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# Comparison of polyphenol content and antioxidant capacity of strawberry fruit from 90 cultivars of *Fragaria x ananassa* Duch.

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**Keywords:** agrimoniin, antioxidant, ellagitannin, flavonoids, *Fragaria x ananassa*, HPLC-PDA, procyanidin, strawberry cultivars, UPLC-ESI-qTOF-MS

## ABSTRACT

Strawberry fruit is a valuable resource, rich in vitamins and polyphenolic compounds. These compounds have a broad spectrum of biological activity. The aim of this study was to evaluate the qualitative and quantitative composition of polyphenols in strawberry fruit from 90 cultivars of *Fragaria x ananassa* Duch. from two growing seasons. Eighty of them were analyzed for the first time (to the best of our knowledge). The identification of polyphenolics and other compounds was performed using UPLC-qTOF-MS/MS. Nine compounds were recorded for the first time in mature strawberry fruit. Antioxidant properties were also determined using DPPH and ABTS methods. Statistical analysis of the results was performed using principal component analysis. Tannins, especially ellagitannins with agrimoniin, as well as the total polyphenols, had the

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