

Table S3: Table summarizing the statistical analyses performed on the Mass Balance (Fig. 4). The table is divided in six sections: summary table for number of replicates (N), mean mass balance, standard deviation (sd) and standard error (se), Two-Way ANOVA, One-Way ANOVA on treatments, Tukey.HSD multiple comparison on treatments, One-Way ANOVA on time (plant development) and Tukey.HSD multiple comparison on time (plant development). C = Control condition; -P = phosphorus deficiency; -Fe = iron deficiency.

Summary table

Treatment	Time	Glycine concentration (μM)	Tissue	N	Mass balance (mg g^{-1} Gly derived $^{13}\text{C DW}^{-1}$)	sd	se
C	0	500	Root	5	1.0429	0.2125	0.0950
C	0	500	Shoot	5	0.0107	0.0032	0.0014
C	0	50	Root	5	0.2693	0.1072	0.0479
C	0	50	Shoot	5	0.0066	0.0044	0.0020
C	3	500	Root	5	0.9307	0.4244	0.1898
C	3	500	Shoot	5	0.0058	0.0010	0.0004
C	3	50	Root	5	0.2802	0.0563	0.0252
C	3	50	Shoot	5	0.0017	0.0023	0.0010
C	7	500	Root	5	0.7341	0.4042	0.1808
C	7	500	Shoot	5	0.0116	0.0040	0.0018
C	7	50	Root	5	0.1580	0.0589	0.0264
C	7	50	Shoot	5	0.0010	0.0024	0.0011
C	10	500	Root	5	0.4086	0.2241	0.1002
C	10	500	Shoot	5	0.0066	0.0021	0.0009
C	10	50	Root	5	0.0724	0.0519	0.0232
C	10	50	Shoot	5	0.0024	0.0024	0.0011
C	14	500	Root	5	0.4718	0.0851	0.0381
C	14	500	Shoot	5	0.0066	0.0016	0.0007
C	14	50	Root	5	0.1382	0.0324	0.0145
C	14	50	Shoot	5	-0.0013	0.0025	0.0011
C	17	500	Root	5	0.4276	0.1342	0.0600
C	17	500	Shoot	5	-0.0009	0.0040	0.0018
C	17	50	Root	5	0.0884	0.0386	0.0173
C	17	50	Shoot	5	-0.0038	0.0058	0.0026
Fe	0	500	Root	5	0.8591	0.3774	0.1688
Fe	0	500	Shoot	5	0.0033	0.0017	0.0008
Fe	0	50	Root	5	0.1982	0.0473	0.0212
Fe	0	50	Shoot	5	0.0016	0.0008	0.0004
Fe	3	500	Root	5	1.3434	0.6563	0.2935
Fe	3	500	Shoot	5	0.0072	0.0018	0.0008
Fe	3	50	Root	5	0.3417	0.1613	0.0721
Fe	3	50	Shoot	5	0.0021	0.0021	0.0009
Fe	7	500	Root	5	0.9140	0.4054	0.1813
Fe	7	500	Shoot	5	0.0199	0.0071	0.0032
Fe	7	50	Root	5	0.1768	0.0653	0.0292
Fe	7	50	Shoot	5	0.0044	0.0012	0.0005
Fe	10	500	Root	5	0.4618	0.1379	0.0617
Fe	10	500	Shoot	5	0.0167	0.0087	0.0039

