Anti-rancidity effect of the unsaponifiable matters of Bene hull oil

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In this research, anti-rancidity effect of the hull oil unsaponifiable matters (USM, 100 ppm) of the Pistacia atlantica subsp. mutica (Bene) on sunflower oil (SFO) during frying process at 180 °C was investigated and compared to that of tertiary-butylhydroquinone (TBHQ, 100 ppm). The results obtained from the measurements of total polar compounds (TPC), conjugated diene value (CDV), carbonyl value (CV), and acid value (AV) during 32 h of the frying process showed that the frying stability of the SFO improves more in the presence of the USM of the Bene hull oil (BHO) than in the presence of the TBHQ. Moreover, compared to the TBHQ, the USM of the BHO had a better protective effect on the indigenous tocopherols of the SFO during the frying process.