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Nutrient Contents of Pinus brutia Ten. (Pinaceae) and Pistacia terebinthus L. (Anacardiaceae) Growing on Marl and Conglomerate Substrata in the Eastern Mediterranean

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Scientific Journals Home Page Abstract: The eastern Mediterranean region is one of the main areas of the Mediterranean vegetation containing Calabrian cluster pine (Pinus brutia Ten., Pinaceae) forests and terebinth (Pistacia terebinthus L., Anacardiaceae) communities. This study was carried out with the leaves, shoots, leaf litters, and soils of Calabrian cluster pine and terebinth growing on both marl and conglomerate substrata in the eastern Mediterranean region (Turkey) to determine average C, N, P and K contents, and the amounts of humic and fulvic acid in these plant soils. The average element contents of leaf, shoot, leaf litter and soil samples of both plants from the 2 different substrata were compared and exhibited only a few relatively subtle differences. The average C and N contents in the terebinth soils derived from conglomerate substratum were significantly higher than those in soils derived from marl substratum. Yet, it did not differ in the Calabrian cluster pine. While the average P and K concentrations of terebinth leaves and shoots varied significantly between the substrata, they did not vary in the Calabrian cluster pine leaves and shoots. This may due to the difference of plant species.

Key Words: Calabrian cluster pine, Litter, Substratum, Plant, Soil, N, P, K, Terebinth

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