

**PENGARUH PENAMBAHAN EKSTRAK ASAM KANDIS  
(*Garcinia cowa Roxb*) SEBAGAI PENGASAM TERHADAP  
KARAKTERISTIK SAUS TOMAT (*Lycopersicum esculentum*,  
Mill.)**

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## **Pengaruh Penambahan Ekstrak Asam Kandis (*Garcinia cowa Roxb*) Sebagai Pengasam Terhadap Karakteristik Saus Tomat (*Lycopersicum esculentum*, Mill.)**

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### **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan ekstrak asam kandis sebagai pengasam dan formulasi terbaik berdasarkan karakteristik kimia, fisik, mikrobiologi, dan organoleptik terhadap saus tomat. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Pada penelitian ini dilakukan penambahan ekstrak asam kandis dengan perlakuan A (0%), B (3%), C (3,5%) D (4%), dan E (4,5%). Hasil penelitian dari masing-masing parameter dianalisis statistik dengan menggunakan Analysis of Variance (ANOVA) dan jika berpengaruh berbeda nyata dilanjutkan dengan analisis Duncan's New Multiple Range (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan penambahan ekstrak asam kandis memberikan pengaruh berbeda nyata terhadap kadar air, aktivitas air ( $A_w$ ), nilai pH, total asam, total padatan terlarut, viskositas, organoleptik rasa dan organoleptik tekstur dari saus tomat. Namun, memberikan pengaruh berbeda tidak nyata terhadap angka lempeng total, organoleptik warna, dan aroma. Perlakuan terbaik penambahan ekstrak asam kandis yang tepat berdasarkan karakteristik kimia, fisik, mikrobiologi, dan organoleptik saus tomat adalah perlakuan D (penambahan asam kandis 4%) dengan kriteria kadar air 76,68%, aktivitas air 0,77, nilai pH 4,11, total asam 1,08%, total padatan terlarut 31,20°Brix, viskositas 56,93 dPa.s, angka lempeng total  $1,2 \times 10^2$  koloni/g, dan tingkat kesukaan warna 4,00 (suka), aroma 4,07 (suka), tekstur 4,20 (suka), dan rasa 4,43 (suka).

**Kata Kunci :** tomat, asam kandis, saus tomat

**The Effect of Adding Kandis Extract (*Garcinia cowa Roxb*) as an Acid to The Characteristics of Tomato Sauce (*Lycopersicum esculentum*, Mill.)**

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**ABSTRACT**

The research aimed to determine the effect of adding kandis extract as an acidifier and the best formulation based on chemical, physical, microbiological, and organoleptic characteristics of tomato sauce. The research design used was a Completely Randomized Design (CRD) with 5 treatments and 3 replicates. In this research, kandis extract was added with treatments A (0%), B (3%), C (3.5%), D (4%), and E (4.5%). The results of each research parameter were analyzed statistically using Analysis of Variance (ANOVA) and if the effect was significantly different, it was continued with Duncan's New Multiple Range (DNMRT) analysis at the 5% level. The results showed that the addition of kandis had a significantly different effect on water content, activity water (Aw), pH value, total acid, total dissolved solids, viscosity, organoleptic taste and texture of tomato sauce. However, it did not have a significantly different effect on total plate count, color, and aroma organoleptics. The best treatment for the addition of kandis extract based on the chemical, physical, microbiological, and organoleptic characteristics of tomato sauce is treatment D (addition of 4% kandis) with the criteria of water content of 76.68 %, activity water of 0.77, pH of 4.11, total acid of 1.08%, total dissolved solids of 31.20°Brix, viscosity of 56.93 dPa.s, total plate count of  $1.2 \times 10^2$  colonies/g, and organoleptic acceptance rate for color 4.00 (like), aroma 4.07 (like), texture 4.20 (like), and taste 4.43 (like).

**Keywords :** tomato, kandis, tomato sauce