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The Effects of Agricultural Waste Compost Applications on Soil Properties

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Abstract : The wastes that come out as a result of agricultural productions are disposed randomly and always by burning. Agricultural wastes have a great volume and agricultural wastes cause environmental pollution. Spent mushroom compost and cut flower carnation wastes have a serious potential in Turkey and especially in Antalya. One of the best evaluation methods of agricultural wastes is composting methods and so agricultural wastes transformed for a new product. In this study, agricultural wastes were evaluated the effects of compost and organic material on soil pH, EC, soil organic matter, and macro-micro nutrient contents of soil that it growth carnation. The effects of compost applications on soils were found to be statistically significant. Organic material applications have caused an increase in all physical and chemical parameters except for pH that pH decreased with compost added in soils. The best results among the compost applications were determined R1 compost that R1 compost included %75 Carnation Wastes + %25 Spent Mushroom Compost. The structural properties of soils can be improved with reusing of agricultural wastes by composting so it can be provided that decreasing the harmful effects of organic wastes on the environment.

Keywords: agricultural wastes, carnation wastes, composting, organic material, spent mushroom compost

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