SUPPLEMENTAL DATA

Supplemental Table S1. Overview of the effects of phytohormone treatment on Col-0 leaf parameters, ± the standard error (n=6).

Parameter	K1	JA	BAP	GA3
LEAF 4				
Leaf area[a]	21.57 ± 0.99	21.46 ± 0.68	11.26 ± 0.61	21.22 ± 0.82
Cells/leaf	11509 ±806	12935 ± 970	13285 ± 1123	12145 ± 2156
Cell area[b]	1841 ± 94	1973 ± 902	986 ± 342	1910 ± 216
Trichomes/leaf	41 ± 1	37 ± 1	43 ± 1	35 ± 1
Trichome Index[c]	0.37 ± 0.06	0.30 ± 0.05	0.34 ± 0.07	0.31 ± 0.08
Stomata/leaf	3858 ± 206	3967 ± 69	4472 ± 60	3991 ± 61
Stomatal Index[c]	27.91 ± 1.49	28.70 ± 0.50	32.34 ± 0.43	28.87 ± 0.44
LEAF 7				
Leaf area[a]	30.64 ± 0.64	28.03 ± 0.58	16.27 ± 0.55	35.50 ± 0.33
Cells/leaf	30657 ± 1156	31848 ± 1723	41088 ± 2306	25349 ± 823
Cell area[b]	1020 ± 87	902 ± 98	342 ± 64	1420 ± 55
Trichomes/leaf	136 ± 3	219 ± 5	253 ± 10	174 ± 3
Trichome Index[c]	0.43 ± 0.01	0.69 ± 0.03	0.65 ± 0.03	0.69 ± 0.02
Stomata/leaf	4851 ± 283	4070 ± 589	5119 ± 262	4339 ± 280
Stomatal Index[c]	35.08 ± 2.05	33.55 ± 1.77	37.47 ± 1.90	28.87 ± 0.81

[a] in mm^2

[b] in μm^2

[c] The trichome and stomatal index are calculated by the formula: 100 x [number of trichomes (or stomata)] / [number of trichome (or stomata) + number of pavement and guard cells].

Supplemental Table S2. Trichome nuclear area parameters. Nuclear area and fluorescence intensity are indicated in μm^2 and relative fluorescence units, respectively, $\pm$ the standard error (n=10).

Treatment	Nuclear area	Fluorescence Intensity
K1	25.8 ± 1.1	104832 ± 14590
JA	49.1 ± 3.4	93939 ± 11837
BAP	22.4 ± 1.0	77126 ± 18691
GA3	24.7 ± 2.4	94203 ± 10161

Figure S1. Influence of the phytohormones JA, BAP, and GA3 on trichome development in Arabidopsis Col-0 and C24 seedlings. (A) Leaf 7 from Col-0, 14 days after phytohormone treatment. (B) Leaf 7 from C24, 14 days after phytohormone treatment.

Figure S2. Expression of R1-MYB genes in phytohormone-treated rosette leaves. *TRY, ETC1, ETC2* (A) and *CPC* (B) expression in the 7th and 8th leaf (pooled), 5 days after phytohormone treatment. Numbers in the ordinate give the fold-induction compared to that in the mock treatment (K1). Error bars represent the standard error (n=9).

Figure S3. Phytohormonal elicitation of leaf anthocyanin biosynthesis. (A) Anthocyanin accumulation, 14 days after phytohormone treatment. (B) *TT8*, *PAP1*, and *PAP2* expression in phytohormone-treated seedlings, 5 days after phytohormone treatment. Numbers on the ordinate give the Q-value calculated by the formula A_{530} - 0.33 A_{657} (A) and fold-induction compared to the mock treatment (K1) (B). Error bars represent the standard error (n=9). Statistical significance was determined by Student *t*-test (** $P<0.01$, * $P<0.05$).

Figure S4. Expression of bHLH genes in single bHLH mutants. Quantitative RT-PCR analysis of *TT8*, *GL3*, and *EGL3* expression in leaves (7 and 8) of wild-type and bHLH mutant plants, 5 days after phytohormone treatment. Numbers in the ordinate reflect the fold-induction in comparison to that of the wild-type plants (Col-0). Error bars represent the standard error (n=4).