

Supplementary Tables

Table 1: Soybean growth responses to the foliar spray of flavonoids under salt stress (120 mM NaCl) and optimal growth condition

Soybean growth variables (foliar spray of flavonoids) – optimal conditions							
Treatments	Shoot FW (g) ± SE	Shoot DW (g) ± SE	Leaf area (cm ²) ± SE	Root FW (g) ± SE	Root DW (g) ± SE	Root length (cm) ± SE	Root volume (cm ³) ± SE
<i>p</i>-value	.0030	.0090	.0575	.1435	.0256	.1821	.0381
Ctrl	9.09 ^b ± 1.70	1.59 ^b ± 0.35	255.60 ^b ± 54.73	3.35 ^b ± 0.70	0.188 ^b ± 0.052	1407.25 ^b ± 213.82	2.523 ^b ± 0.581
Fl 50 mL ha ⁻¹	13.15 ^{ab} ± 1.99	2.40 ^{ab} ± 0.40	342.00 ^{ab} ± 59.95	5.09 ^{ab} ± 1.40	0.285 ^{ab} ± 0.060	1929.50 ^{ab} ± 280.17	3.992 ^{ab} ± 0.677
Fl 100 mL ha ⁻¹	16.83 ^a ± 1.60	2.96 ^a ± 0.30	429.43 ^a ± 48.32	6.35 ^a ± 1.21	0.393 ^a ± 0.053	1975.25 ^a ± 272.08	4.569 ^a ± 0.689
Fl 150 mL ha ⁻¹	17.35 ^a ± 0.75	3.17 ^a ± 0.24	443.77 ^a ± 43.54	6.02 ^{ab} ± 0.81	0.390 ^a ± 0.035	2062.25 ^a ± 59.11	4.969 ^a ± 0.399

Soybean growth variables (foliar spray of flavonoids) – 120 mM NaCl condition							
Treatments	Shoot FW (g) ± SE	Shoot DW (g) ± SE	Leaf area (cm ²) ± SE	Root FW (g) ± SE	Root DW (g) ± SE	Root length (cm) ± SE	Root volume (cm ³) ± SE
<i>p</i>-value	.3292	.3346	.0895	.6209	.2421	.0968	.4101
Ctrl	3.60 ^a ± 0.85	0.59 ^a ± 0.17	89.25 ^{ab} ± 26.27	1.34 ^a ± 0.29	0.050 ^a ± 0.015	496.38 ^b ± 129.42	0.914 ^a ± 0.229
Fl 50 mL ha ⁻¹	5.15 ^a ± 0.53	0.86 ^a ± 0.09	140.92 ^a ± 18.26	1.99 ^a ± 0.29	0.083 ^a ± 0.010	881.38 ^a ± 62.81	1.275 ^a ± 0.107
Fl 100 mL ha ⁻¹	3.70 ^a ± 0.62	0.60 ^a ± 0.11	76.98 ^b ± 14.21	1.62 ^a ± 0.36	0.054 ^a ± 0.011	600.63 ^{ab} ± 101.14	0.950 ^a ± 0.148
Fl 150 mL ha ⁻¹	4.50 ^a ± 0.62	0.75 ^a ± 0.09	94.81 ^{ab} ± 9.01	1.69 ^a ± 0.41	0.068 ^a ± 0.013	670.38 ^{ab} ± 121.21	1.173 ^a ± 0.189

Table 2: Soybean growth responses to the foliar spray of CFS under salt stress (120mM NaCl) and optimal growth condition

