

Supplementary Information

¹H HR-MAS NMR Metabolomics Uncovers Coordinated Metabolic Response to Water Stress in Transgenic Swingle Citrumelo

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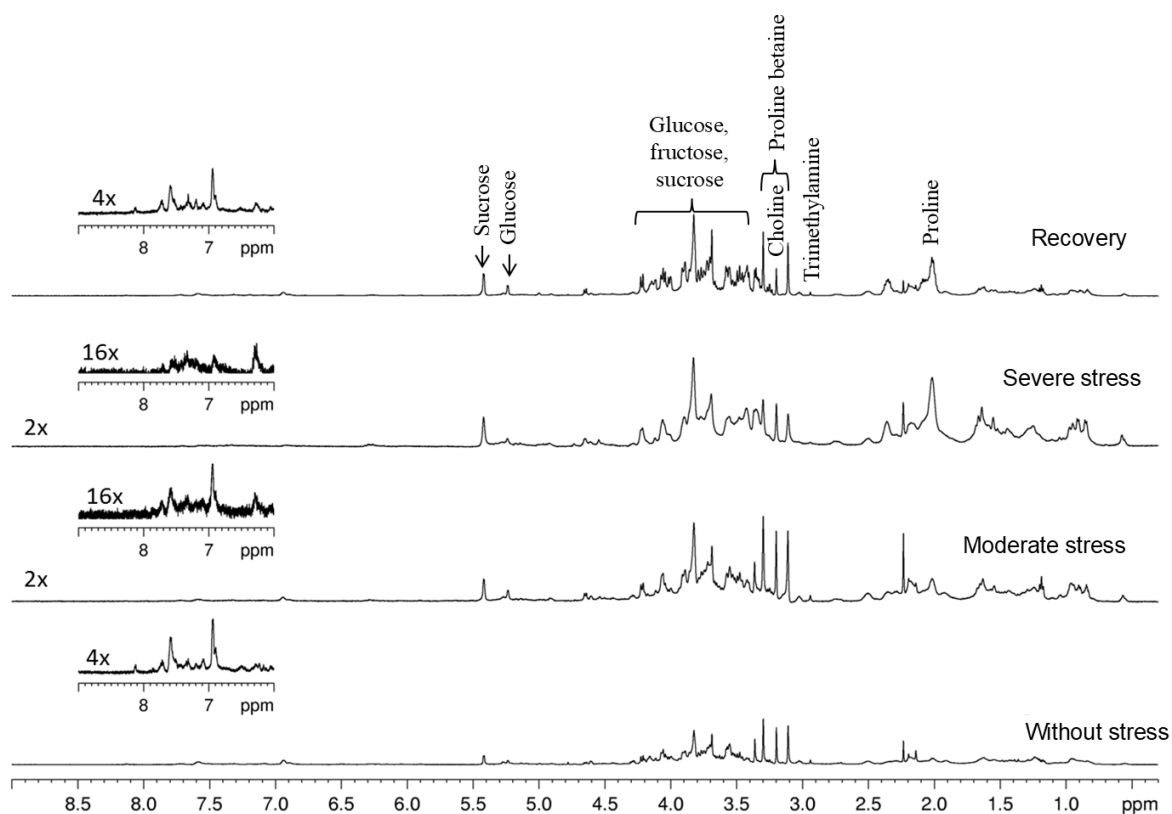


Figure S1. Representative ^1H HR-MAS NMR (500 MHz, suspension in D_2O) spectra of conventional (NT) Swingle citrumelo leaves of each water-stress period.

