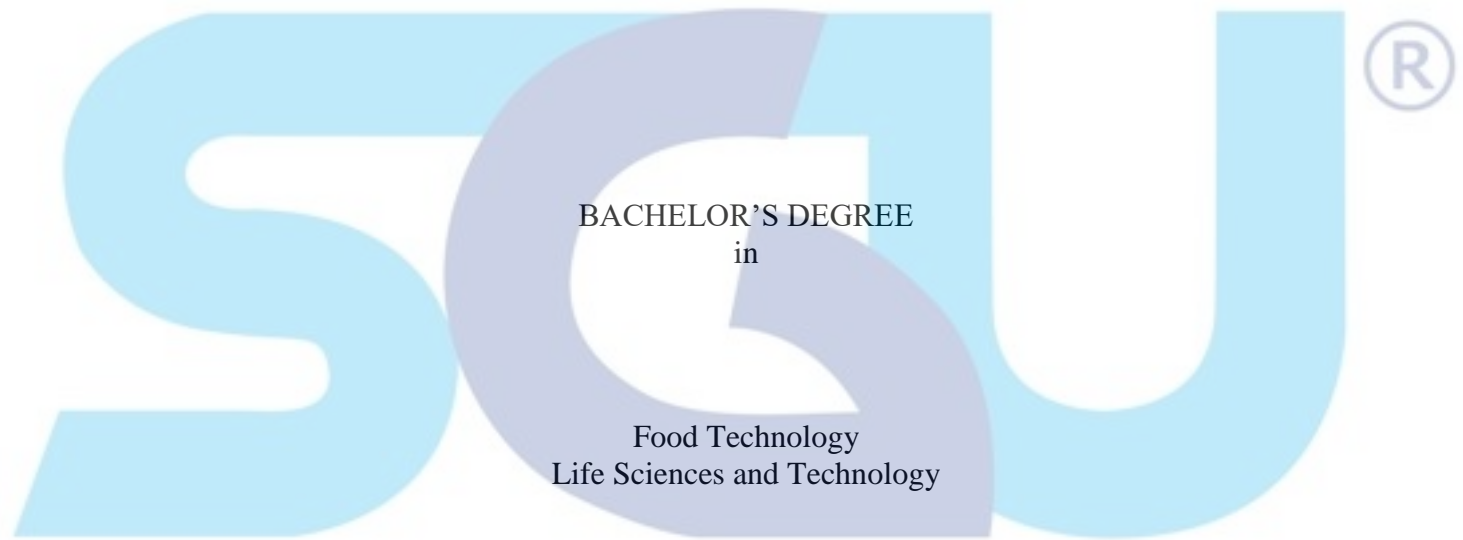


**UTILIZATION OF *Clarias gariepinus* AND ITS EFFECT
FOR FISH BALL PRODUCT PROPERTIES**

By

Deborah Arief
11405006



BACHELOR'S DEGREE
in

Food Technology
Life Sciences and Technology

SWISS GERMAN UNIVERSITY

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

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Fish ball is one of the most popular processed fish products in Indonesia. African catfish (*Clarias gariepinus*) is a potential raw material in fish ball production. The research studies the differences of catfish ball from general fish ball (*Scomberomorus guttatus*/Spanish mackerel-based fish ball) and the proportion change effects, of catfish paste to tapioca starch, towards the important properties of fish ball (umami taste, bouncy texture, firmness and fish aroma/flavour). There were 5 prepared samples: CFB1 (80% catfish w/w of tapioca+fish), CFB2 (85%), CFB3 (90%), CFB4 (95%) and SMFB3 (90% mackerel). The samples were tested of sensory analysis (overall 9-point hedonic and attribute intensity appropriateness, Just-About-Right scale), texture analysis, expressible moisture content, folding test, colour test and national standard conformity test. The result is, overall sensory acceptance of the 5 samples showed no significant difference ($P < 0.05$). Increasing content of catfish in fish ball changes the properties in: lower firmness, gel strength and bounciness. It was significantly better in umami and higher resilience. Similar fish aroma intensity and elasticity was also concluded. Further studies are needed about catfish potential to excel Spanish mackerel quality as fish ball raw material and the broad range of fish ball acceptance level by Indonesian consumer are to be pursued.

Keywords: Product Development, Fish ball, Clarias gariepinus, African catfish, Underutilized fish.



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DEDICATION

To Papi, Mami, Cici and the future of healthy Indonesia



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Hopefully this research could be beneficial and educative for other curious researches.

The technologist

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