

**Antioxidative effects of stabilized and unstabilized defatted rice bran methanolic extracts on the stability of rice bran oil under accelerated conditions.**

ABSTRACT

The present research assessed the antioxidant activity against the synthetic 1, 1-diphenyl-2-picrylhydrazyl radical, and  $\beta$ -carotene-linoleic acid assay of the methanolic extracts of defatted rice bran from stabilized and unstabilized rice bran. The effects of the extracts (0.1 and 0.25% w/w) on the oxidative stability of refined-bleached rice bran oil were determined and compared with those of BHA (synthetic antioxidant). The study was carried out over a 168 hr period at 70°C and the progression of oxidation was measured by peroxide value, p-anisidine value, and thiobarbituric acid-reactive substances (TBARS). The relative % of residual  $\alpha$ -tocopherol and  $\gamma$ -oryzanol of the rice bran oil containing methanolic extracts of stabilized and unstabilized defatted rice bran during storage at 70°C were studied.

**Keyword:** Antioxidant activity; Rice bran oil; Stability; Stabilized defatted rice bran