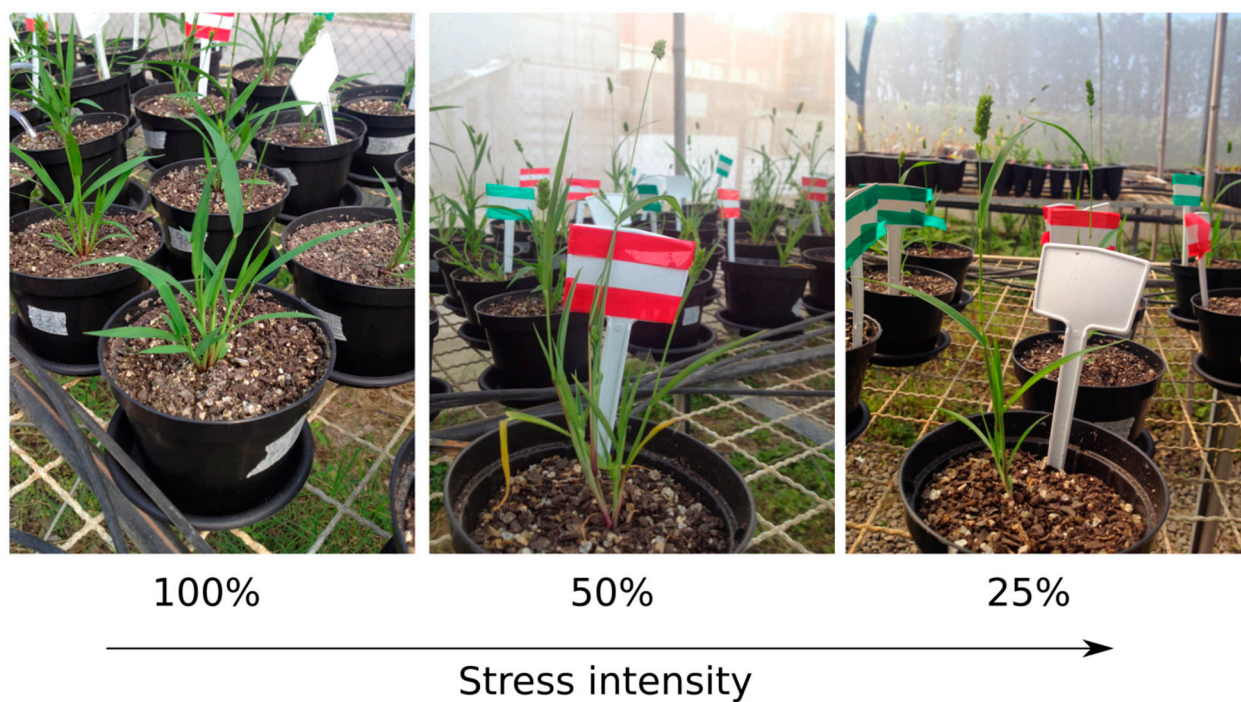
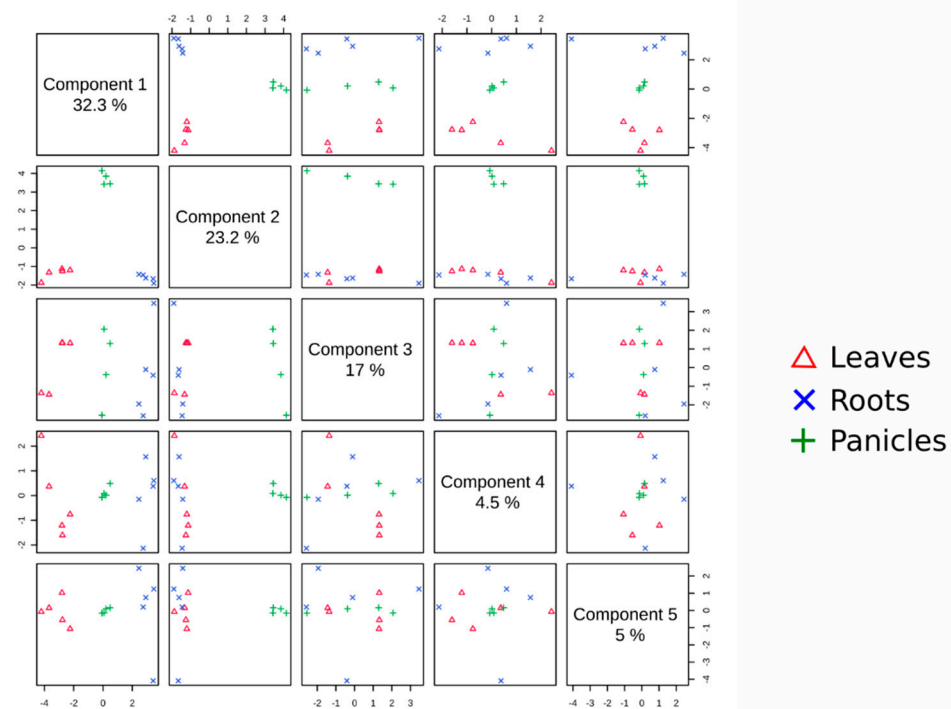
