

# Biosynthesis and Radical Scavenging Activity of Betalains during the Cultivation of Red Beet (*Beta vulgaris*) Hairy Root Cultures

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Betalains biosynthesis and antiradical scavenging activity were investigated during cultivation of four hairy root cultures of *Beta vulgaris*, obtained from different cultivars (Bordo, Egyptian, Detroit 2 and Detroit Dark Red). The best producer of betalains was a hairy root culture from *Beta vulgaris* cv. Detroit Dark Red (13.27 mg/g dry weight total pigment production). The ethanol extract, derived from roots of the same culture grown for 15 days under submerged conditions, showed a high antiradical activity (83% of inhibition of the stable DPPH•).