

SKRIPSI

**KARAKTERISTIK FISIKOKIMIA PATI GEMBILI (*Dioscorea
esculenta L.*) DAN TALAS (*Colocasia esculenta L.*)
TERMODIFIKASI ALKOHOL-BASA**

**PHYSICOCHEMICAL CHARACTERISTICS OF LESSER YAM
(*Dioscorea esculenta L.*) AND TARO (*Colocasia esculenta L.*)
STARCH MODIFIED BY ALCOHOLIC-ALKALINE**



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**PROGRAM STUDI TEKNOLOGI HASIL PERTANIAN
JURUSAN TEKNOLOGI PERTANIAN
FAKULTAS PERTANIAN
UNIVERSITAS SRIWIJAYA**

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SUMMARY

TRI NURJANNAH. Physicochemical Characteristics of Lesser Yam (*Dioscorea Esculenta* L.) and Taro (*Colocasia Esculenta* L.) Starch Modified by Alcoholic-Alkaline. (Supervised by **NURA MALAHAYATI** and **PARWIYANTI**).

This study aimed to determine the effect of varying amounts of NaOH on physicochemical characteristics of lesser yam and taro starch. The research was conducted in Oktober 2018 to February 2019 at Agricultural Product Chemical Laboratory, Agricultural Technology Department, Faculty of Agriculture, Sriwijaya University.

This study used a Split Plot Design with two treatment factors were the types of starch (lesser yam and taro) and varying amounts of NaOH 3 M (0, 3, 6, 9 g). Each treatment was repeated triplicate. The parameters observed included physical characteristics (whiteness level, water absorption index, water solubility, yield, swelling power and solubility index) and chemical characteristics (ash, water, amylose, and starch content).

The results showed that the type of starch had significantly affected on water absorption index, water solubility, swelling power, solubility index, and ash content of modified starch. The amount of NaOH had significantly affected on whiteness level, water absorption index, water solubility, yield, swelling power, solubility index, and ash content of modified starch. Moreover, the interaction between types of starch and the amount of NaOH had significantly affected on water absorption index, solubility in water, solubility index, and ash content of modified starch. Based on the parameters of water absorption index and whiteness level, lesser yam starch with the addition 3 g of NaOH 3M is the best treatment.

LEMBAR PENGESAHAN

KARAKTERISTIK FISIKOKIMIA PATI GEMBILI (*Dioscorea esculenta* L.) DAN TALAS (*Colocasia esculenta* L.) TERMODIFIKASI ALKOHOL-BASA

SKRIPSI

Sebagai Salah Satu Syarat untuk Mendapatkan Gelar Sarjana Teknologi Pertanian
pada Fakultas Pertanian Universitas Sriwijaya


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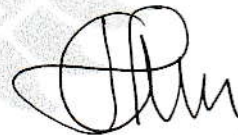
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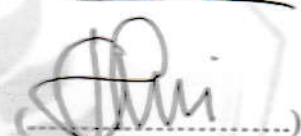


Mengetahui,
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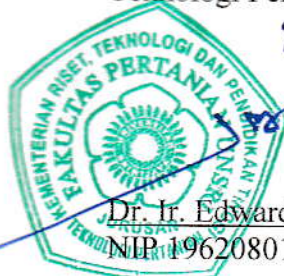
Skripsi dengan Judul “Karakteristik Fisikokimia Pati Gembili (*Dioscorea esculenta L.*) dan Talas (*Colocasia esculenta L.*) Termodifikasi Alkohol-basa.” oleh Tri Nurjannah telah dipertahankan di hadapan Komisi Penguji Skripsi Fakultas Pertanian Universitas Sriwijaya pada tanggal 21 Juni 2019 dan telah diperbaiki sesuai saran dan masukan tim penguji.

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Menyatakan bahwa semua data dan informasi yang dimuat dalam skripsi ini merupakan hasil penelitian saya sendiri di bawah supervisi pembimbing, kecuali yang disebutkan dengan jelas sumbernya. Apabila di kemudian hari ditemukan adanya unsur plagiasi dalam laporan skripsi ini, maka saya bersedia menerima sanksi akademik dari Universitas Sriwijaya.

Demikian pernyataan ini saya buat dalam keadaan sadar dan tidak mendapat paksaan dari pihak siapapun.




Tri Nurjannah