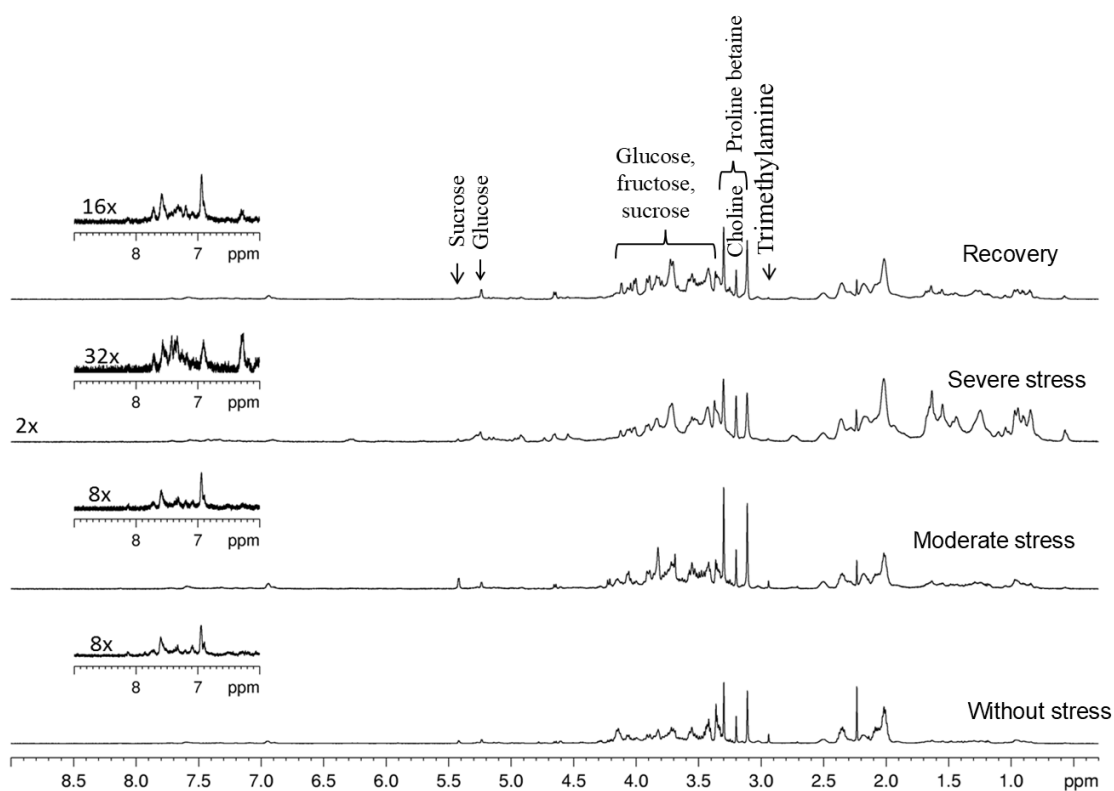


Figure S2. Representative ^1H HR-MAS NMR (500 MHz, suspension in D_2O) spectra of transgenic (T35S) Swingle citrumelo leaves of each water-stress period.

