



**PENGARUH PERENDAMAN DALAM AIR KAPUR DAN SUHU PENGERINGAN TERHADAP KARAKTERISTIK KIMIA MANISAN TOMAT (*Lycopersicum esculentum*)**

**INTISARI**

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Indonesia merupakan salah satu negara penghasil tomat (*Lycopersicum esculentum*). Harga tomat yang saat panen raya cenderung jatuh bebas hingga merugikan petani. Masyarakat di berbagai kota melakukan pengawetan tomat menjadi manisan tomat. Penelitian terdahulu menunjukkan tomat mengandung vitamin dan senyawa fenolik lain yang berfungsi sebagai antioksidan dan berpotensi untuk menjadi pangan fungsional. Belum terdapat penelitian untuk mengetahui kadar kapur terbaik dalam perendaman serta suhu pengeringan terbaik untuk produksi manisan buah tomat. Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan kadar kapur serta perbedaan suhu pengeringan terhadap kandungan gula reduksi, gula total, total fenolik, aktivitas antioksidan.

Tomat dikeluarkan biji kemudian direndam dalam air kapur dengan berbagai variasi (0.1%, 0.3%, 0.6%, 0.9%) selama 4 jam lalu dimasak dengan gula selanjutnya dikeringkan dengan pengering kabinet berbagai variasi suhu (55 °C, 60 °C, 65 °C, 70 °C) selama 12 jam. Selanjutnya dilakukan analisis kandungan gula reduksi, gula total, total fenolik, dan aktivitas antioksidan manisan tomat. Hasil penelitian menunjukkan manisan tomat dengan perbedaan kadar kapur menghasilkan kandungan gula reduksi, gula total, dan total antioksidan yang berbeda nyata ( $p < 0.05$ ), namun tidak terdapat perbedaan nyata pada kadar kapur 0.6 dan 0.9 untuk gula reduksi, 0.1 dan 0.9 pada total fenolik. Perbedaan suhu pengeringan menghasilkan kandungan gula reduksi, gula total, total fenolik, dan total antioksidan yang berbeda nyata, namun tidak terdapat perbedaan nyata untuk gula reduksi pada suhu pengeringan 60°C, 65°C, dan 70 °C, serta pada suhu pengeringan 60°C dan 65 °C untuk total fenolik.

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Kata kunci : manisan tomat, kadar kapur, pengeringan, aktivitas antioksidan

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## EFFECT OF SOAKING IN LIME WATER AND DRYING TEMPERATURE ON CHEMICAL CHARACTERISTICS OF DRIED TOMATO (*Lycopersicum esculentum*)

### ABSTRACT

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Indonesia was one of the country that produce tomatoes (*Lycopersicum esculentum*). Price tomatoes during the harvest fell free to the detriment of farmers. People in various cities preserve tomatoes as candied tomatoes. Previous research shows tomatoes contain vitamins and other phenolic compounds that function as antioxidants and have potential to become functional food. There has been no research to determine the best lime content in the soaking and drying temperature is best for the production of tomatoes. This study aims to determine the effect of different levels of lime and differences in drying temperatures on reducing sugar content, total sugar, total phenolic, antioxidant activity, and sensory observation of candied tomatoes.

Tomato seeds are removed and then soaked in lime water with variations 0.1%, 0.3%, 0.6%, 0.9%) for 4 hours and then cooked with sugar 20% and then dried with a dryer temperature variations (55 °C, 60 °C, 65 °C, 70 °C) inside cabinet dryer for 12 hours. Then an analysis of reducing sugar content, total sugar, total phenolic, and antioxidant activity of candied tomatoes. The results showed that tomato candied with different levels of lime produced a reducing sugar content, total sugar, and total antioxidant that were significantly different ( $p < 0.05$ ), but there were no significant differences in lime levels 0.6 and 0.9 for reducing sugars, 0.1 and 0.9 in total phenolic. The difference in drying temperature resulted in reducing sugar content, total sugar, total phenolic, and total antioxidant that were significantly different, but there were no significant differences for reducing sugars at drying temperatures of 60°C, 65°C and 70 °C, as well as at drying temperatures 60°C and 65 °C for total phenolic.

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Keywords : Dried Tomato, drying, lime water, antioxidant activity

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