

Utilization of Two Kind of Recycling Greywater in Irrigation of Syngonium SP. Plants Grown Under Different Water Regime

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Abstract : The work was carried out at the greenhouse of National Research Centre, Pot experiment was carried out during of 2020 and 2021 seasons aimed to study the effect of two types of water (two recycling gray water treatments((SMR (Sequencing Batch Reactor) and MBR(Membrane Biology Reactor) and three watering intervals 15, 20 and 25 days on Syngonium plants growth. Examination of data cleared that, (MBR) recorded increase in vegetative growth parameters, osmotic pressure, transpiration rate chlorophyll a,b,carotenoids and carbohydrate)in compared with SBR.As for water, intervalthe highest values of most growth parameters were obtained from plants irrigated with after (20 days) compared with other treatments.15 days irrigation intervals recorded significantly increased in osmotic pressure, transpiration rate and photosynthetic pigments, while carbohydrate values recorded decreased. Interaction between water type and water intervals(SBR) recorded the highest values of most growth parameters by irrigation after 20 days. While the treatment (MBR)and irrigated after 25 days showed the highest values on leaf area and leaves fresh weight compared with other treatments.

Keywords : grey water, water intervals, Syngonium plant, recycling water, vegetative growth

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