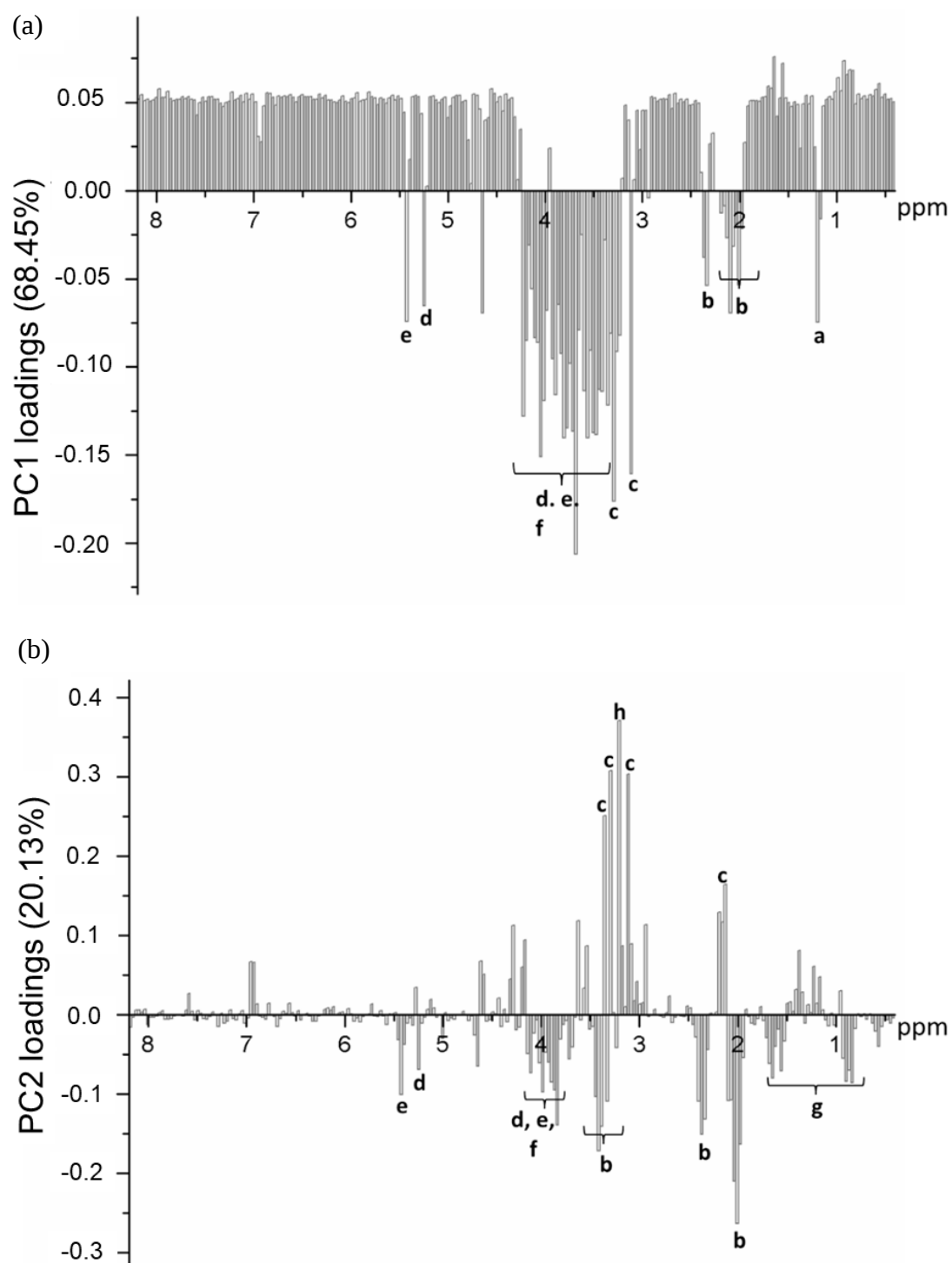


Figure S3. PCA loading plots of ^1H HR-MAS NMR spectra of conventional Swingle citrumelo (NT) leaves for (a) principal component 1 and (b) principal component 2 (b). The metabolites highlighted in PC1 and PC2 are: (a) ethanol; (b) proline; (c) proline betaine; (d) glucose; (e) sucrose; (f) fructose; (g) fatty acids; (h) choline.

