

Table S1 Content of estimated metabolites in agitated microshoot in vitro cultures of *S. lateriflora* grown on LS medium supplemented with 1.0 mg/L BA and 1.0 NAA mg/L after administering different concentrations of biosynthetic precursors (phenylalanine and tyrosine) and elicitor (methyl jasmonate) collected 3 days after supplementation. Mean \pm SD [mg/100 g DW].

Feeding/eliciting		Baicalein	Baicalin	Wogonin	Wogonoside	Scutellarin	Oroxylin A	Total flavonoids	Verbascoside
Control		171.557 \pm 12.516	445.713 \pm 20.473	689.250 \pm 24.371	424.741 \pm 11.473	4.065 \pm 0.927	4.620 \pm 0.788	1739.947 \pm 70.548	311.197 \pm 40.548
Phenylalanine [g/L]	1.0	334.258 \pm 18.753	575.217 \pm 18.189	764.828 \pm 50.536	827.073 \pm 58.224	72.340 \pm 13.252	17.224 \pm 1.534	2590.941 \pm 160.489	463.414 \pm 60.489
	1.5	533.084 \pm 21.941	698.826 \pm 35.761	808.929 \pm 64.103	935.389 \pm 67.641	30.648 \pm 9.536	34.814 \pm 2.934	3041.690 \pm 201.914	469.127 \pm 91.914
	2.0	435.692 \pm 32.555	590.140 \pm 56.988	777.430 \pm 65.114	905.162 \pm 78.460	27.527 \pm 2.972	30.873 \pm 5.557	2766.825 \pm 241.644	379.043 \pm 41.644
	2.5	330.399 \pm 27.374	449.045 \pm 40.104	687.909 \pm 37.977	885.060 \pm 43.051	28.722 \pm 5.183	32.812 \pm 3.366	2413.946 \pm 157.056	346.063 \pm 57.056
Tyrosine [g/L]	1.0	304.790 \pm 13.156	431.531 \pm 19.470	747.038 \pm 15.450	407.018 \pm 21.356	11.714 \pm 2.075	29.693 \pm 4.480	1931.784 \pm 75.987	299.480 \pm 75.987
	1.5	315.664 \pm 28.169	442.068 \pm 20.460	749.526 \pm 15.489	388.409 \pm 22.555	14.205 \pm 1.264	18.889 \pm 1.150	1928.760 \pm 89.087	222.880 \pm 49.087
	2.0	199.789 \pm 16.897	196.472 \pm 16.015	546.742 \pm 9.012	310.049 \pm 10.132	8.810 \pm 0.188	22.051 \pm 5.243	1283.913 \pm 57.489	166.752 \pm 57.489
	2.5	187.658 \pm 13.839	255.948 \pm 44.914	484.239 \pm 66.116	220.618 \pm 43.480	1.910 \pm 0.079	25.742 \pm 2.520	1176.114 \pm 170.949	171.135 \pm 17.949
Methyl jasmonate μ M]	10	351.450 \pm 41.801	552.318 \pm 23.506	649.821 \pm 21.065	469.450 \pm 23.055	12.588 \pm 4.015	23.924 \pm 1.454	2059.550 \pm 114.897	381.523 \pm 14.897
	50	298.456 \pm 22.566	546.947 \pm 26.662	676.638 \pm 25.215	421.951 \pm 56.217	25.840 \pm 6.515	37.418 \pm 2.325	2007.250 \pm 139.498	133.698 \pm 39.498
	100	221.490 \pm 16.340	290.315 \pm 17.305	149.515 \pm 26.980	281.021 \pm 18.593	1.098 \pm 0.161	33.121 \pm 5.111	976.560 \pm 84.489	20.696 \pm 8.489
