

Table 1 Relative concentrations and fold changes of significantly different metabolites in EI and EF plants stem under ESI+

Metabolites name	EI	EF	Log ₂ ^(EI/EF)
Adenosine	730.51±162.52	1438.06±278.43	-0.98
L-Histidine	661.07±126.39	110.71±21.05	2.58 **
2'-Deoxyadenosine	423.42±73.49	123.21±33.89	1.78 **
L-Phenylalanine	13019.62±3265.98	1168.78±116.31	3.48 **
L-Lysine	850.78±188.57	166.56±23.13	2.35 **
Betaine	7533.19±1219.47	1693.24±300.80	2.15 ***
Isoleucine	21114.48±3767.30	2953.39±879.55	2.84 ***
Choline	5361.61±1141.15	11158.00±1126.15	-1.06 **
D-(+)-Tryptophan	6223.61±1310.68	902.96±387.63	2.79 **
Proline	2428.19±356.87	657.13±81.36	1.89 ***
L-Glutamine	2392.61±440.33	4024.04±669.72	-0.75
L-Tyrosine	2401.42±591.53	405.33±138.55	2.57 **
Indole	2360.52±190.35	2897.70±176.51	-0.3
Asparagine	4375.68±779.49	866.02±386.17	2.34 **
Hypoxanthine	945.90±315.07	27.26±8.87	5.12 *
Pipecolic acid	976.91±216.02	197.82±26.80	2.30 **
4-Hydroxybenzaldehyde	196.47±43.42	31.20±12.27	2.65 **
DL-Arginine	2040.53±408.74	402.71±80.37	2.34 **
Crotonic acid	3095.89±582.09	319.40±35.71	3.28 ***
Thymine	140.79±32.20	15.64±0.85	3.17 **
Cytosine	353.93±21.50	127.72±18.72	1.47 ***
Acetophenone	659.92±280.67	165.51±47.73	2
L-Aspartic acid	935.76±109.15	230.64±32.11	2.02 ***
L-Threonine	1136.51±148.38	350.84±144.75	1.70 **
L-(-)-Methionine	881.81±149.31	80.62±29.58	3.45 ***
Guanosine	611.50±52.65	181.06±26.66	1.76 ***
DL-2,6-Diaminopimelic acid	211.28±33.93	38.54±4.47	2.45 ***
Benzophenone	105.61±17.51	195.94±20.85	-0.89 *
Alpha-ketoglutaric acid	250.05±56.43	35.74±5.70	2.81 **
D-Pantothenic acid	132.10±18.26	53.53±21.13	1.30 *
Hexitol	342.29±121.00	48.39±6.21	2.82 *
cGMP	27.35±22.38	128.97±35.40	-2.24 *
Cytidine	123.96±9.83	63.19±8.59	0.97 **
Saccharopine	51.00±23.47	6.69±0.52	2.93
3,4-Dihydroxyphenylglycol	20.67±10.69	168.32±18.42	-3.03 ***
Pheophorbide A	8822.71±1614.12	48.07±11.34	7.52 ***
Niacin	212.60±36.70	85.26±12.97	1.32 **
L-(+)-Ergothioneine	17.68±12.09	107.15±26.70	-2.60 *
Ricinoleic acid	15.33±5.44	99.90±26.76	-2.70 *
Stearidonic acid	885.53±211.95	335.57±71.39	1.40 *
Gamma-aminobutyric acid	3377.60±634.00	344.27±36.35	3.29 ***
Coumarone	755.33±147.17	152.95±45.24	2.30 **
Phosphoglycolate	6551.08±529.20	8982.96±768.29	-0.46 *
Styrene	1144.36±485.47	16.48±4.58	6.12 *
Uracil	152.46±17.02	64.22±7.85	1.25 ***
Toluene	107.78±29.28	22.33±1.65	2.27 *

Note: Fold changes were calculated using the formula $\log_2^{(EI/EF)}$. *, **, *** means significant differences at $0.01 < p < 0.05$; $0.001 < p < 0.01$ and $p < 0.001$, respectively