

Figure S1. Reaction of grass pea leaf and stem photosynthetic apparatus to salinity. The fast chlorophyll *a* fluorescence transient (OJIP kinetics) of grass pea leaves and stems after 25 days of cultivation under 0, 50 and 100 mM NaCl

Table S1. Raw value of Fv/Fm (the maximum quantum yield of PSII) of grass pea leaf and stem photosynthetic apparatus after 25 days of cultivation under 0, 50 and 100 mM NaCl

NaCl [Mm]	Fv/Fm value	
	Leaf	Stem
0	0.81 ^a ±0.01	0.81 ^a ±0.01
50	0.82 ^a ±0.01	0.81 ^a ±0.01
100	0.78 ^b ±0.05	0.81 ^a ±0.01

Table S2. FTIR bands assignment to biomolecules (ν – stretching and δ - bending modes) [49-53].

	IR band position [cm ⁻¹]	Assignment
LIPIDS	3012	=C-H, ν (=CH)
	2960	-CH ₃ , ν (-C-H)
	2936-2924	-CH ₂ , ν_{as} (-C-H)
	2855-2851	-CH ₂ , ν_s (-C-H)
	1740	Triacylglycerols, ν (C=O)
	1716	Free fatty acids, ν (C=O)
PROTEINS	1680	Amide I, β -turn, ν (C=O)
	1654	Amide I, α -helix, ν (C=O)
	1633	Amide I, β -sheet, ν (C=O)
	1548/1541	Amide II, δ (N-H)/ ν (C-N)
	1516	Tyrosine
SACCHARIDES	1076	Saccharides, ν (C-O)/ ν (C-C)
	1048	Saccharose, fructose, ν (C-O)
	1021	Saccharides, ν (C-O)
	990	Starch, saccharose, glucose, ν (C-O)/ ν (C-C)
	944	Saccharose, δ (CH ₂)
	921	Saccharides, δ (CCO)

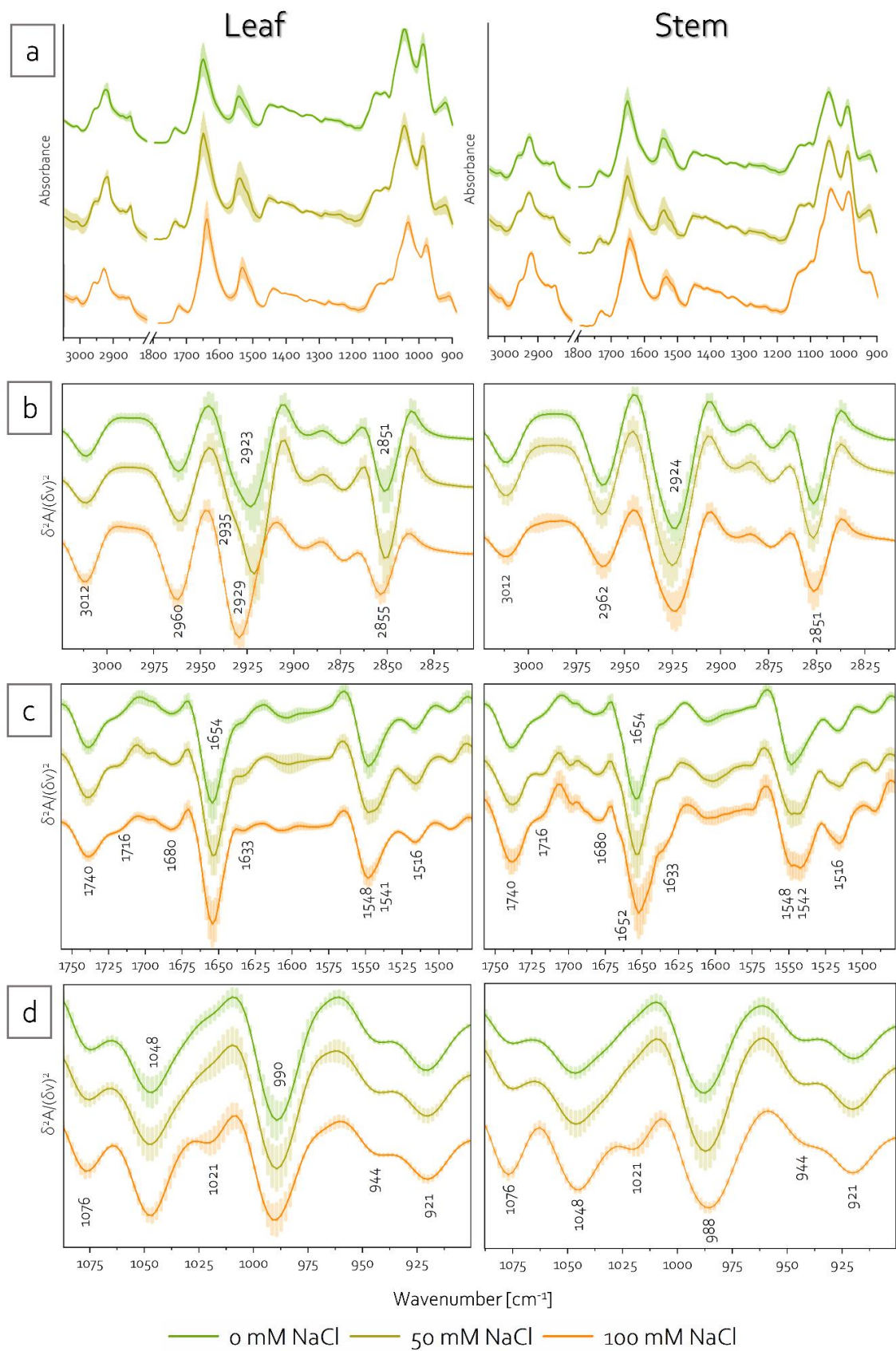


Figure S2. Averaged raw ATR FTIR spectra (a) and their second derivatives with peak labelling in the regions specific for (b) fatty acids (3050 – 2800 cm^{-1}), (c) triacylglycerols, fatty acids and proteins (1750 – 1480 cm^{-1}) and (d) sugars (1100 – 900 cm^{-1}). Shading of spectra denotes standard deviation ($n = 3$).