



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.10 No.15, pp 440-448, 2017

Antioxidant capacities and total phenolic and flavonoid contents of some indigenous fruits from Turkey

Yasemin Gökgöz¹, Asuman Karadeniz Pekgöz^{1*}

¹Mehmet Akif Ersoy University Faculty of Science and Art Department of Biology
Burdur Turkey

Abstract : Introduction. Natural antioxidants particularly in fruits and vegetables have gained increasing interest among consumers and in the scientific world. Antioxidant capacity of fruits, black grape (*Vitis vinifera* L.), white grape (*Vitis vinifera* L.), rose hip (*Rosa canina* L.), cornelian cherry (*Cornus mas* L.), medlar (*Mespilus germanica* L.), and pear (*Pyrus elaeagnifolia* Pall.) sold in the public bazaars in Burdur province, were investigated. **Materials and Methods.** Antioxidant capacity of the extracts were detected by DPPH (2,2-diphenyl-1-picryl hydrazyl) radical scavenging activity (RSA) test, Trolox equivalent antioxidant capacity (TEAC) and copper²⁺ reducing antioxidant capacity (CUPRAC) tests and by measuring total phenolic and total flavonoid contents. **Results.** Cornelian cherry seeds, rose hip fleshes, black grape seeds and cornelian cherry fleshes had the highest antioxidant capacity according to DPPH RSA, TEAC and CUPRAC tests, respectively. Except cornelian cherry fleshes these fruit parts had the highest total phenolic (gallic acid equivalent) and flavonoid (catechine equivalent) content, respectively. **Conclusion.** As we know, this is the first report on the antioxidant capacity of cornelian cherry seeds. Further detailed study is needed on the phytochemistry of this fruit because it could be evaluated both as a food and as a feed additive. People should be aware of consuming the fruits together with their edible seeds. Since the seeds of cornelian cherry are hard, they might be consumed as food additives after being powdered. **Key Words :** CUPRAC / DPPH RSA / indigenous fruit / TEAC / total flavonoids / total phenolics.
