

Selected nutritional aspects of field grown root vegetables in the Czech Republic

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Abstract

Different cultivars of beetroot (*Beta vulgaris* var. *conditiva*), black salsify (*Scorzonera hispanica*), parsnip (*Pastinaca sativa*), parsley (*Petroselinum hortense*) and celeriac (*Apium graveolens* var. *rapaceum*) were evaluated for total soluble solids (TSS), dry matter, carbohydrate, dietary fibre, calcium, potassium, magnesium, sodium, vitamin C, carotenoids and nitrate contents. TSS varied from 6.8-16°Brix, total dry matter, 10-29%, crude fibre, 4.8-12.8%, potassium, 2800-5024 mg.kg⁻¹, calcium, 112-523 mg.kg⁻¹ f.m., magnesium, 106-593 mg.kg⁻¹, sodium, 56-754 mg.kg⁻¹, vitamin C, 93-699 mg.kg⁻¹, total carotenoids, up to 3.2 mg.kg⁻¹ and nitrate content, 92-285 mg.kg⁻¹ fresh weight. Highest amount of vitamin C and other substances were obtained in parsley, with cultivar 'Jadran' and 'Atika' having the best nutritional value. Mineral contents were lowest in beetroot which also had the highest nitrate content. Vitamin C was lowest in celeriac which however contained significant amount of dietary fibre and high levels of TSS and total dry matter. Parsnip was the best source of calcium and potassium.