Fe	10	50	Root	5	0.2500	0.0364	0.0163
Fe	10	50	Shoot	5	0.0061	0.0032	0.0014
Fe	14	500	Root	5	0.5331	0.1890	0.0845
Fe	14	500	Shoot	5	0.0156	0.0027	0.0012
Fe	14	50	Root	5	0.2256	0.0410	0.0183
Fe	14	50	Shoot	5	0.0020	0.0032	0.0014
Fe	17	500	Root	4	0.4971	0.2045	0.1023
Fe	17	500	Shoot	5	0.0223	0.0125	0.0056
Fe	17	50	Root	4	0.1088	0.0834	0.0417
Fe	17	50	Shoot	5	0.0031	0.0052	0.0023
P	0	500	Root	5	0.8506	0.4995	0.2234
P	0	500	Shoot	5	0.0045	0.0032	0.0014
P	0	50	Root	5	0.2599	0.0953	0.0426
P	0	50	Shoot	5	0.0047	0.0033	0.0015
P	3	500	Root	5	1.4708	0.3001	0.1342
P	3	500	Shoot	5	0.0091	0.0064	0.0029
P	3	50	Root	5	0.2501	0.1461	0.0653
P	3	50	Shoot	5	0.0037	0.0007	0.0003
P	7	500	Root	5	0.8634	0.2106	0.0942
P	7	500	Shoot	5	0.0109	0.0034	0.0015
P	7	50	Root	4	0.3546	0.1923	0.0962
P	7	50	Shoot	5	0.0027	0.0023	0.0010
P	10	500	Root	5	0.8654	0.2043	0.0914
P	10	500	Shoot	5	0.0047	0.0043	0.0019
P	10	50	Root	5	0.1969	0.0507	0.0227
P	10	50	Shoot	5	-0.0005	0.0005	0.0002
P	14	500	Root	5	0.4860	0.1281	0.0573
P	14	500	Shoot	5	0.0155	0.0019	0.0008
P	14	50	Root	5	0.2111	0.0560	0.0250
P	14	50	Shoot	5	0.0031	0.0035	0.0016
P	17	500	Root	5	0.4451	0.2106	0.0942
P	17	500	Shoot	5	0.0076	0.0029	0.0013
P	17	50	Root	5	0.1828	0.1380	0.0617
P	17	50	Shoot	5	-0.0020	0.0036	0.0016

Two-Way ANOVA

<i>Tissue</i>	<i>Gly Concentration (μM)</i>	<i>Statistical parameter</i>	<i>Treatment</i>	<i>Time</i>	<i>Treatment:Time</i>	<i>Residuals</i>
Root	50	<i>Df</i>	2	5	10	70
		<i>F value</i>	4.79	5.56	2.23	
		<i>P value</i>	0.011	0.000	0.025	
Root	500	<i>Df</i>	2	5	10	72
		<i>F value</i>	3.53	4.83	3.46	
		<i>P value</i>	0.034	0.001	0.001	
Shoot	50	<i>Df</i>	2	5	10	71
		<i>F value</i>	2.02	13.75	1.25	
		<i>P value</i>	0.141	0.000	0.274	
Shoot	500	<i>Df</i>	2	5	10	72
		<i>F value</i>	18.28	5.60	6.55	
		<i>P value</i>	0.000	0.000	0.000	

One-Way ANOVA Treatment

<i>Tissue</i>	<i>Gly Concentration (μM)</i>	<i>Time</i>	<i>Statistical parameter</i>	<i>Treatment</i>	<i>Residuals</i>
Root	50	0	<i>Df</i>	2	12
			<i>F value</i>	0.98	
			<i>P value</i>	0.403	
Root	50	3	<i>Df</i>	2	12
			<i>F value</i>	0.65	
			<i>P value</i>	0.541	
Root	50	7	<i>Df</i>	2	12
			<i>F value</i>	3.91	
			<i>P value</i>	0.052	
Root	50	10	<i>Df</i>	2	12
			<i>F value</i>	18.92	
			<i>P value</i>	0.000	
Root	50	14	<i>Df</i>	2	12
			<i>F value</i>	5.62	
			<i>P value</i>	0.019	
Root	50	17	<i>Df</i>	2	12
			<i>F value</i>	1.30	
			<i>P value</i>	0.312	
Root	500	0	<i>Df</i>	2	12
			<i>F value</i>	0.41	
			<i>P value</i>	0.676	
Root	500	3	<i>Df</i>	2	12
			<i>F value</i>	1.71	
			<i>P value</i>	0.223	
Root	500	7	<i>Df</i>	2	12
			<i>F value</i>	0.35	
			<i>P value</i>	0.714	
Root	500	10	<i>Df</i>	2	12
			<i>F value</i>	8.43	
			<i>P value</i>	0.005	
Root	500	14	<i>Df</i>	2	12
			<i>F value</i>	0.26	
			<i>P value</i>	0.776	
Root	500	17	<i>Df</i>	2	12
			<i>F value</i>	0.17	
			<i>P value</i>	0.849	
Shoot	50	0	<i>Df</i>	2	12
			<i>F value</i>	3.13	
			<i>P value</i>	0.081	
Shoot	50	3	<i>Df</i>	2	12
			<i>F value</i>	1.63	
			<i>P value</i>	0.237	
Shoot	50	7	<i>Df</i>	2	12
			<i>F value</i>	3.44	
			<i>P value</i>	0.066	