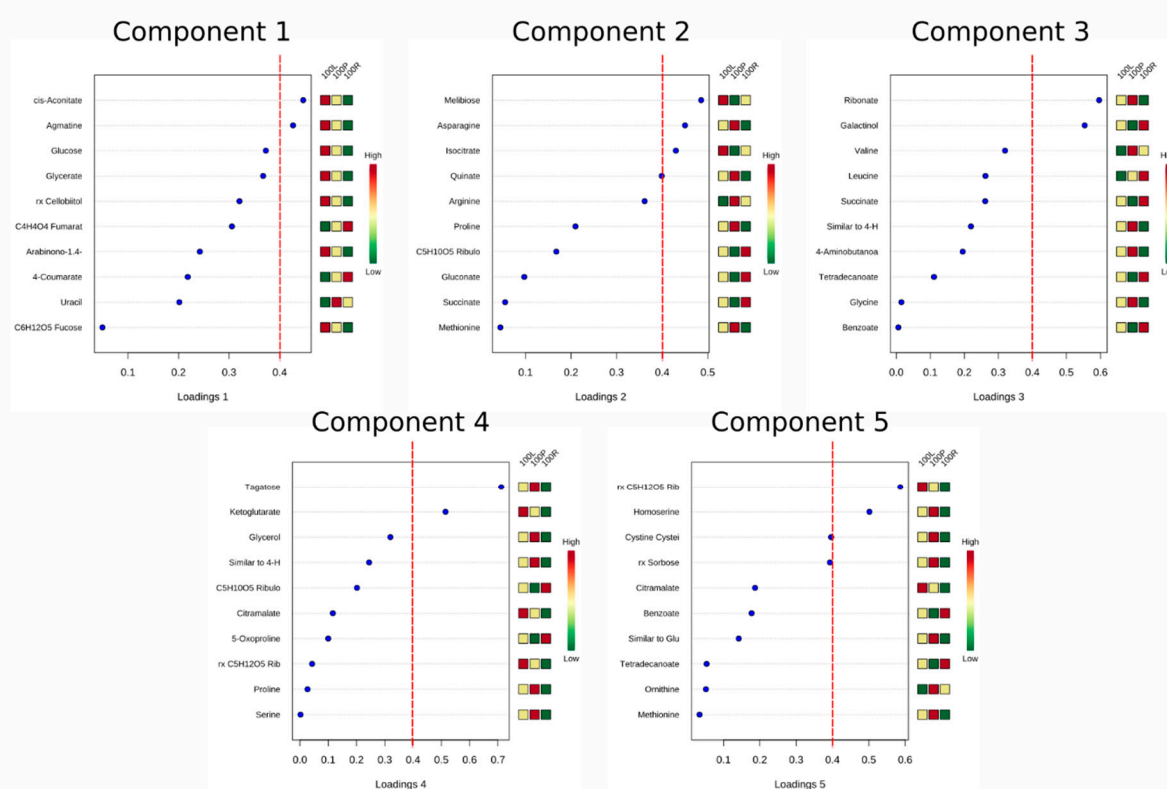


