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'Pink' Waxapple Response to Salinity: Growth and Nutrient Uptake

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Abstract : Wax apple is an important tropical fruit in Taiwan. The famous producing area is located on the coast in Pingtung county. Land subsidence and climate change will tend to soil alkalization more seriously. This study was to evaluate the effects of NaCl in wax apple seedlings. NaCl salinity reduced wax apple shoot growth, it may due to reducing relative water content in leaf and new shoot. Leaf Cl and Na concentration were increased but K, Ca, and Mg content had no significant difference after irrigated with NaCl for six weeks. In roots, Na and Cl content increase significantly with 90 mM NaCl treatment, but K, Ca, and Mg content was reduced. 30-90 mM NaCl treatment do not affect K/Na, Ca/Na, and Mg/Na ratio, but decrease significantly in 90 mM treatment in roots. The leaf and root electrolyte leakage were significantly affected by 90 mM NaCl treatment. Suggesting 90 mM was optimum concentration for sieve out other tolerance wax apple verities.

Keywords: growth, NaCl stress, nutrient, wax apple

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