World Academy of Science, Engineering and Technology International Journal of Pharmacological and Pharmaceutical Sciences Vol:8, No:11, 2014

Phytochemical Study and Evaluation of the Antioxidant Activity of Flavonoids Isolated from Prunus persica L. Leaves

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Abstract : This work aims to evaluate the antioxidant of flavonoids extracted from the leaves of Prunus persica L. A phytochemical screening allowed us to highlight the different phytochemicals present in the leaves of the studied plant. The selective extraction of flavonoids gave yields of 0.71, 1.5, and 4.8% for the fractions ethyl ether, ethyl acetate and n- butanol, respectively. The reading of the antioxidant activity of different extracts of flavonoids by HPLTC method revealed positive reaction (yellow spots) on the TLC plates sprayed with DPPH. Using the DPPH method, the fractions of flavonoids (bunanol, ethyl acetate and Diethyl ether) showed a potent scavenging activity with IC50 = 0.22; 0.27 and 0.76 mg / ml, respectively. Furthermore, our findings revealed the extracts under study exhibited higher reducing potential which depends upon extract concentration. These results obtained from this investigation confirm that the Prunus persica remains a major resource of bioactive molecules.

Keywords: Prunus persica L., phytochemical study, flavonoids, antioxidant activity, TLC bioautographic, FRAP, DPPH **Conference Title:** ICPPNP 2014: International Conference on Pharmacognosy, Phytochemistry and Natural Products

Conference Location: Istanbul, Türkiye Conference Dates: November 28-29, 2014