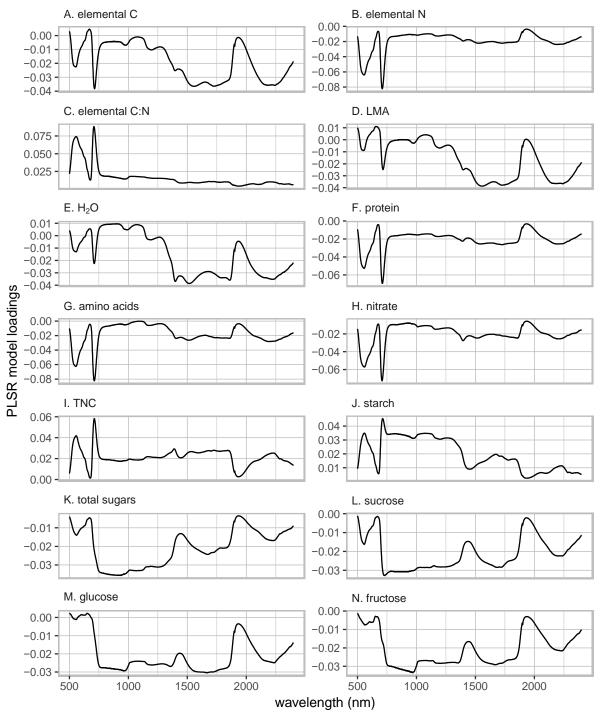
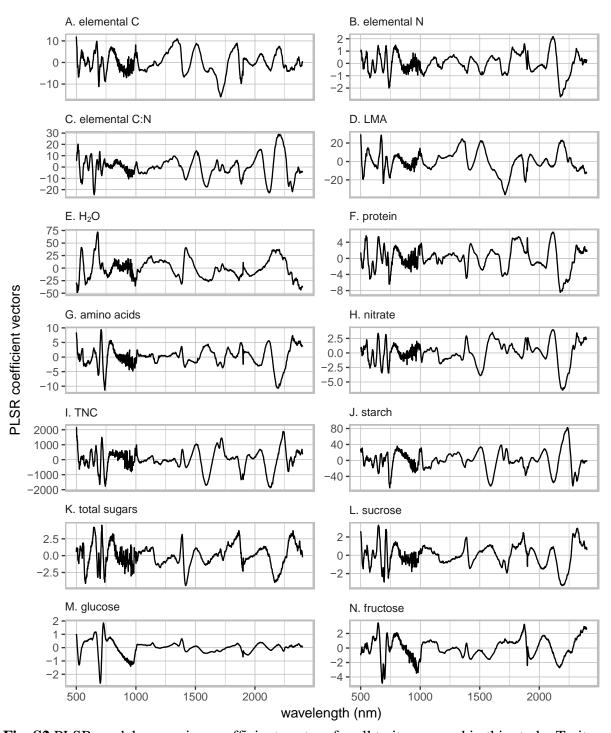
Common name	Species	Pot Sizes (L)	Large pot (myco bx)		Small pot (myco bx)		Large pot (bx)		Small pot (bx)		Totals	
			plants	leaves	plants	leaves	plants	leaves	plants	leaves	plants	leaves
tomato	Solanum lycopersicum var. lycopersicum	30, 11	1	3	2	3	3	7	3	7	9	20
cucumber	Cucumis sativus	11, 4	2	6	4	6	3	6	3	5	12	23
zucchini	Cucurbita pepo	11, 4	1	4	3	5	4	5	4	5	12	19
soybean	Glycine max	13, 4	2	3	3	7	3	3	3	4	11	17
bush bean	Phaseolus vulgaris	4, 2	5	8	5	8	-	-	-	-	10	16
basil	Ocimum basilicum	11, 2	3	7	2	5	1	4	2	4	8	20
sunflower	Helianthus annuus	11, 4	5	10	4	10	4	9	4	12	17	41
poplar	Populus deltoides Bartr. x Populus nigra L.	100, 13	2	6	1	7	2	6	3	12	8	31

A total of 187 leaves were sampled from 87 different plants, each randomly selected from a pool of plants comprising 4 – 9 plants for each treatment combination. myco bx = Pro-mix BX mycorrhizae growth media, bx = Pro-mix BX growth media (Premier Tech, Rivière-du-Loup, Québec, Canada).



**Fig. S1** PLSR model loadings for all traits assessed in this study. Loadings indicate the contribution of each trait throughout the wavelength range, with regions that depart from zero being the most important for the model. A. C g m<sup>-2</sup>, B. N g m<sup>-2</sup>, C. C:N, D. LMA g m<sup>-2</sup>, E. H<sub>2</sub>O g m<sup>-2</sup>, F. protein mg m<sup>-2</sup>, G. amino acids μmol m<sup>-2</sup>, H. log nitrate μmol m<sup>-2</sup>, I. total non-structural carbohydrate (TNC) μmol  $C_6$  m<sup>-2</sup>, J. starch μmol  $C_6$  m<sup>-2</sup>, K. log total sugars μmol  $C_6$  m<sup>-2</sup>, L. log sucrose μmol  $C_6$  m<sup>-2</sup>, M. log glucose μmol  $C_6$  m<sup>-2</sup> and N. log fructose μmol  $C_6$  m<sup>-2</sup>.



**Fig. S2** PLSR model regression coefficient vectors for all traits assessed in this study. Trait values are estimated by multiplying wavelength values by the regression coefficients plus the intercept. A. C g m<sup>-2</sup>, B. N g m<sup>-2</sup>, C. C:N, D. LMA g m<sup>-2</sup>, E. H<sub>2</sub>O g m<sup>-2</sup>, F. protein mg m<sup>-2</sup>, G. amino acids μmol m<sup>-2</sup>, H. log nitrate μmol m<sup>-2</sup>, I. total non-structural carbohydrate (TNC) μmol  $C_6$  m<sup>-2</sup>, J. starch μmol  $C_6$  m<sup>-2</sup>, K. log total sugars μmol  $C_6$  m<sup>-2</sup>, L. log sucrose μmol  $C_6$  m<sup>-2</sup>, M. log glucose μmol  $C_6$  m<sup>-2</sup> and N. log fructose μmol  $C_6$  m<sup>-2</sup>.