Soybean growth variables (foliar spray of CFS) – optimal conditions							
Treatments	Shoot FW (g) ± SE	Shoot DW (g) ± SE	Leaf area (cm ²) ± SE	Root FW (g) ± SE	Root DW (g) ± SE	Root length (cm) ± SE	Root volume (cm ³) ± SE
p-value	0.7968	0.9998	0.6069	0.5506	0.4781	0.1657	0.7633
Ctrl	13.96 ^a ± 1.99	2.94 ^a ± 0.37	444.04 ^a ± 54.67	5.27 ^a ± 1.00	0.47 ^a ± 0.06	2312.88 ^a ± 166.94	6.71 ^a ± 1.09
Fl 50 mL ha ⁻¹	13.95 ^a ± 1.30	2.94 ^a ± 0.24	458.41 ^a ± 35.76	5.53 ^a ± 0.62	0.46 ^a ± 0.04	2784.50 ^a ± 215.08	6.40 ^a ± 0.59
Fl 100 mL ha ⁻¹	14.90 ^a ± 1.45	2.96 ^a ± 0.31	477.37 ^a ± 38.40	6.11 ^a ± 0.85	0.54 ^a ± 0.05	2730.25 ^a ± 172.40	7.38 ^a ± 0.80
Fl 150 mL ha ⁻¹	15.83 ^a ± 1.30	2.98 ^a ± 0.48	521.56 ^a ± 39.58	6.92 ^a ± 0.93	0.55 ^a ± 0.05	2783.00 ^a ± 100.30	7.44 ^a ± 0.72
Soybean growth variables (foliar spray of CFS) – 120 mM NaCl condition							
Treatments	Shoot FW (g) ± SE	Shoot DW (g) ± SE	Leaf area (cm ²) ± SE	Root FW (g) ± SE	Root DW (g) ± SE	Root length (cm) ± SE	Root volume (cm ³) ± SE
p-value	0.0379	0.0007	0.0132	0.2386	0.1160	0.2547	0.1345
Ctrl	2.89 ^b ± 0.86	0.54 ^b ± 0.15	73.24 ^b ± 31.81	1.05 ^a ± 0.36	0.06 ^b ± 0.02	689.25 ^a ± 210.07	1.16 ^b ± 0.44
Fl 50 mL ha ⁻¹	3.95 ^{ab} ± 0.55	0.65 ^b ± 0.10	90.53 ^b ± 17.77	1.16 ^a ± 0.22	0.08 ^{ab} ± 0.02	848.75 ^a ± 172.97	1.36 ^{ab} ± 0.30
Fl 100 mL ha ⁻¹	6.58 ^a ± 1.43	1.41 ^a ± 0.21	215.38 ^a ± 49.24	2.04 ^a ± 0.57	0.15 ^a ± 0.04	1309.50 ^a ± 277.79	2.52 ^a ± 0.64
Fl 150 mL ha ⁻¹	3.38 ^b ± 0.52	0.67 ^b ± 0.09	91.82 ^b ± 16.68	1.25 ^a ± 0.21	0.08 ^{ab} ± 0.02	968.88 ^a ± 205.87	1.35 ^{ab} ± 0.26

Table 3: Canola growth responses to the foliar spray of **flavonoids** under salt stress (150 mM NaCl) and optimal growth condition

Canola growth variables (foliar spray of Flavonoids) – optimal conditions							
Treatments	Shoot FW (g) ± SE	Shoot DW (g) ± SE	Leaf area (cm ²) ± SE	Root FW (g) ± SE	Root DW (g) ± SE	Root length (cm) ± SE	Root volume (cm ³) ± SE
<i>p</i>-value	0.7808	0.7996	0.6978	0.7387	0.5684	0.0548*	0.2196
Ctrl	30.15 ^a ± 3.87	2.98 ^a ± 0.48	508.41 ^a ± 63.15	2.74 ^a ± 0.20	0.29 ^a ± 0.02	1677.75 ^b ± 161.25	3.27 ^a ± 0.32
Fl 100 mL ha ⁻¹	32.24 ^a ± 3.93	3.19 ^a ± 0.50	579.55 ^a ± 70.97	3.27 ^a ± 0.37	0.33 ^a ± 0.03	1970.38 ^{ab} ± 125.84	3.73 ^a ± 0.36
Fl 200 mL ha ⁻¹	27.25 ^a ± 3.45	2.63 ^a ± 0.40	477.92 ^a ± 59.61	3.00 ^a ± 0.38	0.28 ^a ± 0.04	1645.75 ^b ± 86.34	3.57 ^a ± 0.45
Fl 300 mL ha ⁻¹	31.86 ^a ± 3.84	3.19 ^a ± 0.45	559.50 ^a ± 73.55	3.06 ^a ± 0.38	0.28 ^a ± 0.02	2325.25 ^a ± 300.80	2.73 ^a ± 0.27
Canola growth variables (foliar spray of Flavonoids) – 150mM NaCl condition							
Treatments	Shoot FW (g) ± SE	Shoot DW (g) ± SE	Leaf area (cm ²) ± SE	Root FW (g) ± SE	Root DW (g) ± SE	Root length (cm) ± SE	Root volume (cm ³) ± SE
<i>p</i>-value	0.6435	0.6341	0.5886	0.1032	0.2294	0.1344	0.1345
Ctrl	23.43 ^a ± 3.30	1.95 ^a ± 0.34	387.09 ^a ± 52.71	1.69 ^b ± 0.27	0.15 ^a ± 0.02	1449.63 ^b ± 152.07	1.16 ^b ± 0.44
Fl 100 mL ha ⁻¹	29.33 ^a ± 3.18	2.50 ^a ± 0.34	487.04 ^a ± 55.51	2.76 ^a ± 0.40	0.22 ^a ± 0.03	2162.75 ^a ± 206.09	1.36 ^{ab} ± 0.30
Fl 200 mL ha ⁻¹	25.10 ^a ± 2.12	2.05 ^a ± 0.21	424.23 ^a ± 34.26	2.12 ^{ab} ± 0.24	0.16 ^a ± 0.02	1884.63 ^{ab} ± 186.39	2.52 ^a ± 0.64
Fl 300 mL ha ⁻¹	25.12 ^a ± 4.42	2.05 ^a ± 0.39	401.53 ^a ± 70.08	1.74 ^b ± 0.38	0.15 ^a ± 0.03	1601.50 ^{ab} ± 311.28	1.35 ^{ab} ± 0.26

