

**P-150 (252)****EVALUATION OF PHENOL CONTENT AND ANTIOXIDANT CAPACITY OF JUJUBE**

**Assist. Prof. Shadab Faramarzi**, Department of Horticultural Science, University of Hormozgan, Bandar Abbas, Iran; [faramarzi@hormozgan.ac.ir](mailto:faramarzi@hormozgan.ac.ir) (Presenting author)

**Dr. Severina Pacifico**, Department of Environmental, Biological and Pharmaceutical Sciences, Technologies, Second University of Naples, Naples, Italy; [severina.pacifico@unina2.it](mailto:severina.pacifico@unina2.it)

*Ziziphus jujuba* is a member of the family Rhamnaceae, a putative fruits with a long history of *therapeutic use* and *prevention of disease*. Jujube fruit is an excellent source of nutrients and bioactive compounds, and this fruit recently has been shown the health benefits, including anticancer, anti-inflammation and antiobesity, antioxidant properties. Jujube fruit is rich in polyphenols, cyclopeptide alkaloids, dammarane saponins, vitamins, minerals, amino acids, and polyunsaturated fatty acids. In this experiment, 14 commercial Jujube cultivars were selected from *Agricultural* and *Natural Resource* Research center of Minab (Hormozgan province). Collected fruits were transferred to laboratory. Fruits were cut into thin slices and, then freeze dried. Ultrasound-assisted extraction was performed with MeOH. Because fruit samples were rich of sugar, maceration was carried out in liquid-liquid extraction using ethyl acetate (EtOAc) and water. Total phenol content (TPC) and antioxidant capacity were evaluated for all fruit samples. The results showed that EtOAc fractions obtained are more active than the aqueous fraction, but this latter show equally antiradical efficacy. This finding is in line with the presence of other compounds, probably phenols, within a most abundant sugar component. TPC ranged from about 40 to 80 mg GAE g<sup>-1</sup> in EtOAc fraction and about 15 to 50 mg GAE g<sup>-1</sup> in H<sub>2</sub>O fraction. Antioxidant efficacy of fruit samples was between 1065.67 and 982.12.

**Keywords:** Jujube, Phenol compounds, Antioxidant, Nutrient, *Ziziphus jujuba*.