EFFECT OF HIGHNESS ON ANTIOXIDANT ACTIVITY IN *MELISSA OFFICINALIS* L.

Mobarake Andalib,[۱,*] Mahmood Asadi,[۲] Mohammad Hossien Fotokian[۳]

[۱] *Azad University Tonekabon, Tonekabone, Iran*
[۲]*Plant Science Department, Azad University Tonekabon, Tonekabone, Iran*
[۳] *Agriculture College, Shahed University, Tehran, Iran*
E-mail: Mobarakehandalib@yahoo.com

Plant rich source of phenolic compounds are the most important natural antioxidants have been reported to prevent oxidative damage caused by free radical [۱, ۲]. lemon balm (*Melissa officinalis* L.), member of Lamiaceae (formerly Labiatae) family, is one of the important medicinal plant species, this species originates from southern Europe, Asia Minor and southern parts of North America[۳,۴]. The aerial parts of *Melissa officinalis* L. were collected from ۴ regions (Nashtarod, Tosakoti, Emamzadeh Ghasem, Balas Dohezar) in mazandaran and they were dried. In this study, the antioxidant activity of methanol extracts was prepard from aerial parts of *M. officinalis*. The antioxidant activity was measured by DPPH assy. Our results have showed that the higher level of antioxidant activity was in ۵۰۰m (Tosakoti) and lower level of antioxidant activity was in ۱۵۰۰m (Balas Dohezar). There were significant differences in different highness in antioxidant activity ($p<۰.۰۱$).

References

[۱] Shui, GH.; Leong, LP. *J. ChromatogrA.*۲۰۰۶, ۱۰۳۳: ۶۷–۷۵.
[۲] Sharareh,N.; Vahid, R. *International Research Journal of Applied and Basic Sciences* ۲۰۱۳; ۶(۳):۶۰۸-۶۱۲.
[۳] H, Rostami.; M, Kazemi,; S, Shafiei, *Asian Journal of Biochemistry* ۲۰۱۲, DOI:۱۰.
[۴] Reyhan Bahtiyarcabagdat, *J. of Fac. Of Agric.*, ۲۰۰۶, ۳)(۱): ۱۱۶-۱۲۱.