

PENGERINGAN KEMOREAKSI DENGAN KAPUR API (CaO) UNTUK MENCEGAH KEHILANGAN MINYAK ATSIRI PADA JAHE

(Chemoreaction Drying Using Quicklime (CaO) to Prevent Loss of Essential Oil in Ginger)

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ABSTRACT

Ginger (Zingiber officinalis Rosc) has been widely used in various pharmaceuticals, cosmetics, foods and beverages. Harvesting time, handling and drying methods are important factors in producing best quality of dried ginger. The objectives of this study were to examine : 1) the optimum harvesting time, 2) chemoreaction drying capacity using quicklime in ginger drying, 3) the effect of sliced ginger thickness on drying time and essential oil content of ginger and 4) the effect of blanching pretreatment on the quality of dried ginger. There were three kinds of ginger used in this study i.e. red, big white and small white ginger. The results showed that the optimum harvesting time for the red and small white ginger was 10 months while that for the big white ginger was 9 months. The optimum thickness for sliced ginger drying was 2,5 mm. The efficient weight ratio of quicklime to ginger for drying was 3 : 1 and the final moisture content were 7,34% wb, 5,53% wb and 6,57% wb for red, big white and small white ginger respectively. The moisture content of ginger has complied with the quality standard of as herbal materials, i.e. 10%, while the essential oil for red, big white and small white ginger were 3,39%, 3,12% and 3,16% respectively, and the drying time was 45 hours.

Key words : Drying Characteristics, Chemoreaction Drying, Quicklime, Ginger