

D-02: Effect of density of ramets on the morphological plasticity of *Salvinia molesta*

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Salvinia molesta is an aquatic fern which has become a major problematic weed in tropical fresh waters. The plant consists of 3 morphologically different stages: primary, secondary and tertiary, during its growth.

The present study describes how the initial density of primary stage ramets affected its morphological plasticity. Single ramets of primary stage plants were selected and allowed to grow at densities of 16,400 and 800 ramets/m². The morphological changes and growth were observed for a period of 100 days.

Under the lowest density treatment, the plants remained at their primary stage throughout the experiment, whereas at higher densities, the plants transformed from primary to secondary and then to tertiary stages. The differences between these 3 growth forms were considered and the least impact exerted to the water body seemed to be by the primary stage plants. Therefore it is argued that the controlling of this problematic weed (at least in manageable water bodies) by continuous monitoring and removal during its primary stage would give the most efficient, economical and successful results.