

Table S2. Relative concentrations and fold changes in the levels of significantly different metabolites in roots of E+ and E- *A.inebrians* seedlings under low phosphorus stress. Fold changes were calculated using the formula $\text{Log}_2^{(\text{RE+}/\text{RE-})}$ and $\text{log}_2^{(0.01 \text{ mM}/0.5 \text{ mM})}$. *, **, *** mean significant differences at $P<0.05$; $P<0.01$ and $P<0.001$, respectively.

Metabolites name	0.01 mM		Fold Changes Log ₂ ^(RE+/RE-)
	Relative concentration		
	RE+	RE-	
Cis-1,2-Dihydronaphthalene-1,2-diol	112.71 ± 10.12	6.47 ± 6.47	4.12 ***
Ribonic acid	21.78 ± 21.78	131.18 ± 14.33	-2.59 **
Tryptophan	22.53 ± 14.32	101.37 ± 22.04	-2.17 *
Maleic acid	4353.06 ± 1517.48	8635.84 ± 658.09	-0.99 *
Gluconic acid	1088.21 ± 242.66	193.55 ± 9.59	2.49 **
Cortexolone	43.87 ± 9.90	105.88 ± 10.65	-1.27 **
5-Aminovaleric acid	283.62 ± 65.95	515.30 ± 18.51	-0.86 **
Proline	5621.40 ± 462.78	13221.57 ± 1234.01	-1.23 ***
Acetol	46.71 ± 10.16	80.47 ± 4.64	-0.78 *
Leucine	629.65 ± 66.17	1447.81 ± 125.26	-1.20 ***
3-Methylglutaric acid	49.03 ± 6.98	27.03 ± 6.48	0.86 *
Maleamate	1284.51 ± 100.78	2466.03 ± 203.94	-0.94 ***
Asparagine	31739.20 ± 1973.62	16926.31 ± 1390.00	0.91 ***
D-Glutamic acid	436.92 ± 27.61	231.55 ± 32.49	0.92 ***
Ethanolamine	8764.70 ± 985.01	15408.24 ± 1246.48	-0.81 **
Alanine	78297.52 ± 7430.11	130879.38 ± 7682.73	-0.74 ***
3-Cyano-L-alanine	65566.20 ± 3491.10	38971.36 ± 4572.38	0.75 ***
	0.5 mM		Fold Changes Log ₂ ^(RE+/RE-)
	Relative concentration		
	RE+	RE-	
Galactonic acid	6.16 ± 2.57	0.003 ± 0.00	11.13 *
1-Kestose	382.755 ± 81.513	61.99 ± 25.93	2.63 **
Uridine	90.31 ± 27.78	3.18 ± 0.69	4.83 *
Isomaltose	238.96 ± 78.48	39.64 ± 17.92	2.59 *
Asparagine	292.53 ± 33.49	50.32 ± 16.57	2.54 ***
Cis-gondoic acid	25.65 ± 2.76	6.78 ± 2.11	1.92 ***
Phosphate	1007.46 ± 40.52	392.66 ± 159.62	1.36 **
3-hydroxybutyric acid	223.03 ± 32.04	79.16 ± 22.57	1.49 **
3-Cyano-L-alanine	1616.88 ± 168.88	589.59 ± 39.25	1.46 ***
Proline	3000.47 ± 285.41	1480.16 ± 171.72	1.02 **

