# Chemical composition of *Tulip* yellow stamens

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**Introduction.** *Tulip* L. genus plants are quite common as ornamental plants, but so far little studied in terms of their chemical composition. *Tulip* is not a pharmacopoeial plant and is not used in official medicine. But in folk medicine and homeopathy, all parts of plant are in demand due to their medicinal properties. Therefore, the study of the chemical composition of Tulip plants needs attention, for the prospect of using raw materials in the manufacture of various drugs. This work is devoted to the study of the chemical composition of *Tulip* stamens used in various cultures as a food dye and spice.
**Materials and methods**. The aim of this study was to investigate chemical composition of *Tulip* "Purple palette" stamens collected in Ukraine. The extraction was performed in the ultrasonic bath for 30 minutes. Chromatographic separation was conducted in the Shimadzu Nexera X2 LC-30AD HPLC system using ACE C18 column in the solvent system with 0.1% acetic acid in water under gradient increase elution of acetonitrile from 5 to 95%. Chromatograms were recorded at 269 nm. The identification of the compounds was based on the UV/MS spectral data.
**Results**. Six compounds (apigenin 7-glucoside, hiperoside, isoquercitrin, rutin, quercetin, kaempherol) were identified and quantified in the methanol extract of *Tulip* stamens. Isoqurcitrin and rutin were predominant in tested sample with amount 3.77 and 2.20 mg/g, respectively. According to the literature data, luteolin, quercetin, and rutin were found in the Tulips petals. Probably, these components determine the use of tulips in folk medicine as a cardiotonic and antioxidant agent.
**Conclusions**. Flavones may be an important group of pharmacologically active substances that might be responsible for the activity and medicinal application of plants of the genus *Tulip*.

**References**

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