

Table S1. Cytokinins in *Physcomitrella* tissue given in pmol/g dry weight. Mean values \pm standard deviations from 3 cultures per genotype are presented. Data correspond to Fig. 3A. u.d.l. – under detection limit

genotype	day	iPRMP	iPR	iP	iP9G	DHZRMP	DHZR	DHZROG	DHZ	DHZOG	BARP	BAR	BA	BA9G	mT	oT
wild type	d0	331.8 \pm 36	30.8 \pm 2.9	10.9 \pm 2.4	u.d.l.	u.d.l.	0.07 \pm 0.04	4.5 \pm 1.5	0.38 \pm 0.04	u.d.l.	u.d.l.	0.53 \pm 0.10	6.1 \pm 0.80	u.d.l.	7.9 \pm 2.6	6.2 \pm 2.5
	d10	159.9 \pm 6	8.9 \pm 0.8	5.0 \pm 0.6	u.d.l.	u.d.l.	0.10 \pm 0.03	2.6 \pm 0.4	0.08 \pm 0.03	u.d.l.	u.d.l.	0.48 \pm 0.14	3.1 \pm 1.5	u.d.l.	0.9 \pm 0.2	0.9 \pm 0.2
	d20	63.0 \pm 22	2.7 \pm 0.9	3.2 \pm 0.5	u.d.l.	u.d.l.	0.07 \pm 0.02	2.2 \pm 0.6	0.05 \pm 0.02	u.d.l.	u.d.l.	0.41 \pm 0.18	4.2 \pm 0.3	u.d.l.	1.8 \pm 0.4	0.9 \pm 0.2
tCKX7	d0	329.5 \pm 41	62.1 \pm 3.5	9.5 \pm 2.4	u.d.l.	u.d.l.	0.09 \pm 0.04	4.4 \pm 0.9	0.32 \pm 0.08	u.d.l.	u.d.l.	1.47 \pm 0.62	6.2 \pm 2.8	u.d.l.	5.4 \pm 0.9	6.0 \pm 2.5
	d10	154.4 \pm 39	16.1 \pm 4.7	2.2 \pm 0.3	u.d.l.	u.d.l.	0.09 \pm 0.02	3.1 \pm 0.3	0.06 \pm 0.02	u.d.l.	u.d.l.	0.25 \pm 0.04	2.2 \pm 0.4	u.d.l.	1.2 \pm 0.1	0.7 \pm 0.1
	d20	127.1 \pm 40	8.3 \pm 2.8	2.3 \pm 0.3	u.d.l.	u.d.l.	0.05 \pm 0.01	0.1 \pm 0.0	0 \pm 0	2.1	u.d.l.	0.85 \pm 0.34	3.1 \pm 0.3	u.d.l.	2.0 \pm 0.3	0.8 \pm 0.1
tCKX16	d0	280.6 \pm 82	35.8 \pm 4.1	7.1 \pm 2.9	u.d.l.	u.d.l.	0.16 \pm 0.03	2.9 \pm 0.5	0.26 \pm 0.01	u.d.l.	u.d.l.	0.63 \pm 0.14	5.2 \pm 1.5	u.d.l.	3.2 \pm 0.2	3.0 \pm 0.2
	d10	107.9 \pm 30	19.7 \pm 7.5	2.6 \pm 0.9	u.d.l.	u.d.l.	0.12 \pm 0.03	2.5 \pm 0.4	0.08 \pm 0.02	u.d.l.	u.d.l.	0.18 \pm 0.04	2.2 \pm 0.3	u.d.l.	1.8 \pm 0.8	1.1 \pm 0.4
	d20	52.3 \pm 17	2.1 \pm 0.7	1.6 \pm 0.4	u.d.l.	u.d.l.	0.16 \pm 0.01	1.8 \pm 0.5	0.07 \pm 0.01	u.d.l.	u.d.l.	0.71 \pm 0.09	3.8 \pm 1.8	u.d.l.	0 \pm 0	0.8 \pm 0.1

genotype	day	tZRMP	tZR	tZROG	tZ	tZOG	cZRMP	cZR	cZROG	cZ	cZOG
wild type	d0	68.1 \pm 12.5	0.91 \pm 0.2	170.4 \pm 51.3	13.5 \pm 1.3	14.8 \pm 4.8	71.7 \pm 12.7	13.5 \pm 2.3	645.5 \pm 207.3	2.7 \pm 0.3	51.5 \pm 15.4
	d10	11.1 \pm 3.0	0.44 \pm 0.1	100.8 \pm 14.9	4.4 \pm 1.2	5.5 \pm 1.7	27.5 \pm 10.9	14.2 \pm 1.2	338.4 \pm 36.1	2.1 \pm 1.0	33.0 \pm 12.1
	d20	4.6 \pm 1.3	0.23 \pm 0.0	83.7 \pm 15.4	19.3 \pm 6.4	4.9 \pm 0.8	20.2 \pm 7.8	14.1 \pm 0.9	319.2 \pm 65.8	1.0 \pm 0.2	26.9 \pm 2.7
tCKX7	d0	53.8 \pm 15.0	0.55 \pm 0.2	109.2 \pm 20.7	8.5 \pm 1.9	7.6 \pm 1.2	54.2 \pm 16.8	14.5 \pm 2.0	626.8 \pm 137.3	2.0 \pm 0.1	41.2 \pm 7.4
	d10	13.3 \pm 5.4	0.31 \pm 0.1	85.0 \pm 11.0	1.2 \pm 0.5	3.6 \pm 1.0	33.0 \pm 12.6	18.3 \pm 1.9	457.0 \pm 30.9	1.3 \pm 0.3	43.4 \pm 9.2
	d20	3.3 \pm 0.2	0.29 \pm 0.1	64.5 \pm 13.8	16.2 \pm 7.5	4.4 \pm 1.0	5.2 \pm 1.3	19.6 \pm 4.1	312.6 \pm 40.1	1.0 \pm 0.3	11.2 \pm 2.0
tCKX16	d0	43.7 \pm 16.9	0.28 \pm 0.0	55.3 \pm 16.0	3.8 \pm 1.2	5.6 \pm 1.8	40.6 \pm 11.5	20.9 \pm 5.5	439.8 \pm 88.1	2.4 \pm 0.3	38.6 \pm 11.1
	d10	7.9 \pm 3.5	0.40 \pm 0.1	49.6 \pm 11.5	0.7 \pm 0.2	2.7 \pm 0.9	22.6 \pm 9.8	27.9 \pm 2.0	359.1 \pm 46.3	1.9 \pm 0.5	34.5 \pm 9.3
	d20	4.5 \pm 1.5	0.35 \pm 0.1	29.3 \pm 7.8	5.8 \pm 0.7	2.3 \pm 0.3	24.8 \pm 6.4	25.3 \pm 5.9	264.0 \pm 53.9	1.2 \pm 0.3	8.5 \pm 2.4

tissue dry weight in mg per 200 ml medium

day	wildtype	tCKX7	tCKX16
d0	25.2 \pm 5.8	34.8 \pm 1.7	31.6 \pm 0.7
d10	86.1 \pm 3.8	96.2 \pm 7.2	91.6 \pm 14.4
d20	189.2 \pm 6.4	198.8 \pm 2.7	192.0 \pm 14.9