

# SIFAT FISIK, KIMIA DAN TINGKAT KESUKAAN BAWANG PUTIH GORENG DENGAN PERBEDAAN METODE PENGGORENGAN DAN VARIETAS

## INTISARI

Indonesia merupakan salah satu negara penghasil rempah-rempah seperti bawang putih. Pemanfaatan bawang putih paling mudah adalah dengan metode penggorengan, yaitu menjadikannya bawang putih goreng yang merupakan produk siap pakai tanpa perlu pengolahan lagi. Varietas bawang putih yang paling mudah ditemui adalah jenis bawang lanang, kating dan sin chung. Metode penggorengan yang cocok dan paling sering digunakan untuk memproduksi makanan kering seperti bawang putih goreng adalah *deep frying* dan *pan frying*. Tujuan penelitian ini adalah untuk mengetahui pengaruh dari perbedaan metode penggorengan dan varietas bawang putih terhadap parameter sifat fisik, kimia dan tingkat kesukaan bawang putih goreng.

Penelitian ini dilakukan menggunakan RAL (Rancangan Acak Lengkap) dengan 2 faktor. Faktor pertama adalah metode penggorengan (*pan frying* dan *deep frying*) dan faktor kedua yaitu varietas bawang putih yang digunakan (lanang, kating dan sin chung). Pengujian yang dilakukan pada bawang putih mentah yaitu uji kadar air dan kadar gula, sedangkan pengujian pada bawang putih goreng berupa uji kadar air, kadar abu, kadar lemak, kadar asam lemak bebas, uji kadar gula, kadar aktivitas antioksidan, tekstur dan tingkat kesukaan. Data yang diperoleh dari pengujian bawang putih goreng dilakukan analisis statistik ANOVA dan jika berbeda nyata dilanjutkan dengan uji *Duncan Multiple Range Test* pada tingkat kepercayaan  $\alpha$  5%.

Hasil penelitian menunjukkan bahwa bawang putih goreng sampel M1V3 yaitu bawang sin chung dengan metode *pan frying* yang paling disukai panelis yang memiliki nilai kadar air 4,30%; kadar abu 3,55%; kadar lemak 40,63%; kadar asam lemak bebas 4,18%; kadar gula total 35,01%; aktivitas antioksidan 11,15% dan kerenyahan atau tekstur 1,25 N. Perbedaan metode penggorengan dan varietas bawang putih yang digunakan berpengaruh nyata terhadap sifat fisik yaitu tekstur atau kerenyahan, serta sifat kimia yaitu nilai kadar air, kadar abu, kadar lemak, kadar asam lemak bebas, kadar gula total dan aktivitas antioksidan pada bawang putih goreng.

**Kata kunci:** bawang putih lanang, bawang putih kating, bawang putih sin chung, *deep frying*, *pan frying*

# **PHYSICAL, CHEMICAL PROPERTIES AND PANELIST PREFERENCE OF FRIED GARLIC WITH DIFFERENT METHODS OF FRYING AND VARIETY**

## **ABSTRACT**

Indonesia is one of the producing countries of spices such as garlic. The easiest use of garlic is the frying method, which is to make fried garlic which is a ready-to-use product without the need for further processing. The varieties of garlic that are easiest to find are the types of lanang, kating and sin chung. Frying methods that are suitable and most often used to produce dry foods such as fried garlic are deep frying and pan frying. The purpose of this study was to determine the effect of different frying methods and varieties of garlic on the parameters of physical, chemical and preferred for fried garlic.

This research was conducted using CRD (Completely Randomized Design) with 2 factors. The first factor is the frying method (pan frying and deep frying) and the second factor is the garlic varieties (lanang, kating and sin chung). The tests carried out on raw garlic were moisture and sugar content, while the fried garlic tests were water content, ash content, fat content, free fatty acid content, sugar content test, antioxidant activity level, texture and preference level. The data obtained from the fried garlic test was carried out by ANOVA statistical analysis and if it was significantly different, it was continued with the Duncan Multiple Range Test at a confidence level of  $\alpha$  5%.

The results showed that the fried garlic sample M1V3, namely sin chung garlic using the pan frying method, was the most preferred by the panelists which had a moisture content value of 4.30%; ash content 3,55%; fat content 40.63%; free fatty acid content of 4.18%; total sugar content of 35.01%; antioxidant activity of 11.15% and crispness or texture of 1.25 N. Differences in frying methods and varieties of garlic used have a significant effect on physical properties, namely texture or crispness, and chemical properties, namely the value of moisture content, ash content, fat content, acid content free fat, total sugar content and antioxidant activity in fried garlic.

**Keywords:** lanang garlic, kating garlic, sin chung garlic, deep frying, pan frying