High total phenol content, antioxidant activity and mineral content in 'Sweetheart' cherry peel

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Abstract

Cherry is used for several processed products, resulting in a large volume of subproducts, mainly stones and peel. For evaluation of nutritional potential of some sub products, total phenol content (Folin-Ciocalteu reagent method), antioxidant activity (DPPH method), and calcium, magnesium, sodium, potassium and phosphorus content (ICP-AES) were determined in 'Sweetheart' cherry peel. Results were compared with those of 'Tulameen' raspberry fruit cultivated in the same region. Raspberry is recognised to having a high level of antioxidants, minerals and fibre. Average concentrations of 2793.8 mg gallic acid equivalent kg^{-1}, 3450.9 mg Trolox equivalent kg^{-1}, (Ca) 317.7, (Mg) 267.5, (Na) 9.8, (K) 2196.2, and (P) 407.5 mg kg^{-1} were found in 'Sweetheart' cherry peel. Regarding raspberries, concentrations of 1411.8 mg gallic acid equivalent kg^{-1}, 2709.5 mg Trolox equivalent kg^{-1}, (Ca) 281.9, (Mg) 227.2, (Na) 1.3, (K) 1646.7, and (P) 76.7 mg kg^{-1} were found. All nutritional concentrations in peel were significantly higher than in the remaining fruit, showing its potential for nutrition complement production.