Table 4: Canola growth responses to the foliar spray of CFS under salt stress (150 mM NaCl) and optimal growth condition

Canola growth variables (foliar spray of CFS) – optimal conditions							
Treatments	Shoot FW (g) ± SE	Shoot DW (g) ± SE	Leaf area (cm ²) ± SE	Root FW (g) ± SE	Root DW (g) ± SE	Root length (cm) ± SE	Root volume (cm ³) ± SE
<i>p</i>-value	0.9201	0.5508	0.9675	0.7486	0.5901	0.7025	0.7024
Ctrl	23.68 ^a ± 5.20	2.18 ^a ± 0.38	413.00 ^a ± 82.09	2.23 ^a ± 0.26	0.31 ^a ± 0.05	1918.13 ^a ± 166.14	3.07 ^a ± 0.17
Fl 100 mL ha ⁻¹	26.08 ^a ± 4.70	2.55 ^a ± 0.31	432.25 ^a ± 75.19	2.09 ^a ± 0.18	0.34 ^a ± 0.03	1943.83 ^a ± 146.04	3.05 ^a ± 0.21
Fl 200 mL ha ⁻¹	24.26 ^a ± 4.99	2.24 ^a ± 0.30	431.74 ^a ± 85.86	2.21 ^a ± 0.23	0.34 ^a ± 0.04	1841.60 ^a ± 98.35	3.08 ^a ± 0.21
Fl 300 mL ha ⁻¹	27.98 ^a ± 4.28	2.72 ^a ± 0.21	468.61 ^a ± 74.96	2.43 ^a ± 0.21	0.39 ^a ± 0.04	2101.30 ^a ± 204.16	3.38 ^a ± 0.29
Canola growth variables (foliar spray of CFS) – 150mM NaCl condition							
Treatments	Shoot FW (g) ± SE	Shoot DW (g) ± SE	Leaf area (cm ²) ± SE	Root FW (g) ± SE	Root DW (g) ± SE	Root length (cm) ± SE	Root volume (cm ³) ± SE
<i>p</i>-value	0.9678	0.8980	0.9491	0.8803	0.6190	0.5760	0.1636
Ctrl	23.08 ^a ± 4.96	2.10 ^a ± 0.41	403.92 ^a ± 73.88	1.98 ^a ± 0.23	0.30 ^a ± 0.04	1782.13 ^a ± 94.33	3.02 ^{ab} ± 0.25
Fl 100 mL ha ⁻¹	26.05 ^a ± 3.49	2.45 ^a ± 0.27	453.96 ^a ± 63.55	2.22 ^a ± 0.25	0.37 ^a ± 0.03	1722.63 ^a ± 141.95	3.43 ^{ab} ± 0.19
Fl 200 mL ha ⁻¹	25.34 ^a ± 4.04	2.31 ^a ± 0.29	457.40 ^a ± 71.27	2.25 ^a ± 0.19	0.35 ^a ± 0.03	2018.00 ^a ± 191.26	3.57 ^a ± 0.28
Fl 300 mL ha ⁻¹	25.01 ^a ± 4.82	2.14 ^a ± 0.46	443.97 ^a ± 77.54	2.14 ^a ± 0.35	0.31 ^a ± 0.05	1884.25 ^a ± 184.15	2.79 ^b ± 0.33