

## **Preliminary study regarding the anthocyanins figs ethanolic extract stability**

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### **Abstract**

Fig (*Ficus carica* L.) fruits represent a rich source of polyphenols. From the phenolic compounds, anthocyanins represent an important group of water-soluble pigments with important roles in development of plant organs, pollination and peel's and pulp's color. They also have antioxidant, anticancer, anti-inflammatory and antimicrobial properties, being used from food to pharmaceutical industries. Ten fig varieties (1 Mai, Ploiești, Săvârșin, Fântanele, Rot negru, Stork, Viscool, Negru Șvinița, Passulana nera, Cilento nero) with color starting from brownie-green to black were analyzed for their amount of anthocyanins. The objective of this preliminary study was to investigate the anthocyanins' figs ethanolic extracts stability, because they have a low stability, being influenced by many factors. To quantify the total anthocyanins content the pH differential method was used. The extracts were analyzed after 24 and 72 hours and the results were expressed as equivalents of cyanidin-3-glucoside mg/ 100 g of fresh fruit. It was found that anthocyanin stability varied both between varieties, and the period of time as follows: Viscool variety had an increase with 3.24 mg/100g after 72 h than initial moment, instead Passulana Nera variety had an increase only with 0.85 mg/100g than the initial moment. Even if the Stork variety was found to have the highest content of cyanidin-3-glucoside mg/100 g, he exhibited a medium to low increase after 72 h compared to the other varieties.

**Keywords:** Anthocyanins, Cyanidin-3-glucoside, Ethanolic Extract, Stability.