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Supplementary Material

Salinity tolerances of three succulent halophytes (*Tecticornia* spp.) differentially distributed along a salinity gradient

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Table S1. The Na^+ concentration in soil water (Na^+_{sw}) underlying *Tecticornia medusa, T. auriculata and T. indica* at an ephemeral salt lake located at Fortescue Marsh, north-western Australia

Soil was sampled at a depth of 20–30 cm at positions (number of positions sampled in each species zone, *n*, given in the table) along two transects in November 2011 on the northern fringe of Fortescue Marsh (119°20′ E, 22°21′ S) (see Moir-Barnetson 2014). Samples were sealed in double-bags and soil water content was measured for sub-samples (oven-dried at 105°C) and values corrected for the crystal water of gypsum. Soil was air-dried and homogenised Na^+ was measured in 1 : 5 soil : water extracts using a flame photometer (Jenway PFP7, Barloworld Scientific, Essex, UK). Values were converted to estimates on a corrected gravimetric soil water content basis (Na^+_{sw}) by correcting for the different volume of water and assuming the full dissolution of Na^+ in water. Relative species coverage in each plot was determined using a line-intercept method and used as a weighting factor for the expression of the 'weighted mean'.

Species	Na^+ concentration in soil water basis (mM)			
	n	**Range (min–max)**	**Mean (± s.e)**	**Weighted mean (± s.e)**
T. medusa	30	477–1793	1220 ± 117	1336 ± 78
T. auriculata	43	265–2711	1399 ± 106	1562 ± 96
T. indica	46	14–2565	923 ± 142	655 ± 85

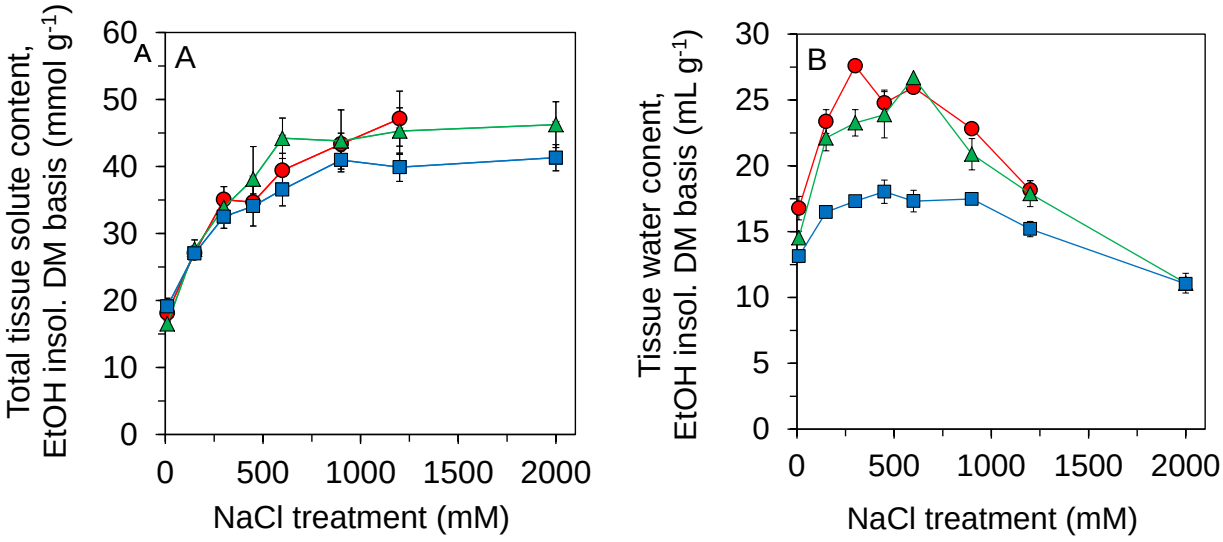

Fig. S1. (A) The total tissue solute concentration (the sum of Na^+, Cl^-, K^+, glycinebetaine, fructose, glucose and sucrose, mmol g^{-1} EtOH-insoluble dry mass) and (B) the tissue water content (mL g^{-1} EtOH-insoluble dry mass) in fully-expanded succulent shoot tissues (i.e. reduced and fused leaves) in (▲) *Tecticornia medusa*, (■) *T. auriculata* and (●) *T. indica* in response to 10–2000 mM NaCl. These data were used to calculate relative changes presented in Figs. 3B–D. Values are the means (n = 3) ± s.e. Results of two-way ANOVA for overall effects of species, NaCl treatment and the species x NaCl treatment interaction in (A) and (B) were significant ($P < 0.05$).