Abstract

Purslane (*Purtulaca oleracea* L.) is an annual salt-tolerant species, which could use as vegetable, fodder or medicinal plant and has many therapeutic properties including; antioxidant, antibacterial, and antidiabetic. This study was carried out to estimate total phenolics, flavonoids, anthocyanin content and also to evaluat antioxidant potential of metanolic extract of *P. oleracea* leaves, stem and root at different stages of plant growth and development. For this purpose *P. oleracea* cultivated in Sistsn (east of Iran). The quantity of flavonoid compounds was measured by standard curve of the quercetin, hydrochloric acid was used for measuring of anthocyanin content. Total phenolic contents of the methanolic extract was determined by Folin-Ciocalteu method. The antioxidant activity was evaluated by DPPD (2,2-diphenyl-1-picrylhydrazyl) method. Statistical analysis was performed according to the SPSS software. The result showed that in ripe seed phase, phenolic compounds and antioxidant activity of the leaves were significantly higher than the stem and root. There for, it seem there is a positive correlation between phenolic compound and antioxidant activity of plant extracts in ripen seed phase.

Key words: *Portulaca oleracea* L., antioxidant activity, flavenoid compounds, phenol compounds.



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Variation of antioxidant activity and flavenoides compounds of Portulaca oleracea L. leaf, stem and root during the different stages of plant growth.

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