

ABSTRACT

EFFECT OF 20% TURMERIC POWDER IN WOSTED COOKED OIL ON WATER CONTENT WITH VARIATIONS IN ADSORPTION TIME

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Cooking oil is one of the basic human needs as a food processing ingredient. Using cooking oil repeatedly during the frying process will reduce the quality of the cooking oil. One effort to process used cooking oil is by adsorption using turmeric. This research aims to determine the effect of turmeric adsorbent (*Curcuma domestica* Val) in used cooking oil on water content with variations in the length of adsorption time. This research uses the heating method. The parameter observed was water content, with 20 g turmeric powder adsorbent in 100 ml of used cooking oil. The research results showed that turmeric adsorbent with variations in adsorption time had an effect on the water content in used cooking oil. The results of the water content of used cooking oil before adsorption were 0.13%, at a time variation of 35 minutes 0.11%, at a time variation of 45 minutes 0.10%, at a time variation of 50 minutes 0.09%, at a time variation of 55 minutes 0, 09%, and at a time variation of 60 minutes 0.07%.

Keywords: Used cooking oil, water content, adsorption, adsorbent, and Turmeric (*Curcuma domestica* Val)