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Growing broccoli plants in the newly reclaimed soils of Egypt, as affected by different fertilizer sources

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Abstract: Experiments were conducted in sandy soil open field at Nubaria, Egypt using drip irrigation system. The effect of bio, mineral and organic fertilizers and their interactions on the vegetative growth, leaves nutrient content and productivity of broccoli plants w **Hanaa A. Abd-Alrahman, *et al*** /International Journal of ChemTech Research, 2016,9(5),pp 01-11.ere studied. Five treatments of bio-fertilizers were applied using a mixture of nitrogen fixing and phosphorus solubilizing microorganisms (*Aztobacter chroococcum, Bacillus megaterium, Arbiscular mycorrhizea, Bacillus polymyxa*). In addition, four equations of mineral and organic fertilizers were applied. Mixture of *Azotobacter chroococcum* and *Arbiscular mycorrhizea* recorded the highest values of vegetative growth, leaves nutrient content (N, P and K) and total heads yield. Equation of 75% mineral + 25% organic of the recommended fertilizer units exhibited the highest values of vegetative growth, leaves nutrient content and total heads yield as compared to the other treatments. Interestingly, the combined effect of the two mixtures of *Azotobacter chroococcum*+ *Arbiscular mycorrhizea* with 75% mineral+ 25% organic of the recommended fertilizer units recorded the highest values of vegetative growth, leaves nutrient content and broccoli heads yield.
Key words: Broccoli; Bio-fertilizers; Mineral fertilizers; Organic fertilizers.

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