitled “Effect of pretreatment on fishy flavor and odor of gelatin extracted from sutchi catfish (*Pangasius sutchi*) skin” was submitted by Wan Najma Farhaten Binti Wan A Latiff, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Science and Food Technology, in the Faculty of Applied Science, and was approved by



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## ABSTRACT

### EFFECT OF PRETREATMENT ON FISHY FLAVOR AND ODOR OF GELATIN EXTRACTED FROM SUTCHI CATFISH (*Pangasius sutchi*) SKIN

Gelatin from sutchi catfish (*Pangasius sutchi*) skin was extracted by using hot water extraction and several pre treatments were done to the skin to remove the fishy flavor and odor. The effect on yield and physical properties of the gelatin were determined. Sutchi catfish skin was divided into three portions coded as GC, GLT, and GSC. Skin from portion GLT was soaked with lime followed by tamarind solution. For portion GSC, the skin was soaked in salt solutions followed by activated carbon solution while skin from portion GC was soaked in distilled water and act as a control. For extraction, the skin was soaked in sodium hydroxide (NaOH) solution and acetic acid solution. After soaking, the gelatin from the skin was extracted at 50 °C for 12 hours in shaking water bath, followed by filtration and then freeze dried. Gelatin treated with lime followed by tamarind (GLT) showed the highest yield (19.72%) compared to the gelatin treated with salts followed by activated carbon (GSC) (15.01%) and GC (15.81%). The fishy flavor and odor of gelatin treated with lime followed by tamarind (GLT), were almost absent with the intensity of 1.68 and 1.74, respectively. These values were below the reference ranged which is 1.87 (fishy flavor) and 2.71 (fishy odor) which denotes absent to weak. GLT also showed the lowest value in gel strength (282.29g), hardness (227.90g), gumminess (221.60g), chewiness (202.19g), viscoelastic point (14.1 °C), and setting point (10.46 °C) compared to the gelatin treated with salts and activated carbon (GSC) and control gelatin (GC). Treatment which involved lime, tamarind and salts showed a decreased in physical properties such as gel strength, hardness, gumminess, chewiness, viscoelastic properties, viscosity and setting point. Since fishy flavor and odor of gelatin treated with lime followed by tamarind (GLT) were almost absent, such treatment could be a good method for treatment of sutchi skin prior to gelatin extraction.