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Response of growth and yield of *Ocimum basilicum* with application of Humic acid

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Abstract

The present investigation was carried out to evaluate the effect of humic acid fertilizer on growth and yield of Basil (Ocimum basilicum.) in open field. Humic acid was used in five levels (0, 2.5, 5, 10 and 15 gr/lit for $0.5m^2$) which were used in fertigation. Humic acid application was performed five times during the growth period. Measured factors consisted of total weight, shoot weight, plant height, root Length , Inter node Length, Lateral shoot Length, shoot number, Leaf number, Dry weight leaf, node number, fresh weight leaf, leaf area, total biomass, diameter root, essential, chlorophyll and antioxidant activity. The results of this study showed that application of humic acid on growth and yield parameters was effective. Application of humic acid with concentration H_4 (15g/l for 0.5m) have the best of growth and yield but was observed the highest of height of plant in H_2 (5g/ l for 0.5m). But, no significant differences were found between humic acid and control in essential oil, chlorophyll and antioxidant activity.

Key words: Ocimum basilicum, humic acid, yield, growth

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