

Growing Evaluation Process in Chamaedorea Linearis with Humus from Biosolids of the Wastewater Treatment Plant, Nueva Granada Military University Cajica

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Abstract : Palms have different characteristics that make them vulnerable; that is the case of the *Chamaedorea linearis*, with the presence of solitary stems of small diameter and medium leaves, culturally harvested, and in religious festivities used. Additionally, they present a weak apical meristem as the only emergency point, slow development and growth, and an affectation due to the high rate of deforestation in Colombia. Propagation of this species can improve the pressure on wild populations and help their survival in the environment. In this study was used in 177 plants biosolids humus from the Wastewater Treatment Plant (WWTP), located at the UMNG Campus Cajica (Cundinamarca, Colombia). The experiment used a control and two treatments with 10% and 20% of humus. During the process, the variables evaluated were number of leaves, percentage of chlorophyll, stem length, and estimated leaf area. The data set were taking during 14 weeks before the reproductive maturity, evidencing that the most representative development of the palms was in the treatment of 20%, plants in this treatment presented major number of leaves, larger stems, a high quantity of chlorophyll, and was a first treatment that present pinnate leaves them represent an important point in maturity process. The research gives an opportunity to improve times of growth in another species of palms and plants (Product result from INV ING 2986 UMNG).

Keywords : biosolids, humus, growth, palms, wastewater treatment plant, WWTP

Conference Title : ICWTR 2020 : International Conference on Wastewater Treatment and Recycle

Conference Location : New York, United States

Conference Dates : December 10-11, 2020