

Antioxidant activity of Citrus hystrix peel extract in RBD palm olein during frying of fish crackers

ABSTRACT

The Citrus hystrix peel extract (2,000 ppm) and butylated hydroxytoluene(BHT) (200 ppm) were added to the frying oil. The antioxidant activities were determined during deep fat frying of fish crackers for 4 consecutive days. Each frying period was for 5 h and intermittent frying at 180C with half an hour interval was carried out. The antioxidant activities were determined by measuring peroxide value (PV), p-anisidine value (AnV), totox value, iodine value (IV), percent free fatty acids, color and viscosity of the oil. Results indicated that the ethanol extract of the citrus peel exhibited antioxidant properties and therefore has a potential as one of the new sources of natural antioxidants.

Keyword: Antioxidant; Fish crackers; Citrus hystrix peel extract; Frying