



Response of Spearmint Plants Grown under Sandy Soils Condition to some Growth Stimulators

Dina M.G.Hendi^{1*} and Mohamed S. Boghdady²

¹Medicinal and Aromatic Plants Res. Dept., Hort. Res. Inst., Agric., Giza, Egypt

²Agric. Bot. Dept., Fac. Agric., Zagazig Univ., Egypt

Abstract: The present study was carried out at Ali Mubarak Experimental Farm of South Tahrir, Horticulture Research Station, El-Bostan Area, EL-Behira Governorate, during the two successive seasons of 2013 and 2014 to study the response of spearmint plants grown under sandy soil condition to some growth stimulators, i.e (Salicylic acid, Ascorbic acid and Vitamin E) growth characters (plant height, fresh and dry weights) were determined. Maximum plant height, fresh and dry weights, essential oil content & composition were obtained with ascorbic acid at 400ppm. Anatomical study for stem and leaves were also carried out. As for the effect of foliar application with ascorbic acid at 400 ppm on anatomical structure of vegetative growth of spearmint plants it could be stated that such treatment increased stem diameter. spraying ascorbic acid at 400 ppm increased thickness of both midvein and lamina of leaf blades. The main vascular bundle of the midvein increased in size, also increased the mean diameter of vessel.

Dina M.G.Hendi and Mohamed S. Boghdady/Int.J. PharmTech Res. 2016,9(4),pp 92-101.