Shoot	50	10	<i>Df</i>	2	12
			<i>F value</i>	10.25	
			<i>P value</i>	0.003	
Shoot	50	14	<i>Df</i>	2	12
			<i>F value</i>	2.76	
			<i>P value</i>	0.103	
Shoot	50	17	<i>Df</i>	2	12
			<i>F value</i>	2.67	
			<i>P value</i>	0.110	
Shoot	500	0	<i>Df</i>	2	12
			<i>F value</i>	10.04	
			<i>P value</i>	0.003	
Shoot	500	3	<i>Df</i>	2	12
			<i>F value</i>	0.90	
			<i>P value</i>	0.431	
Shoot	500	7	<i>Df</i>	2	12
			<i>F value</i>	4.82	
			<i>P value</i>	0.029	
Shoot	500	10	<i>Df</i>	2	12
			<i>F value</i>	6.39	
			<i>P value</i>	0.013	
Shoot	500	14	<i>Df</i>	2	12
			<i>F value</i>	30.75	
			<i>P value</i>	0.000	
Shoot	500	17	<i>Df</i>	2	12
			<i>F value</i>	11.36	
			<i>P value</i>	0.002	

Tukey.HSD multiple comparison on treatments

\$`50μM\_TR`

\$`50μM\_TR`\$`0`

	Value	groups
C	0.269343	a
P	0.259927	a
Fe	0.198181	a

\$`50μM\_TR`\$`3`

	Value	groups
Fe	0.341673	a
C	0.280206	a
P	0.250103	a

\$`50μM\_TR`\$`7`

	Value	groups
P	0.354568	a
Fe	0.176758	a
C	0.157975	a

\$`50μM\_TR`\$`10`

	Value	groups
Fe	0.249972	a
P	0.196916	a
C	0.07237	b

\$`50μM\_TR`\$`14`

	Value	groups
Fe	0.225647	a
P	0.211072	ab
C	0.138188	b

\$`50μM\_TR`\$`17`

	Value	groups
P	0.182799	a
Fe	0.108835	a
C	0.088446	a

\$`50μM\_TS`

\$`50μM\_TS`\$`0`

	Value	groups
C	0.006631	a
P	0.004742	a
Fe	0.001604	a

\$`50μM\_TS`\$`3`

	Value	groups
P	0.003697	a

Fe	0.002069 a
C	0.001725 a

\$`50μM\_TS`\$`7`

	Value	groups
Fe	0.004355 a	
P	0.002717 a	
C	0.00095 a	

\$`50μM\_TS`\$`10`

	Value	groups
Fe	0.006084 a	
C	0.0024 ab	
P	-0.00054 b	

\$`50μM\_TS`\$`14`

	Value	groups
P	0.003141 a	
Fe	0.002002 a	
C	-0.00126 a	

\$`50μM\_TS`\$`17`

	Value	groups
Fe	0.003149 a	
P	-0.002 a	
C	-0.00384 a	

\$`500μM\_TR`

\$`500μM\_TR`\$`0`

	Value	groups
C	1.042941 a	
Fe	0.859122 a	
P	0.850604 a	

\$`500μM\_TR`\$`3`

	Value	groups
P	1.470801 a	
Fe	1.343419 a	
C	0.930735 a	

\$`500μM\_TR`\$`7`

	Value	groups
Fe	0.913961 a	
P	0.863419 a	
C	0.734077 a	

\$`500μM\_TR`\$`10`

	Value	groups
P	0.865389 a	

Fe	0.461816	b
C	0.408597	b

\$`500μM\_TR`\$`14`

	Value	groups
Fe	0.533093	a
P	0.486007	a
C	0.471831	a

\$`500μM\_TR`\$`17`

	Value	groups
Fe	0.497144	a
P	0.445067	a
C	0.427553	a

\$`500μM\_TS`

\$`500μM\_TS`\$`0`

	Value	groups
C	0.010697	a
P	0.004538	b
Fe	0.003334	b

\$`500μM\_TS`\$`3`

	Value	groups
P	0.009098	a
Fe	0.0072	a
C	0.005786	a

\$`500μM\_TS`\$`7`

	Value	groups
Fe	0.019886	a
C	0.011551	ab
P	0.010901	b

\$`500μM\_TS`\$`10`

	Value	groups
Fe	0.016745	a
C	0.006584	b
P	0.004738	b

\$`500μM\_TS`\$`14`

	Value	groups
Fe	0.015648	a
P	0.015533	a
C	0.006598	b

\$`500μM\_TS`\$`17`

	Value	groups
