THE NUTRITIVE COMPOSITION OF SUGAR BEET LEAF

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ABSTRACT

Sugar beet is mainly used for the production of white sugar. Despite the fact that its leaves are left on fields or could be used as animal feed, people look at them as agricultural waste, ignoring its possibility in industrial production. Compared to this, in opposition to other vegetable leaves, because of the great amount, it could be used for some industrial purposes. The sugar beet leaf has a high protein content that could have a great use in food industry as protein and essential amino acid source. Because of this, the sugar beet leaf composition determination was the main aim of this research.

During the extraction of organic matters, we primarily focused on the nutritious composition of the sugar beet leaves (sugars, cellulose, proteins, fats and oils), and their quantity was also determined. The process of the isolation was preformed according to the methods of the Association of Analytical Chemists under laboratory conditions. In our experiment, we wanted to determine the yield of the substances we extracted, because this information decides which materials could be profitably utilized in different industries. In our experiment, we found that sugar beet has a high fibre (31.58%), sugar (28.89%) and protein (31.33%) content, so these materials could be used the most efficiently for industrial production.

Keywords: sugar beet leaf, composition determination, industrial use