

Chemical composition of seabuckthorn leaves, branches and buds

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Seabuckthorn is a highly valuable plant. Products from seabuckthorn have high prices. Actually high amounts of seabuckthorn fruit are processed and an important part of harvest is done by cutting technology. Thus an important amount of leaves, branches and buds are available for technical use as by-product.

From literature is well known that these parts have different biochemical composition and that there is a chance to produce value added products.

Within a research project the aim of this work was to collect data on seabuckthorn parts composition. Especially the dependence on cultivars was focus and we analysed basic components as well as high value constituents like vitamins and other minor component.

Samples were taken from Russian cultivars in Barnaul — directly from orchard of Lisavenkow institute and in Germany — from orchards near Berlin.

Oil was extracted by method of Blyer and Dyer after drying. Nutrients were analysed by standard methods. Oil was investigated by gas liquid chromatography for determination of fatty acid and sterol composition.

Fatty acid composition varies between different brands investigated. Also differences in sterols and tocopherols were observed. Never the less the main sterol is β -Sitosterol.

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