Abstract

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Title of Diploma Thesis: HPLC method development and validation for biological active substances determination in nutraceuticals

A new HPLC method was developed and validated for the simultaneous determination of resveratrol and polydatin in nutraceuticals and the method was used for determination of these compounds in nutraceuticals A1 Resveratrol 800 RX (A1 Pharma s.r.o.), Evelor Resveratrol 50 mg (Medochemie Ltd), Walmark Lecithin s resveratrolem (Walmark), Resveratrol MAX (Tachyon), Resveratrol antiaging (TheraTech), Indonal Partner for Woman (Synergia). The chromatographic separation was performed using Ascentis Express ES-Cyano column (100 x 3.0 mm; 2.7 µm) Supelco Analytical. The mobile phase consisted of a mixture of acetonitrile/0.5% acetic acid 20:80 with flow rate of 1.0 ml/min, the detection wavelength was 305 nm using DAD detector, with a temperature of 60^{o}C and pressure of 20.0 MPa.

Keywords: HPLC, resveratrol, piceid, phytoalexin, antioxidant, nutraceuticals