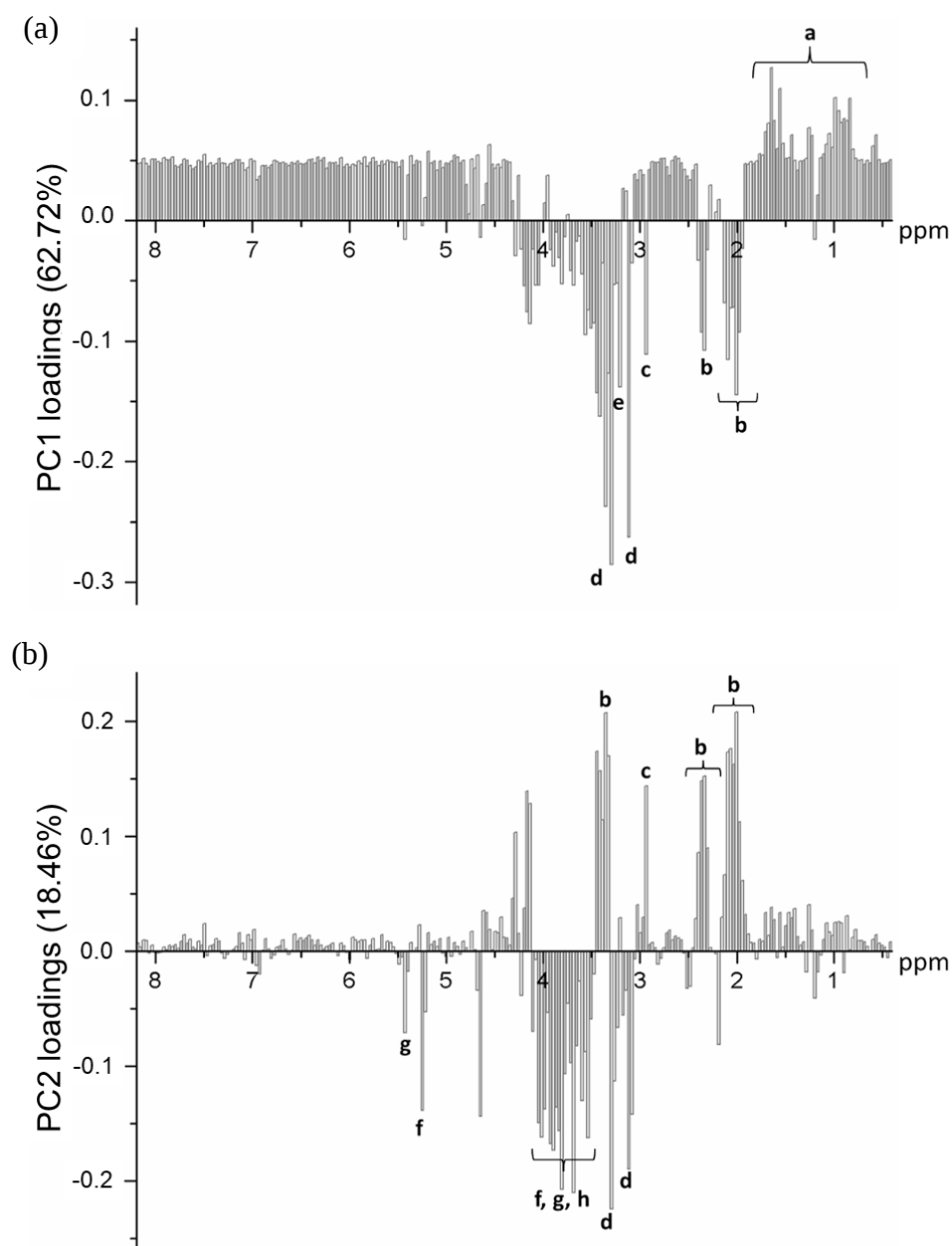


Figure S4. PCA loading plots obtained from the ^1H HR-MAS NMR spectra of transgenic (T35S) Swingle citrumelo leaves for (a) principal component 1 and (b) principal component 2. The metabolites highlighted in PC1 and PC2 are: a: fatty acids; b: proline; c: trimethylamine; d: proline betaine; e: choline; f: glucose; g: sucrose; h: fructose.

