S134 (P015) Effect of biostimulants application on leaves and phytochemical traits of Mentha piperitha L. under farm conditions

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Known as mint or peppermint, Mentha piperita L. is used for medicinal and food purposes. To study the effects of biostimulants on leaves traits of Mint plants, an experiment was conducted on the basis of randomized complete blocks design (RCBD) with three replications in 2015-2016. The treatments were control, 400 ppm CA, 400 ppm HA, 800 ppm HA, 200 ppm CH + 400 ppm CA, 400 ppm CH + 400 ppm CA, 200 ppm CH + 400 ppm HA + 400 ppm CA, 200 ppm CH + 800 ppm HA + 400 ppm CA, 400 ppm CH + 400 ppm HA + 400 ppm CA, 400 ppm CH + 800 ppm HA + 400 ppm CA. The results showed that the maximum plant height (56.66 cm) was observed in 200 ppm CH + 800 ppm HA + 400 ppm CA, while the maximum amount of leaf area (353.37 cm2) was attained in treatment of 200 ppm CH + 400 ppm HA + 400 ppm CA. The greatest leaves dry weight (15.253 g.m-2) was reported in 400 ppm CH + 400 ppm HA + 400 ppm CA. The maximum amount of essential oil was found in treatments of 400 ppm CH + 400 ppm CA and 200 ppm CH + 400 ppm HA + 400 ppm CA.

Key words: Biostimulants, Leaves and phytochemical traits, Mentha piperitha L.