

ABSTRACT

EFFECT OF CONTACT TIME OF BANANA PEEL ADSORBENT ON PEROXIDE NUMBER OF USED COOKING OIL

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Plantain peels contain pectin and cellulose that can be utilized as adsorbents that absorb peroxide compounds in cooking oil. Peroxide compounds are carcinogenic compounds found in used cooking oil, making it unfit for reuse. One of the factors that affect the adsorption process is the length of contact time, therefore this study aims to determine the effect of contact time on peroxide numbers in used cooking oil. The length of contact time used was 30, 60, 90, 120, and 150 minutes. Peroxide number analysis was carried out using the iodometric method. The results obtained in this study are that the length of contact time of 30 minutes after adsorption can reduce the peroxide number 7.69 meq / Kg, with the best % decrease of 36.34% from before adsorption 12.08 meq / Kg.

Keywords: Used Cooking Oil, Raja Nangka Banana Peel, Adsorbent, Length of contact time.