

SOME PRELIMINARY STUDIES ON EFFECTS OF  
SELECTIVE REMOVAL OF ROOTS, LEAVES AND  
SEVERING OF STOLONS ON THE  
GROWTH AND BRANCHING PATTERN OF SALVINIA MOLESTA

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Experiments were conducted in tanks under outdoor conditions to study the effect of selective removal of roots, leaves and severing of stolons

on the growth and branching of Salvinia molesta, a major floating aquatic weed in tropical fresh waters. In some experimental plants, every other root on stolons, or all roots were removed; in others one of the leaves of every other leaf pair on stolons, or one of the leaves of all the leaf pairs were removed; in a third group of plants stolons were severed to produce plants with two or three leaf pairs, or plants with one leaf pair. The growth of such plants was compared with undamaged control plants, after 4 or 5 weeks of growth.

Root removal resulted in decrease of growth and branching significantly. The percentages of branching were 57, 32 and 23 in the control and other two treatments respectively. Leaf removal also decreased the growth and branching significantly and the percentages of branching were 56, 39 and 36 in the control and other two treatments respectively. Severing of stolons into smaller pieces resulted in a significant increase in branching (the percentages of branching were 48, 57 and 68 in the control and other two treatments respectively), whilst there was no difference in overall growth.