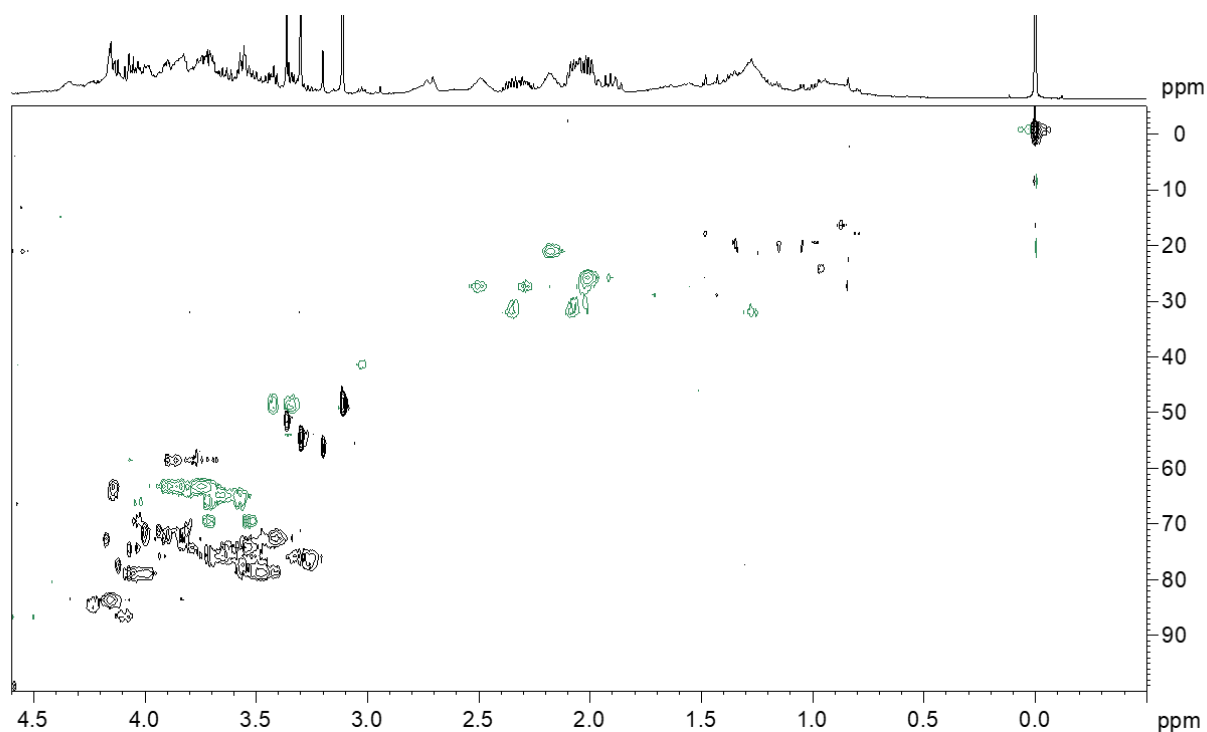


Figure S5. Representative ^1H - ^{13}C HSQC HR-MAS NMR experiment (500 MHz, suspension in D_2O) of one Swingle citrumelo leaf sample.

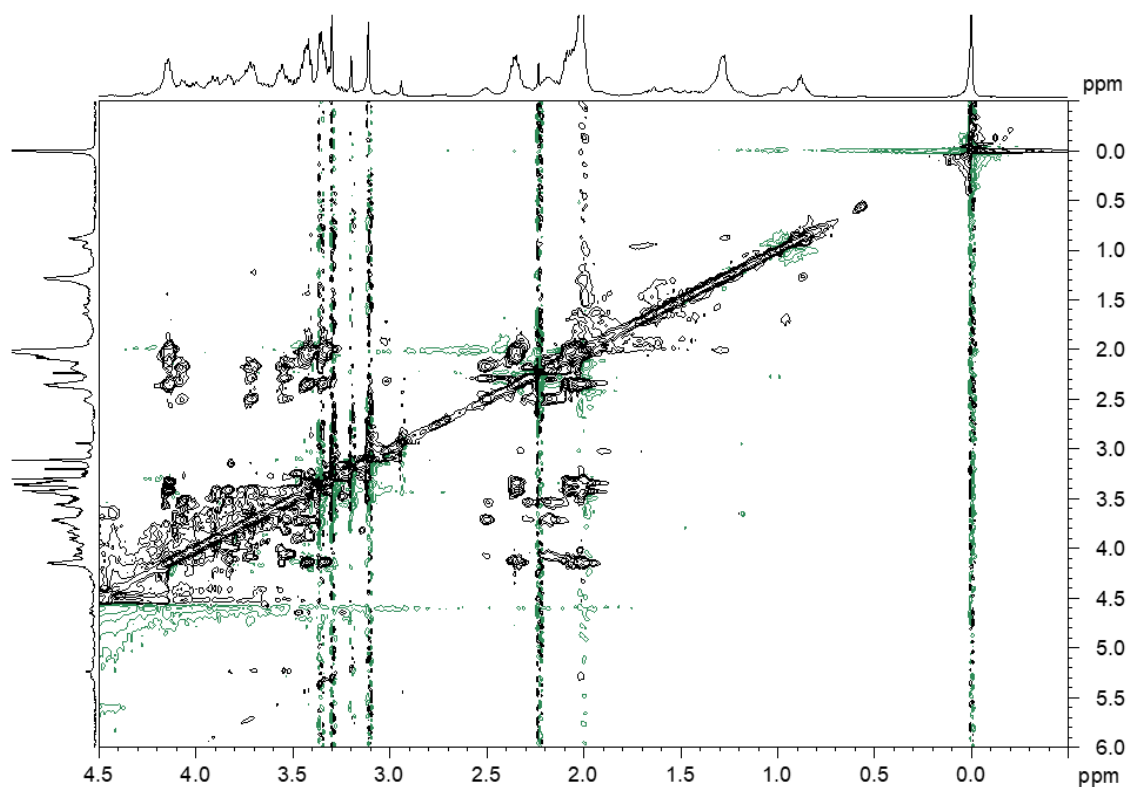


Figure S6. Representative ^1H - ^1H TOCSY HR-MAS NMR experiment (500 MHz, suspension in D_2O) of one Swingle citrumelo leaf sample.