

<b>Title</b>	Nutritional value of minor fruits in Latvia
<b>Author</b>	Solvita Kampuse, Kaspars Kampuss, Zanda Kruma and Krasnova
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### Abstract

There are many edible fruits and berries in Latvia, which are still underutilized for commercial growing and processing in food products. Some of them are known for their medical value (e.g. *Rosa rugosa* and *Aronia melanocarpa*) or are cultivated in home gardens, but there is little information about nutritional value and suitability of minor fruits for developing products of high nutritional quality. The aim of this research was to evaluate biochemical composition of different minor berries and small fruits grown in Latvia and to compare it with antiradical activity of the sample. The experiments were done in Latvia University of Agriculture (LLU) and in Latvia State Institute of Fruit Growing. Contents of titrable acids, soluble solids, ascorbic acid, total phenols, anthocyanins, carotenoids, tannins, and antiradical activity (DPPH) of fresh and frozen fruits of saskatoon (*Amelanchier spicata*), honeysuckle (*Lonicera ssp.*), golden currant (*Ribes aureum*) cultivar 'Laila', rosehips (*Rosa rugosa*), hawthorn (*Crataegus submollis*), chokeberry (*Aronia melanocarpa*), black elder (*Sambucus nigra*), wild rowanberry (*Sorbus aucupa*) and red bilberry (*Vaccinium vitis-idaea*) cultivar 'Coralie' were analysed. The highest anthocyanin content was observed to fresh honeysuckle and to frozen chokeberries. The fruits with highest total phenol content were red bilberry cultivar 'Coralie', and chokeberry. The highest content of carotenoids was detected in rosehips. The highest content of ascorbic acid was observed to rosehips what is more than 10 times higher than all other evaluated non-traditional fruits. The highest antiradical activity were determined in chokeberry rosehips, and saskatoon berry, and the high antiradical activity correlated with high contents of carotenoids, total anthocyanins and tannins ( $r>0.8$ ). Several of the tested fruits had very high nutritional value - rosehips (high contents of ascorbic acid, phenols, carotenoids, and high antiradical activity; chokeberry - high contents of phenols, anthocyanins and high antiradical activity; saskatoon berry - high contents of anthocyanins and high antiradical activity; honeysuckle - high contents of anthocyanins and phenols. Most of these berries have to be evaluated for stability of nutritional value in different products and, finally, new products developed for enlargement of healthy food assortment.