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## Total phenolic and flavonoid contents of methanolic extract from leaves of a native plant from Marivan

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## **Abstract**

The genus Prunus mahaleb, a wild member of the Rosaceae family, is a tree native to the Mediterranean area. The plant is robust and insensitive to diseases and is used as a stock in the grafting of cherry and marasca.

Phenolic compounds including flavonoids and phenolic acids are plants secondary metabolites. Due to their ability to act as antioxidant agents, there is a growing interest to use those components in traditional medicine for cancer prevention or treatment.

This plant was collected in August 2017 from southeast of Mariyan. Methanolic extract was performed with a soxhlet apparatus. The sample was measured for total phenolic content colorimetrically using the Folin-Ciocalteu method and for total flavonoid content using the modified aluminum colorimetric method. The TPC value of the sample was 101.97 µg gallic acid equivalent/mg extract and the TFC value was 42.07 µg quercetin equivalent/mg. These results showed the good antioxidant capacity for *Prunus mahaleb*.

Keywords: Prunus mahaleb, Methanolic extract, Total phenolic, Total flavonoid, Gallic acid, Quercetin