Water limitation induces organ-specific changes in the metabolite profile of *Setaria viridis*

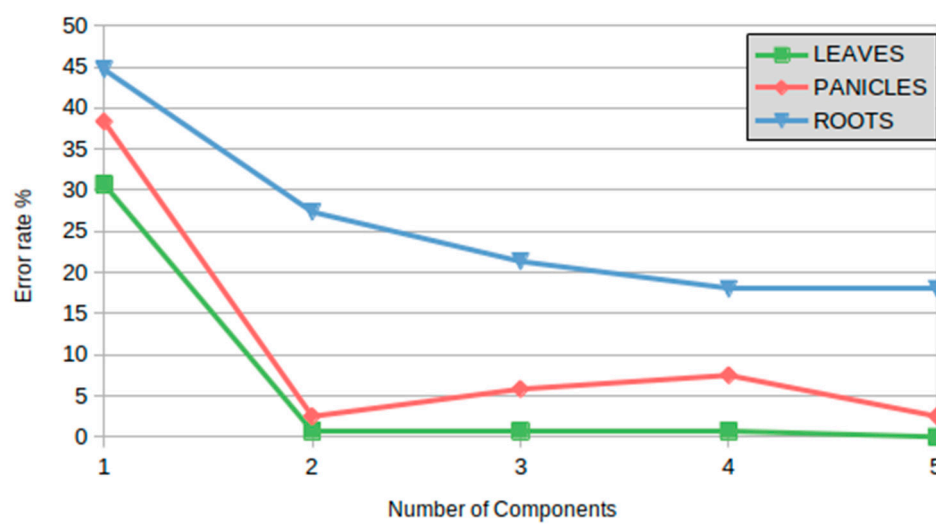
Supplemental figures and tables



Supplemental Figure S1 Representative plants of each treatment: no flag – 100% SPC (control); red flag – 50% SPC; white flag – 25% SPC

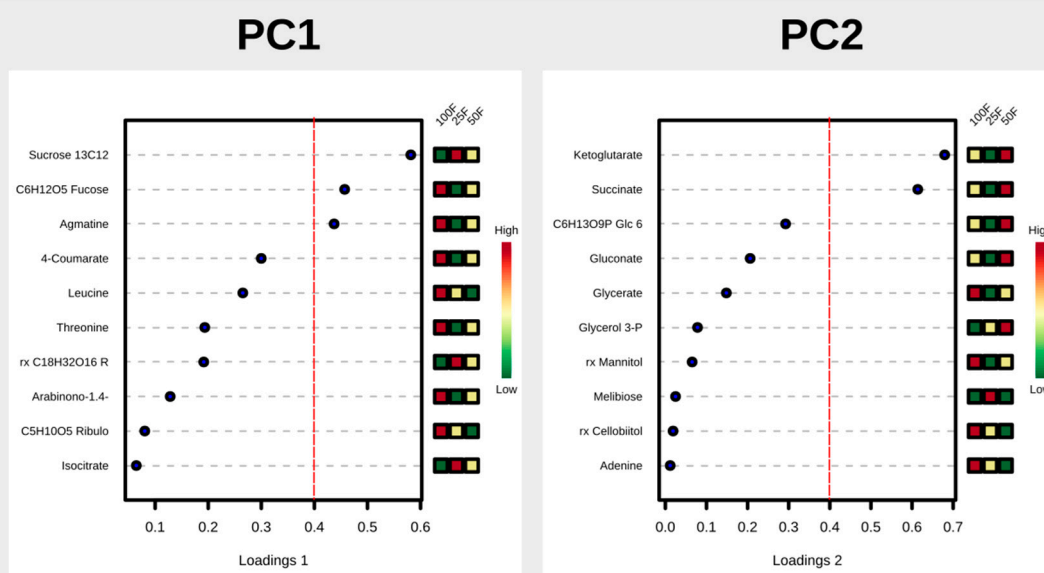
a**b**

Supplemental Figure S2 Discriminant analysis of metabolites in well-watered *S. viridis* panicles, leaves and roots. Five sPLS-DA components (a) and respective metabolites of each component (b). In panel B, the x-axis shows the loading score and dashed red line indicates the threshold (0.40) used to define the most important metabolites

