



Serbian Chemical Society
Serbian Young Chemists' Club



Eight Conference of the Young Chemists of Serbia

Book of Abstracts

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Book of Abstracts

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Poster presentations

Analytical chemistry

Total phenolic content and antioxidant capacity of Norwegian plums

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European plum (*Prunus domestica* L.) is a very adaptable fruit species with a large spreading area, but it is mostly grown under the temperate climatic conditions. Plum production has a very long tradition in Norway, which dates back from the Middle Ages. In addition, plum is the second most produced fruit in Norway.¹

European plum fruits are a healthy food rich in nutrients and phenolics. They are a good source of flavonoids and phenolic acids, as well as vitamins and carotenoids.²

Six plum cultivars (Opal, Mallard, Reeves, Jubileum, Avalon and Valon) grown in Norway were used in this study. In total, 56 samples of plum fruits were gathered from two locations and dried after harvest. The total phenolic content and antioxidant capacity were investigated by spectrophotometric tests (*Folin-Ciocalteu* test and DPPH test, respectively). The content of individual phenolic compounds was analyzed by HPLC. The total phenolic content was in the range 4,43–30,75 g GAE (gallic acid equivalents) per kilogram, while antioxidant capacity was in the range 35,42–262,91 mmol TE (Trolox equivalents) per kilogram dry weight. The results show that all the samples were rich in phenolic compounds and showed high antioxidant capacity.

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