Bonnin SM, Alvarez JA, Faustino LI, Graciano C (2025). **Two *Populus deltoides* W.Bartram ex Marshall clones cope differentially with sodium salinity stress**
iForest – Biogeosciences and Forestry – doi: 10.3832/ifor4783-018

Supplementary Material

Tab. S1 - Texture and chemical description of surface soil of each plot. The following variables are reported: soil pH (spH), electrical conductivity (sEC, dS m^{-1}), total organic carbon (C, g kg^{-1}), Kjeldahl nitrogen (N, g kg^{-1}), extractable phosphorus (eP, mg kg^{-1}), exchangeable calcium (Ca, cmol kg^{-1}), exchangeable magnesium (Mg, cmol kg^{-1}), exchangeable potassium (K, cmol kg^{-1}), exchangeable sodium (Na, cmol kg^{-1}), cation exchange capacity (CEC, cmol kg^{-1}) and total phosphorus (tP, mg kg^{-1}).

Plot	Texture	spH	sCE	C	N	eP	tP	Ca	Mg	K	Na	CEC
A129a	clay	4.4	1.4	58.8	5.3	5.8	876	10.3	10.3	0.6	5.0	44.9
A129b	silty clay loam	4.4	0.7	36.3	3.3	5.1	571	6.7	6.7	0.2	0.9	30.8
A129c	silty clay	4.6	0.9	53.5	4.1	13.2	856	10.3	7.5	0.6	1.2	37.8
HOVd	silty clay loam	4.2	0.9	36.6	3.5	3.6	724	9.1	5.2	0.3	1.1	31.6
HOVe	silty clay loam	4.6	0.7	38.2	3.9	6.3	567	8.7	6.7	0.3	0.8	34.0
HOVf	silty clay	4.8	0.8	52.7	4.4	11.7	734	10.7	7.5	0.8	0.9	30.9
MIXg	silty clay loam	4.0	1.4	45.8	3.9	6.7	772	8.7	7.5	0.3	1.2	31.1
MIXh	silty clay loam	4.3	1.1	35.9	3.3	8.3	649	8.3	5.9	0.5	1.4	28.0
MIXi	silty clay	4.9	0.5	45.8	3.9	18.3	572	8.7	8.7	0.4	0.8	30.5

Tab. S2 - Summary table of linear models fitted to analyse the relation between the sodium concentration ($[Na^+]$, mg g^{-1}) in biomass compartments and the estimated soil electrical conductivity (eEC, dS m^{-1}) (Fig. 2); and the relation among $[Na^+]$ in different compartments (Fig. 3). There is reported the linear model, the R^2 and the p-value for each clone. Linear regressions were considered statically significant when $p \leq 0.05$.

Independent variable (x)	Dependent variable (y)	Clone	Linear model	R^2	p
eEC (dS m^{-1})	$[Na^+]$ (mg g^{-1}) in leaves	A129	-	0.07	0.20
		HOV	y = -0.86 + 4.23x	0.34	<0.01
eEC (dS m^{-1})	$[Na^+]$ (mg g^{-1}) in branches	A129	y = -0.04 + 0.09x	0.15	0.05
		HOV	y = -0.06 + 0.78x	0.21	0.01
eEC (dS m^{-1})	$[Na^+]$ (mg g^{-1}) in roots	A129	y = -0.51 + 2.05x	0.52	<0.001
		HOV	y = -0.76 + 3.32x	0.45	<0.001
$[Na^+]$ (mg g^{-1}) in roots	$[Na^+]$ (mg g^{-1}) in branches	A129	-	0.01	0.68
		HOV	y = 0.13 + 0.23x	0.43	<0.001
$[Na^+]$ (mg g^{-1}) in roots	$[Na^+]$ (mg g^{-1}) in leaves	A129	-	0.10	0.12
		HOV	y = 0.38 + 1.05x	0.52	<0.001
$[Na^+]$ (mg g^{-1}) in branches	$[Na^+]$ (mg g^{-1}) in leaves	A129	-	0.03	0.37
		HOV	y = 0.21 + 3.60x	0.72	<0.001
$[Na^+]$ (µmol g^{-1}) in leaves	$H_{2021-2022}$ (m)	A129	-	0.02	0.46
		HOV	-	0.11	0.08
$[Na^+]$ (µmol g^{-1}) in leaves	$DBH_{2021-2022}$ (m)	A129	-	0.12	0.09
		HOV	y = 3.52 – 0.01x	0.53	<0.001
[cations] (µmol g^{-1}) in leaves	$H_{2021-2022}$ (m)	A129	-	0.001	0.86
		HOV	y = 4.83 – 0.004x	0.22	0.01
[cations] (µmol g^{-1}) in leaves	$DBH_{2021-2022}$ (m)	A129	-	0.001	0.08
		HOV	y = 4.80 – 0.004x	0.15	0.03