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A Relative Analysis of Carbon and Dust Uptake by Important Tree Species in Tehran, Iran

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Abstract : Air pollution, particularly with dust, is one of the biggest issues Tehran is dealing with, and the city's green space which consists of trees has a critical role in absorption of it. The question this study aimed to investigate was which tree species the highest uptake capacity of the dust and carbon have suspended in the air. On this basis, 30 samples of trees from two different districts in Tehran were collected, and after washing and centrifuging, the samples were oven dried. The results of the study revealed that Ulmus minor had the highest amount of deposited dust in both districts. In addition, it was found that in Chamran district Ailanthus altissima and in Gandi district Ulmus minor has had the highest absorption of deposited carbon. Therefore, it could be argued that decision making on the selection of species for urban green spaces should take the above-mentioned parameters into account.

Keywords : dust, leaves, uptake total carbon, Tehran, tree species
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