Phenylalanine [g/L] + methyl jasmonate 50 μ M	1.0	301.654 \pm 39.887	571.818 \pm 59.332	709.401 \pm 86.104	527.879 \pm 60.244	12.122 \pm 1.469	33.493 \pm 2.452	2156.366 \pm 249.489	141.078 \pm 24.489
	1.5	527.640 \pm 57.302	610.602 \pm 78.309	745.436 \pm 77.691	602.067 \pm 85.539	17.999 \pm 5.157	22.153 \pm 3.881	2525.897 \pm 307.879	160.597 \pm 37.879
	2.0	487.657 \pm 57.049	575.362 \pm 69.760	608.223 \pm 77.489	590.686 \pm 66.980	15.461 \pm 3.549	47.607 \pm 4.670	2324.996 \pm 279.498	142.153 \pm 29.498
	2.5	302.749 \pm 22.796	561.104 \pm 42.587	602.598 \pm 48.517	512.708 \pm 49.738	10.038 \pm 1.163	0.134 \pm 0.098	1989.330 \pm 164.899	120.270 \pm 16.899
Tyrosine [g/L] + methyl jasmonate 50 μ M	1.0	257.450 \pm 8.652	507.194 \pm 11.708	659.016 \pm 10.974	442.457 \pm 18.941	17.452 \pm 1.758	22.427 \pm 3.944	1905.997 \pm 55.977	21.176 \pm 5.977
	1.5	212.687 \pm 13.469	344.997 \pm 30.540	356.136 \pm 65.189	381.224 \pm 54.752	10.038 \pm 0.915	27.505 \pm 2.540	1332.587 \pm 167.405	25.460 \pm 7.405
	2.0	105.468 \pm 17.619	140.292 \pm 15.040	120.460 \pm 39.044	360.621 \pm 40.610	3.048 \pm 0.652	0.372 \pm 0.014	730.261 \pm 112.979	17.156 \pm 2.979
	2.5	88.973 \pm 7.140	97.026 \pm 21.534	121.561 \pm 33.081	220.927 \pm 35.617	0.527 \pm 0.058	4.309 \pm 1.052	533.322 \pm 98.484	10.175 \pm 2.484

Table S2 Content of estimated metabolites in agitated microshoot in vitro cultures of *S. lateriflora* grown on LS medium supplemented with 1.0 mg/L BA and 1.0 NAA mg/L after administering different concentrations of biosynthetic precursors (phenylalanine and tyrosine) and elicitor (methyl jasmonate) collected 7 days after supplementation. Mean \pm SD [mg/100 g DW].

Feeding/eliciting		Baicalein	Baicalin	Wogonin	Wogonoside	Scutellarin	Oroxylin A	Total flavonoids	Verbascoside
Control		162.414 \pm 26.104	378.595 \pm 26.606	666.088 \pm 71.518	469.987 \pm 59.996	2.539 \pm 0.940	0.214 \pm 0.023	1679.837 \pm 185.187	267.327 \pm 15.187
Phenylalanine [g/L]	1.0	421.423 \pm 34.919	686.268 \pm 45.593	825.584 \pm 78.669	928.457 \pm 112.633	64.221 \pm 17.094	38.498 \pm 8.280	2964.451 \pm 297.188	398.597 \pm 27.188
	1.5	614.788 \pm 38.279	928.948 \pm 55.794	964.501 \pm 49.668	1138.451 \pm 64.939	68.295 \pm 4.980	49.898 \pm 3.828	3764.881 \pm 217.489	474.795 \pm 27.489
	2.0	516.970 \pm 25.841	988.086 \pm 56.083	875.558 \pm 43.162	1148.771 \pm 50.697	60.817 \pm 6.254	53.653 \pm 4.450	3643.854 \pm 186.487	329.667 \pm 36.487
	2.5	596.308 \pm 23.850	760.204 \pm 11.426	727.718 \pm 21.986	910.827 \pm 13.158	62.108 \pm 7.751	30.143 \pm 6.616	3087.308 \pm 84.786	327.734 \pm 34.786