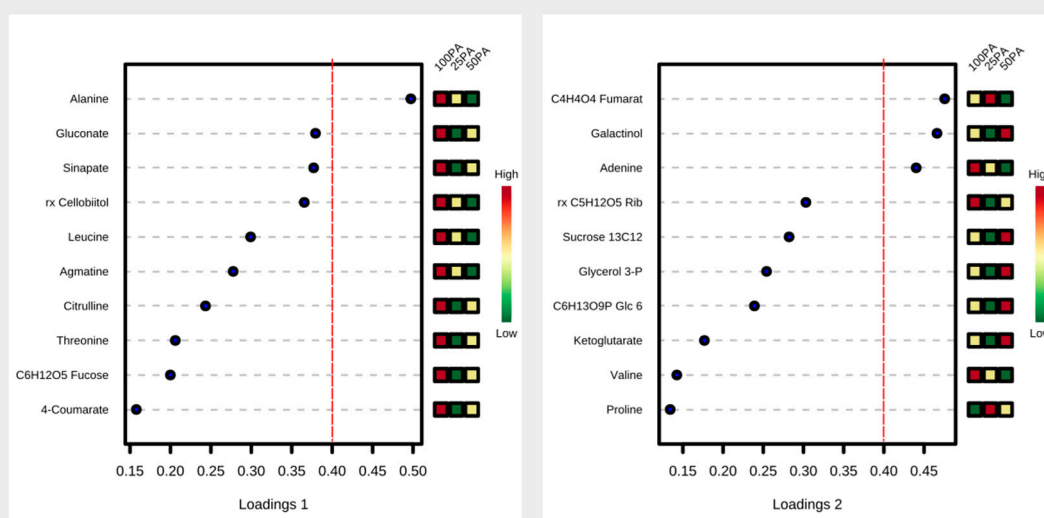


Supplemental Figure S3 The 5-fold cross-validation of sPLS-DA analysis of panicles, leaves and roots with five components and 10 variables/component. The classification error rate corresponds to the average of 10 repetitions

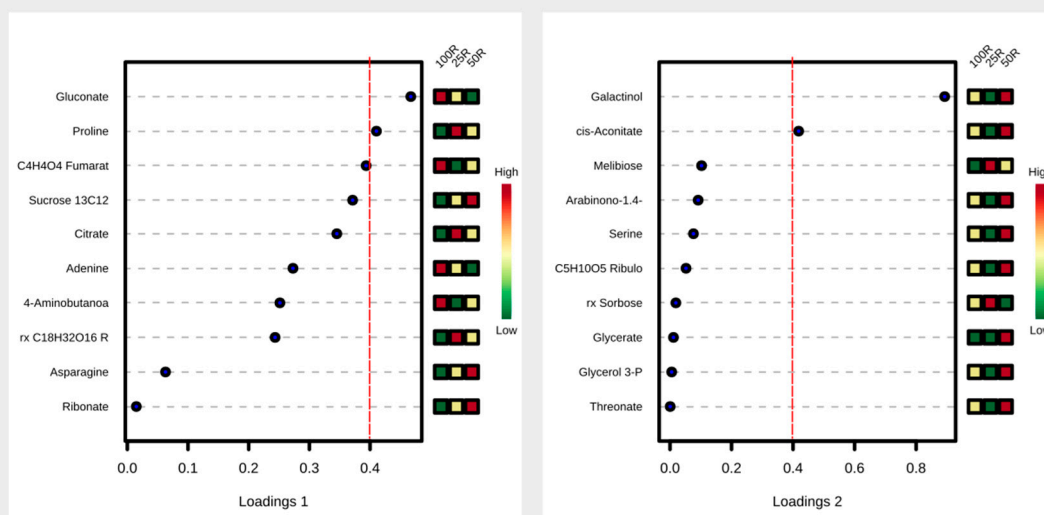
Panicles



Leaves



Roots



Supplemental Figure S4 Important features (metabolites) for PC1 and PC2 of *S. viridis* panicles, leaves and roots

Supplemental Table S1 Content of all metabolites (61) identified for panicles (P), leaves (L), and roots (R) of *S. viridis* plants submitted to three different water treatments: 100% (control), 50% and 25% of soil pot capacity (SPC). Highlighted metabolites correspond to the 36 most important shown in the Figure 2. Content values are the average of four biological replicates followed by the standard deviation. NA means no detectable values. The table is supplied as Microsoft Excel® sheet.

Supplemental Table S2 The metabolites with absolute loading score > 0.40 for the five components of panicles, leaves and roots sPLS-DA analysis.