1-Hexadecanol	832.73 ± 81.76	421.33 ± 74.21	0.98 **
1,3-diaminopropane	104.71 ± 12.52	219.72 ± 33.12	-1.07 **
Aspartic acid	5370.21 ± 434.28	2837.17 ± 375.08	0.92 **
Alanine	28742.71 ± 2411.05	17560.24 ± 2302.60	0.71 **
Gluconic acid	749.07 ± 124.84	418.33 ± 51.65	0.84 *
Tyrosine	1229.14 ± 70.13	761.89 ± 143.81	0.69 *
Maltotriose	642.36 ± 79.38	385.61 ± 40.00	0.74 *
Glutamic acid	774.00 ± 44.31	499.91 ± 47.02	0.63 **
RE+			
Relative concentration		Fold Changes	
	0.01 mM	0.5 mM	Log ₂ ^(0.01 mM/0.5 mM)
Glutamine	3133.63 ± 668.78	0.003 ± 0.00	20.13 ***
D-Glutamic acid	436.92 ± 27.61	0.003 ± 0.00	17.28 ***
Benzoic acid	133.22 ± 32.44	0.003 ± 0.00	15.57 **
6-phosphogluconic acid	2.04 ± 2.04	39.99 ± 5.03	-4.29 ***
Urea	96.67 ± 19.76	0.49 ± 0.24	7.62 ***
Biuret	1981.33 ± 117.45	90.51 ± 40.96	4.45 ***
1-Aminocyclopropanecarboxylic acid	34.45 ± 21.89	167.45 ± 10.04	-2.28 ***
Lysine	6726.81 ± 454.80	534.10 ± 260.50	3.65 ***
Glutaric Acid	56.14 ± 35.57	222.33 ± 24.15	-1.99 **
Asparagine	71188.01 ± 3123.29	292.53 ± 33.49	7.93 ***
Phthalic acid	259.51 ± 11.93	2.72 ± 1.09	6.58 ***
Glucose-6-phosphate	0.002 ± 0.00	24.15 ± 8.07	-13.66 *
Phosphate	354.30 ± 161.22	1007.42 ± 40.52	-1.51 **
3-Cyano-L-alanine	65566.19 ± 3491.10	1616.88 ± 168.88	5.34 ***
1-Kestose	40.96 ± 16.64	382.76 ± 81.51	-3.22 **
Uridine	3.14 ± 1.25	90.31 ± 27.78	-4.84 *
Ribitol	1857.94 ± 270.77	652.15 ± 219.71	1.51 **
Phosphomycin	46.36 ± 15.32	169.94 ± 8.07	-1.87 ***
Lauric acid	123.70 ± 47.07	285.588 ± 25.16	-1.21 *
Threonine	46.24 ± 9.86	362.32 ± 8.57	-2.97 ***
Aspartic acid	35567.04 ± 1886.73	5370.21 ± 434.28	2.73 ***
L-Allothreonine	16238.23 ± 822.45	3465.59 ± 192.14	2.23 ***
Fructose	146912.22 ± 29603.53	373164.16 ± 8045.34	-1.34 ***
Glycine	10286.17 ± 1306.20	2531.83 ± 336.47	2.02 ***
RE-			
Relative concentration		Fold Changes	
	0.01 mM	0.5 mM	Log ₂ ^(0.01 mM/0.5 mM)
Glutamine	5384.25 ± 2044.41	0.003 ± 0.00	20.9 *

Biuret	2104.12 ± 119.60	0.003 ± 0.00	19.55 ***
D-Glutamic acid	231.55 ± 32.49	0.003 ± 0.00	16.36 ***
Cis-1,2-Dihydronaphthalene-1,2-diol	6.47 ± 6.47	154.30 ± 24.40	-4.58 ***
Lysine	5439.91 ± 926.36	159.82 ± 101.11	5.09 ***
Benzoic acid	161.76 ± 43.64	28.32 ± 28.32	2.51 *
6-phosphogluconic acid	0.002 ± 0.00	36.32 ± 8.92	-14.48 **
Gluconic lactone	64.94 ± 16.98	0.003 ± 0.00	14.53 **
Asparagine	43121.44 ± 3062.46	50.32 ± 16.57	9.74 ***
Glycocyamine	26.24 ± 6.39	0.003 ± 0.00	13.22 **
Urea	83.27 ± 9.27	2.04 ± 0.99	5.35 ***
Maleic acid	8635.84 ± 658.09	1625.53 ± 727.88	2.41 ***
Ribitol	1980.23 ± 267.28	481.92 ± 219.46	2.04 **
3-Cyano-L-alanine	38971.36 ± 4572.38	589.59 ± 39.25	6.05 ***
Fructose	123659.34 ± 39542.13	445575.80 ± 16662.40	-1.85 ***
Phthalic acid	127.35 ± 8.17	4.70 ± 0.74	4.76 ***
Tryptophan	101.37 ± 22.04	23.89 ± 16.62	2.09 *
Lauric acid	83.11 ± 30.76	369.28 ± 35.90	-2.15 ***
Threonine	25.99 ± 9.98	346.77 ± 67.16	-3.74 ***
Aspartic acid	31046.49 ± 1476.09	2837.17 ± 375.08	3.45 ***
Glutaric Acid	86.39 ± 28.45	244.54 ± 25.31	-1.5 **
Proline	13221.57 ± 1234.00	1480.16 ± 171.72	3.16 ***
Alanine	130879.38 ± 7682.73	17560.24 ± 2302.60	2.9 ***
Glycine	14128.19 ± 1138.62	2004.19 ± 164.70	2.82 ***
Threitol	25.90 ± 8.55	61.82 ± 5.52	-1.26 **
Oxoproline	99455.60 ± 6816.90	18089.21 ± 2078.31	2.46 ***
L-Allothreonine	12947.93 ± 917.83	2471.45 ± 265.55	2.39 ***
Maleamate	2466.03 ± 203.94	491.438 ± 101.32	2.33 ***
Serine	27155.45 ± 1498.46	5632.65 ± 545.42	2.27 ***
Glutamic acid	2246.39 ± 97.56	499.91 ± 47.02	2.17 ***
Thymidine	95.15 ± 6.15	27.81 ± 5.61	1.77 ***
