

Table 4. Genistein, flavonol, and anthocyanin levels in individual progeny of transgenic *Arabidopsis* expressing soybean IFS, alfalfa CHI, and over-expressing PAP1*

Line	Generation	Quercetin, nmol/g FW	Kaempferol, nmol/g FW	Total flavonols, nmol/g FW	Anthocyanins, mAu/g FW [†]	Genistein, nmol/g FW
Wild-type control	>T ₃	21.0 ± 5.7	418.9 ± 33.3	439.9 ± 30.9	3.1 ± 0.4	0
Pap1-D	>T ₃	200.0 ± 8.3	345.5 ± 48.3	545.7 ± 40.3	192.0 ± 7.1	0
CHI/Pap1-D (3-26)	> T ₃	89.3 ± 6.1	666.6 ± 103.0	755.9 ± 103.7	131.1 ± 10.6	0
IFS 6E	> T ₃	20.8 ± 6.6	323.5 ± 4.3	344.3 ± 9.5	1.1 ± 0.2	3.5 ± 0.2
3-26/6E:						
1-1	F ₂	68.0 ± 3.9	1507.2 ± 35.7	1575.2 ± 33.1	34.7 ± 11.1	5.1 ± 1.3
1-2	F ₂	152.3 ± 17.5	1242.4 ± 95.8	1394.8 ± 112.4	60.2 ± 4.6	7.6 ± 0.7
4-2	F ₂	57.3 ± 18.8	921.0 ± 23.0	978.3 ± 9.3	23.9 ± 3.1	2.3 ± 1.0
6-1	F ₂	52.0 ± 13.0	797.1 ± 92.0	849.1 ± 80.3	18.2 ± 1.1	3.2 ± 1.0
6-2	F ₂	34.4 ± 6.7	681.2 ± 22.0	715.6 ± 28.4	16.5 ± 2.8	5.8 ± 0.3

*Plants were grown under 12-h light/12-h dark, ~200 µE light intensity. Data for >T₃ plants are mean ± SE from three replicate plants each assayed in triplicate. Data for individual F₂ lines are from triplicate analyses.

[†]UV absorbance at 510 nm