	Metabolites	Loading values				
		comp 1	comp 2	comp 3	comp 4	comp 5
Leaves	Tagatose	0.00	0.00	-0.08	0.00	-0.47
	rx Mannitol	0.00	0.00	0.00	-0.41	0.00
	cis-Aconitate	0.00	0.00	-0.41	0.00	0.00
	Galactinol	0.00	-0.47	0.00	0.00	0.00
	Alanine	-0.50	0.00	0.00	0.00	0.00
	Gluconate	-0.38	0.00	0.00	0.00	0.00
	Sinapate	-0.38	0.00	0.00	0.00	0.00
	rx Cellobiitol	-0.37	0.00	0.00	0.00	0.00
	Adenine	0.00	0.44	0.00	0.00	0.00
	rx C18H32O16 Raffinose1-KestoseInulotriose	0.00	0.00	0.71	0.00	0.00
	Ribonate	0.00	0.00	0.00	0.38	0.00
	Quinate	0.00	0.00	0.00	0.38	0.00
	Cystine Cysteine	0.00	0.00	0.00	0.39	0.00
	Succinate	0.00	0.00	0.00	0.40	0.00
	Homoserine	0.00	0.00	0.00	0.42	0.00
	C4H4O4 FumarateMaleate	0.00	0.48	0.26	0.00	0.04
	rx Sorbose	0.00	0.00	0.00	0.00	0.37
	Asparagine	0.00	0.00	0.00	0.00	0.43
	Citramalate	0.00	0.00	0.00	0.00	0.43
Panicles	rx Sorbose	0.00	0.00	0.00	0.00	-0.46
	C6H13O9P Glc 6-PGal 6-P	0.00	-0.25	0.00	0.00	-0.38
	Glycerol	0.00	0.00	0.00	-0.56	0.00
	Similar to 4-Hydroxypyridine	0.00	0.00	0.00	-0.51	0.00
	Homoserine	0.00	0.00	0.00	-0.48	0.00

Roots	rx Cellobiitol	0.00	0.01	-0.49	0.00	0.00
	C4H4O4 FumarateMaleate	0.00	0.00	-0.48	0.00	0.00
	Ketoglutarate	0.00	-0.69	0.00	0.00	0.00
	Succinate	0.00	-0.62	0.00	0.00	0.00
	C6H12O5 FucoseEpifucose	-0.46	0.00	0.00	0.00	0.00
	Agmatine	-0.44	0.00	0.00	0.00	0.00
	Sucrose 13C12	0.59	0.00	0.00	0.00	0.00
	rx C5H12O5 RibitolArabitol	0.00	0.00	0.00	0.00	0.35
	Galactinol	0.00	0.00	-0.38	0.00	0.46
	Tetradecanoate	0.00	0.00	0.00	0.00	0.51
	Arginine	0.00	0.00	0.00	0.00	-0.54
	Isoleucine	0.00	0.00	0.00	0.00	-0.44
	Valine	0.00	0.00	0.00	0.00	-0.38
	rx C18H32O16 Raffinose1-KestoseInulotriose	0.22	0.00	0.00	-0.54	0.00
	Sinapate	0.00	0.00	0.00	-0.49	0.00
	Uracil	0.00	0.00	0.00	-0.37	0.00
	Gluconate	-0.47	0.00	0.00	0.00	0.00
	C4H4O4 FumarateMaleate	-0.40	0.00	0.00	0.00	0.00
	Sucrose 13C12	0.37	0.00	0.00	0.00	0.00
	Proline	0.42	0.00	0.00	0.00	0.00
	cis-Aconitate	0.00	0.42	0.00	0.00	0.00
	Galactinol	0.00	0.89	0.00	0.00	0.00
	Orthophosphate	0.00	0.00	0.45	0.00	0.00
	Agmatine	0.00	0.00	0.84	0.00	0.00
	Glucose	0.00	0.00	0.00	-0.06	0.40

Supplemental Table S3 Important features (metabolites) of PC1 and PC2 of *S. viridis* panicles, leaves and roots corresponding to Venn Diagram shown in **Figure 3**.

Tissue P	TissueL	TissueR	TissueP Tissu eL	TissueP Tissu eR	TissueL Tissu eR	TissueP TissueL Tissu eR
isocitrat e	alanine	citrate	fucose	C18H32O16	fumarate	sucrose
succinat e	sinapate	aminobuta no	agmatine	arabinono	galactinol	gluconate
mannito l	citrullin e	asaparagin e	4-coumarate	C5H10O5	proline	glycerol 3-P
	C5H12 O5	ribonate	leucine	glycerate		adenine
	valine	aconitate	threonine	melibiose		
		serine	ketoglutarate			
		sorbose	C6H13O9P			
		threonate	cellobiitol			