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Growth responses and recovery of invasive plants and native plants under salt stress and rewatering conditions

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Salt stress in abiotic stresses is the major component affecting the plants eco-physiology. Therefore, we analyzed the growth characteristics of both invasive and native plants under different planting conditions in salt stressed environment followed by dilution of saline irrigation as plant height (HP), stem diameter (DS) and biomass following by rewatering. Invasive plant and native plant were cultivated under greenhouse conditions with four different treatment levels of NaCl and $CaCl_2$ as control, low, medium and high concentrations, respectively. The plant height (H_p), stem diameter (D_S) for invasive plant is observed high from low to high stress of salts than native plant. During rewatering, the increments in HP, DS from low to high salt stress are noted more but native plant, increments in H_p, D_S are found less comparatively. H_p and DS was not recovered well even after rewatering, in case and showed less recovery. In addition, the reduction in biomass in native plant during salt stress markedly affected. Our results thus suggest the low competitive ability of native plant over invasive plant, did not cope well with high salt stressed conditions with no recovery after rewatering. While, rewatering is a good method to utilized saline water in order to safe fresh water resources.