

**PENGARUH PERBANDINGAN KONSENTRASI KAPPA DAN IOTA
KARAGENAN TERHADAP KARAKTERISTIK FISIK, KIMIA, DAN SENSORIS
YOGURT KARAGENAN “YOGUKARA”**

INTISARI

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Penelitian ini bertujuan untuk meningkatkan penggunaan karagenan kombinasi kappa dan iota sebagai MALSAI ke dalam produk turunan yogurt bertekstur puding, dan membandingkan karakteristik fisik (persentase sineresis), kimia (persentase kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, dan kadar total asam laktat), serta sensoris (warna, aroma, rasa, dan tekstur) antar perbandingan kappa dan iota (1:1, 2:3, 3:2). Rancangan percobaan yang dilakukan adalah Rancangan Acak Lengkap (RAL) dengan perlakuan penambahan kombinasi kappa-karagenan dan iota-karagenan dalam berbagai perbandingan. Data hasil pengujian dianalisis statistik menggunakan ANOVA dan Kruskal-Wallis, jika terdapat perbedaan antar perlakuan dilanjutkan dengan analisis Duncan Multiple Range Test (DMRT) dan Mann-Whitney.

Hasil penelitian menunjukkan bahwa terdapat perbedaan nyata pada persentase sineresis, kadar air, kadar karbohidrat, dan total asam laktat terhadap perbedaan perbandingan kappa dan iota. Yogurt karagenan dengan perbandingan kappa:iota 2:3 memiliki persentase sineresis paling kecil (2,677%) dan kadar air paling tinggi (84,778%). Yogurt karagenan dengan perbandingan kappa:iota 1:1 memiliki kadar karbohidrat paling tinggi (12,525%), dan pada yogurt karagenan dengan perbandingan kappa:iota 3:2 memiliki persentase total asam laktat paling tinggi (0,443%).

Kata kunci: yogurt, kappa-karagenan, iota-karagenan, yogurt karagenan, sineresis, karakteristik kimia, karakteristik sensoris

EFFECT OF KAPPA AND IOTA CARRAGEENAN'S CONCENTRATION ON PHYSICAL, CHEMICAL, AND SENSORY CHARACTERISTIC OF CARRAGEENAN YOGURT “YOGUKARA”

ABSTRACT

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This research aims to increase utilization of kappa and iota carrageenan as part of MALSAI into a carrageenan yogurt with pudding-like texture, and to compare the physical characteristic (percentage of syneresis), chemical characteristics (percentage of water content, ash content, protein content, fat content, carbohydrate content, and total lactic acid content), as well as sensory (color, aroma, taste, and texture) of each kappa:iota ratio (1:1, 2:3, 3:2). This experiment is done using Rancangan Acak Lengkap (RAL) with addition of kappa-carrageenan and iota-carrageenan in different ratio as a treatment. The result of this research is being statistically analysed using ANOVA and Kruskal-Wallis, with further analysis using Duncan Multiple Range Test (DMRT) and Mann-Whitney.

The results showed that there were significant differences in the percentage of syneresis, water content, carbohydrate content, and total lactic acid content on the difference ratio of kappa and iota. Carrageenan yogurt with a kappa:iota ratio of 2:3 had the smallest syneresis percentage (2.677%), and the highest water content (84.778%). Carrageenan yogurt with a kappa:iota ratio of 1:1 had the highest carbohydrate content (12.525%), and carrageenan yogurt with a kappa:iota ratio of 3:2 had the highest percentage of total lactic acid (0.443%).

Keyword: yogurt, kappa-carrageenan, iota-carrageenan, yogurt carrageenan, syneresis, chemical characteristics, sensory characteristics