

Phytochemical and antioxidant screening of some extracts of *Juniperus communis* L. and *Juniperus oxycedrus* L.

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Citation: Živić N., Milošević S., Dekić V., Dekić B., Ristić N., Ristić M., Sretić Lj. (2019): Phytochemical and antioxidant screening of some extracts of *Juniperus communis* L. and *Juniperus oxycedrus* L. Czech J. Food Sci., 37: 351–358.

Abstract: The content of phytochemicals, total phenolics, total flavonoids and antioxidant potential of extracts of *Juniperus communis* L. and *Juniperus oxycedrus* L. berries were determined. Ethanol, ethyl acetate and chloroform were used for the process of extraction. Phytochemical monitoring was based on already known methods, while *in vitro* antioxidant activities were done by DPPH assay. Phytochemical screening showed a wide spectrum of phytochemicals. Ethanolic extract of *Juniperus communis* L. possesses the strongest antioxidant activity ($IC_{50} = 28.55 \pm 0.24 \mu\text{ml}$), as well the higher contents of total phenolics, 189.82 ± 0.27 mg of gallic acid equivalent per g of dried weight extract (mg GAE/g extract DW), and total flavonoids, 42.85 ± 0.13 mg of rutin equivalents per g of dried weight extract (mg RE/g extract DW). The results indicated the potential application of the tested extracts as significant antioxidants.

Keywords: DPPH; extract; *Juniperus* berries; total flavonoids; total phenolics