Fe	0.022254	a

P	0.00762 b
C	-0.0009 b

One-Way ANOVA Time

<i>Tissue</i>	<i>Gly Concentration (μM)</i>	<i>Treatment</i>	<i>Statistical parameter</i>	<i>Time</i>	<i>Residuals</i>
Root	50	C	<i>Df</i>	5	24
			<i>F value</i>	10.10	
			<i>P value</i>	0.000	
Root	50	Fe	<i>Df</i>	5	23
			<i>F value</i>	3.95	
			<i>P value</i>	0.010	
Root	50	P	<i>Df</i>	5	23
			<i>F value</i>	1.18	
			<i>P value</i>	0.351	
Root	500	C	<i>Df</i>	5	24
			<i>F value</i>	4.88	
			<i>P value</i>	0.003	
Root	500	Fe	<i>Df</i>	5	23
			<i>F value</i>	3.96	
			<i>P value</i>	0.010	
Root	500	P	<i>Df</i>	5	24
			<i>F value</i>	8.39	
			<i>P value</i>	0.000	
Shoot	50	C	<i>Df</i>	5	24
			<i>F value</i>	4.92	
			<i>P value</i>	0.003	
Shoot	50	Fe	<i>Df</i>	5	24
			<i>F value</i>	1.66	
			<i>P value</i>	0.182	
Shoot	50	P	<i>Df</i>	5	24
			<i>F value</i>	4.99	
			<i>P value</i>	0.003	
Shoot	500	C	<i>Df</i>	5	24
			<i>F value</i>	11.71	
			<i>P value</i>	0.000	
Shoot	500	Fe	<i>Df</i>	5	24
			<i>F value</i>	5.53	
			<i>P value</i>	0.002	
Shoot	500	P	<i>Df</i>	5	24
			<i>F value</i>	5.53	
			<i>P value</i>	0.002	

Tukey.HSD multiple comparison on time

\$`50μM\_TR`

\$`50μM\_TR`\$C

	Value	groups
3	0.280206	a
0	0.269343	ab
7	0.157975	bc
14	0.138188	c
17	0.088446	c
10	0.07237	c

\$`50μM\_TR`\$Fe

	Value	groups
3	0.341673	a
10	0.249972	ab
14	0.225647	ab
0	0.198181	ab
7	0.176758	ab
17	0.108835	b

\$`50μM\_TR`\$P

	Value	groups
7	0.354568	a
0	0.259927	a
3	0.250103	a
14	0.211072	a
10	0.196916	a
17	0.182799	a

\$`50μM\_TS`

\$`50μM\_TS`\$C

	Value	groups
0	0.006631	a
10	0.0024	ab
3	0.001725	ab
7	0.00095	ab
14	-0.00126	b
17	-0.00384	b

\$`50μM\_TS`\$Fe

	Value	groups
10	0.006084	a
7	0.004355	a
17	0.003149	a
3	0.002069	a
14	0.002002	a
0	0.001604	a

\$`50μM\_TS`\$P

	Value	groups
0	0.004742	a
3	0.003697	ab
14	0.003141	abc
7	0.002717	abc
10	-0.00054	bc
17	-0.002	c

\$`500μM\_TR`

\$`500μM\_TR`\$C

	Value	groups
0	1.042941	a
3	0.930735	ab
7	0.734077	ab
14	0.471831	b
17	0.427553	b
10	0.408597	b

\$`500μM\_TR`\$Fe

	Value	groups
3	1.343419	a
7	0.913961	ab
0	0.859122	ab
14	0.533093	b
17	0.497144	b
10	0.461816	b

\$`500μM\_TR`\$P

	Value	groups
3	1.470801	a
10	0.865389	b
7	0.863419	b
0	0.850604	b
14	0.486007	b
17	0.445067	b

\$`500μM\_TS`

\$`500μM\_TS`\$C

	Value	groups
7	0.011551	a
0	0.010697	ab
14	0.006598	ab
10	0.006584	ab
3	0.005786	b
17	-0.0009	c

\$`500μM\_TS`\$Fe

	Value	groups
17	0.022254	a
7	0.019886	ab
10	0.016745	abc
14	0.015648	abc
3	0.0072	bc
0	0.003334	c

\$`500μM\_TS`\$P

	Value	groups
14	0.015533	a
7	0.010901	ab
3	0.009098	ab
17	0.00762	b
10	0.004738	b
0	0.004538	b