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Cutting Propagation Studies in Pennisetum divisum and Tamarix aucheriana as Native Plant Species of Kuwait

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Abstract: Native plants are better adapted to the local environment providing a more natural effect on landscape projects; their use will both conserve natural resources and produce sustainable greenery. Continuation of evaluation of additional native plants is essential to increase diversity of plant resources for greenery projects. Therefore, in this project an effort was made to study the mass multiplication of further native plants for greenery applications. Standardization of vegetative propagation methods is essential for conservation and sustainable utilization of native plants in restoration projects. Moreover, these simple propagation methods can be readily adapted by the local nursery sector in Kuwait. In the present study, various treatments were used to mass multiply selected plants using vegetative parts to secure maximum rooting and initial growth. Soft or semi-hardwood cuttings of selected native plants were collected from mother plants and subjected to different treatments. Pennisetum divisum can be vegetatively propagated by cuttings/off-shoots. However, Tamarix aucheriana showed maximum number of rooted cuttings and stronger vigor seedlings with the lowest growth hormone concentration. Standardizing the propagation techniques for the native plant species will add to the rehabilitation and landscape revegetation projects in Kuwait.

Keywords: Kuwait desert, landscape, rooting percentage, vegetative propagation

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