ABSTRACT

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Title of diploma thesis: **HPLC method development and validation for analysis of anthocyanins content in black currant cultivars**.

A high performance liquid chromatography method with diode array detection was used and validated to determine delphinidin-3-glucoside, delphinidin-3-rutinoside, cyanidin-3-glucoside and cyanidin-3-rutinoside in black currant cultivars and black currant juices. The method used gradient elution with methanol and 2 % formic acid. Supelco Analytical, Ascentis Express C18 column with particle size 2.7 μm, 15 cm x 4.6 mm was used for separation. The analysis was performed using a temperature 50°C and a flow rate 0.8 ml/min. For detection, the wavelength of 520 nm was chosen.