

EFFECT OF VEGETABLE OIL TYPE AND CONCENTRATION ON THE PHYSICOCHEMICAL AND SENSORY PROPERTIES OF WHITE SPICE PASTE

VANIA ZUKHRUFA



**UNDERGRADUATE PROGRAM OF FOOD TECHNOLOGY
FACULTY OF ENGINEERING AND TECHNOLOGY
INSTITUT PERTANIAN BOGOR**

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ABSTRAK

VANIA ZUKHRUFA. Pengaruh Jenis dan Konsentrasi Minyak Nabati terhadap Karakteristik Fisikokimia dan Sensori Bumbu Dasar Putih Pasta. Dibimbing oleh FALEH SETIA BUDI.

Bumbu dasar putih pasta merupakan bumbu semi-padat yang karakteristiknya dipengaruhi jenis dan konsentrasi minyak nabati. Penelitian ini mengevaluasi olein sawit dan minyak kanola pada konsentrasi 25%, 30%, dan 35% terhadap karakteristik fisikokimia dan sensori serta menentukan formulasi yang paling sesuai. Penelitian menggunakan rancangan acak lengkap faktorial 2×3 . Analisis mencakup komposisi proksimat, warna, pH, viskositas terukur, dan penerimaan sensori. Jenis minyak, konsentrasi, dan interaksinya berpengaruh nyata terhadap seluruh parameter proksimat dan viskositas terukur, sedangkan interaksi keduanya juga memengaruhi warna. Peningkatan konsentrasi minyak secara umum menurunkan kadar air dan viskositas serta meningkatkan kadar lemak. Nilai pH berkisar 5,55–5,94, sedangkan viskositas terukur berkisar 8.654 cP pada formulasi dengan 35% olein sawit hingga 170.900 cP pada formulasi dengan 25% minyak kanola. Penerimaan warna, tekstur, aroma, dan rasa tidak berbeda nyata. Formulasi dengan 25% minyak kanola dipilih sebagai formulasi yang paling sesuai berdasarkan keseluruhan karakteristik fisikokimia dan sensori, sedangkan formulasi dengan 25% olein sawit dapat dipertimbangkan sebagai alternatif dengan keunggulan ekonomi yang masih perlu dikonfirmasi melalui analisis biaya.

Kata kunci: bumbu dasar putih, jenis minyak nabati, karakteristik fisikokimia, konsentrasi minyak, penerimaan sensori



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ABSTRACT

VANIA ZUKHRUFA. Effect of Vegetable Oil Type and Concentration on the Physicochemical and Sensory Properties of White Spice Paste. Supervised by FALEH SETIA BUDI.

White spice paste is a semi-solid seasoning whose characteristics are influenced by vegetable oil type and concentration. This study evaluated palm olein and canola oil at 25%, 30%, and 35% for their effects on physicochemical and sensory characteristics and identified the most suitable formulation. A 2×3 factorial completely randomized design was used. Analyses included proximate composition, color, pH, apparent viscosity, and sensory acceptance. Oil type, concentration, and their interaction significantly affected all proximate parameters and apparent viscosity, while their interaction also affected color. Increasing oil concentration generally decreased moisture content and apparent viscosity while increasing fat content. pH ranged from 5.55 to 5.94, while apparent viscosity ranged from 8,654 cP in the formulation containing 35% palm olein to 170,900 cP in the formulation containing 25% canola oil. Sensory acceptance of color, texture, aroma, and taste did not differ significantly. The formulation containing 25% canola oil was selected as the most suitable formulation based on overall physicochemical and sensory characteristics, while the formulation containing 25% palm olein may be considered an alternative pending confirmation of its economic advantage through cost analysis.

Keywords: oil concentration, physicochemical characteristics, sensory acceptance, vegetable oil type, white spice paste



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EFFECT OF VEGETABLE OIL TYPE AND CONCENTRATION ON THE PHYSICOCHEMICAL AND SENSORY PROPERTIES OF WHITE SPICE PASTE

VANIA ZUKHRUFA

Bachelor Thesis
as one of the requirements for obtaining a
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**UNDERGRADUATE PROGRAM OF FOOD TECHNOLOGY
FACULTY OF ENGINEERING AND TECHNOLOGY
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Examining Team for Bachelor Thesis Examination:

- 1 Prof. Dr. Didah Nur Faridah, S.T.P., M.Si.
- 2 Dr. Diah Chandra Aryani, S.TP, M.Sc

Title : Effect of Vegetable Oil Type and Concentration on the
Physicochemical and Sensory Properties of White Spice Paste
Name : Vania Zukhrufa
Student ID : F2401221822

Approved by

Supervisor:
Dr. Faleh Setia Budi, ST., M.T
NIP 197001012000031001



Acknowledge By

Head of Undergraduate Program:
Dr. Ing Dase Hunaefi, S. TP., M.Food.St
NIP 197912082005011000



Examination Date: 25 September 2026



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PREFACE

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The author recognises that this thesis remains imperfect. Therefore, suggestions and feedback are sincerely welcomed for its improvement. It is hoped that this thesis may provide useful knowledge and contribute to further studies related to white spice paste.

Bogor,
Vania Zukhrufa

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