

Effect of extraction temperature on the press method on oil and fatty acid content of some varieties of sesame (Sesame)

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Abstract. The technique of extracting oil from seeds affects the oil content, fatty acid, and oil quality. The purpose of this study to determine the effect of pressing temperature on oil content, fatty acids, and the quality of sesame oil. The research method used a completely randomized design (CRD) in the laboratory with temperature and a variety of factors. The temperature factor consists of 5 levels: 50⁰C, 100⁰C, 150⁰C, 200⁰C. The varietal factor consisted of 3 varieties: SBR 1, Winas 3, and Lokal Madiun. Observation parameters: oil content, pulp yield, oil color, aroma, taste, and shelf life. The test uses the SPSS 20 application. The analysis uses a multiple comparison test and the parameter correlation being tested. The results showed that: there was an interaction between the pressing temperature of the varieties on the oil content parameter; the pressing temperature factor has a significant effect on oil content, oil color, and amount of pulp; the strong correlation between oil content parameters with color and aroma

Key word : Temperature, separation, variety, oil content, fatty acid quality