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High *tert*-Butylperoxyl Radical Scavenging Activities of Sweet Potato Cultivars with Purple Flesh

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The *tert*-butylperoxyl radical (*t*-BuOO[·]) scavenging activities of ethanol extracts of 21 sweet potato cultivars with several flesh colors were examined using a *tert*-butyl hydroperoxide (*t*-BuOOH)/hemin/luminol system. Among them, sweet potato cultivars with purple flesh, which contained anthocyanins, had the highest *t*-BuOO[·] scavenging activities. Those cultivars with purple flesh also had the highest antioxidative activities against lipid peroxidation induced by auto-oxidation of linoleic acid. Most of the sweet potato cultivars with white, white-yellow, yellow and orange flesh had low *t*-BuOO[·] scavenging and antioxidative activities; however, some of them had higher activities. In all sweet potato cultivars tested, the *t*-BuOO[·] scavenging activities became higher with an increase in the total phenolic content.

Keywords: [t-BuOO[·] scavenging activity](#), [chemiluminescence intensity](#), [antioxidative activity](#), [lipid peroxidation](#), [total phenolic content](#), [anthocyanin](#), [sweet potato](#)


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