Tyrosine [g/L]	1.0	157.460 \pm 18.653	419.209 \pm 21.780	655.544 \pm 30.779	516.879 \pm 56.240	9.321 \pm 1.797	41.057 \pm 8.250	1799.470 \pm 137.499	263.961 \pm 37.499
	1.5	162.457 \pm 49.878	284.688 \pm 45.369	270.264 \pm 79.089	485.827 \pm 131.150	3.751 \pm 0.678	41.758 \pm 1.730	1248.745 \pm 307.894	210.926 \pm 37.894
	2.0	113.764 \pm 23.568	113.103 \pm 16.217	233.897 \pm 45.127	300.340 \pm 45.344	0.084 \pm 0.007	21.818 \pm 1.459	783.007 \pm 131.722	145.963 \pm 31.722
	2.5	98.154 \pm 22.671	111.861 \pm 35.212	232.868 \pm 68.849	250.713 \pm 94.841	0.041 \pm 0.009	19.392 \pm 6.389	713.028 \pm 227.97	128.312 \pm 27.970
Methyl jasmonate [μ M]	10	254.440 \pm 27.292	474.399 \pm 49.675	657.090 \pm 67.793	328.520 \pm 43.090	5.292 \pm 1.872	43.708 \pm 3.768	1763.448 \pm 193.489	121.553 \pm 19.489
	50	300.486 \pm 40.901	427.820 \pm 20.453	676.857 \pm 55.040	365.481 \pm 17.298	10.087 \pm 2.591	34.146 \pm 1.175	1814.878 \pm 137.456	52.582 \pm 13.456
	100	190.564 \pm 37.074	165.356 \pm 28.380	183.494 \pm 75.055	218.359 \pm 85.208	0.040 \pm 0.007	4.444 \pm 0.632	762.256 \pm 226.354	41.891 \pm 6.354
Phenylalanine [g/L] + methyl jasmonate 50 μ M	1.0	325.480 \pm 21.628	543.161 \pm 21.289	698.489 \pm 19.103	601.435 \pm 28.710	18.946 \pm 4.985	24.858 \pm 1.442	2212.369 \pm 97.156	170.694 \pm 17.156
	1.5	541.608 \pm 36.215	630.484 \pm 17.532	782.986 \pm 29.100	620.747 \pm 30.154	18.046 \pm 3.460	23.002 \pm 4.107	2616.874 \pm 120.568	142.323 \pm 12.568
	2.0	502.489 \pm 58.489	623.827 \pm 75.770	657.050 \pm 90.489	590.761 \pm 82.540	15.346 \pm 2.057	25.006 \pm 7.145	2414.479 \pm 316.489	28.368 \pm 6.489
	2.5	365.978 \pm 34.335	525.029 \pm 57.465	547.899 \pm 74.527	416.988 \pm 86.413	10.181 \pm 1.152	16.730 \pm 2.263	1882.805 \pm 256.156	117.389 \pm 25.156
Tyrosine [g/L] + methyl jasmonate 50 μ M	1.0	264.457 \pm 31.590	411.619 \pm 41.777	599.387 \pm 51.315	479.433 \pm 51.441	9.041 \pm 0.800	14.562 \pm 2.246	1778.499 \pm 179.168	24.220 \pm 1.168
	1.5	170.544 \pm 20.489	390.586 \pm 23.498	415.977 \pm 44.241	403.332 \pm 45.150	10.042 \pm 1.025	8.812 \pm 0.489	1399.293 \pm 134.892	44.068 \pm 4.892
	2.0	120.560 \pm 14.679	114.740 \pm 17.550	330.750 \pm 35.804	321.291 \pm 43.159	3.693 \pm 0.054	6.562 \pm 1.250	897.595 \pm 112.496	38.745 \pm 12.496
	2.5	74.979 \pm 9.588	64.506 \pm 8.850	280.974 \pm 24.238	204.285 \pm 35.218	5.038 \pm 0.727	7.983 \pm 0.843	637.766 \pm 89.464	43.942 \pm 8.464