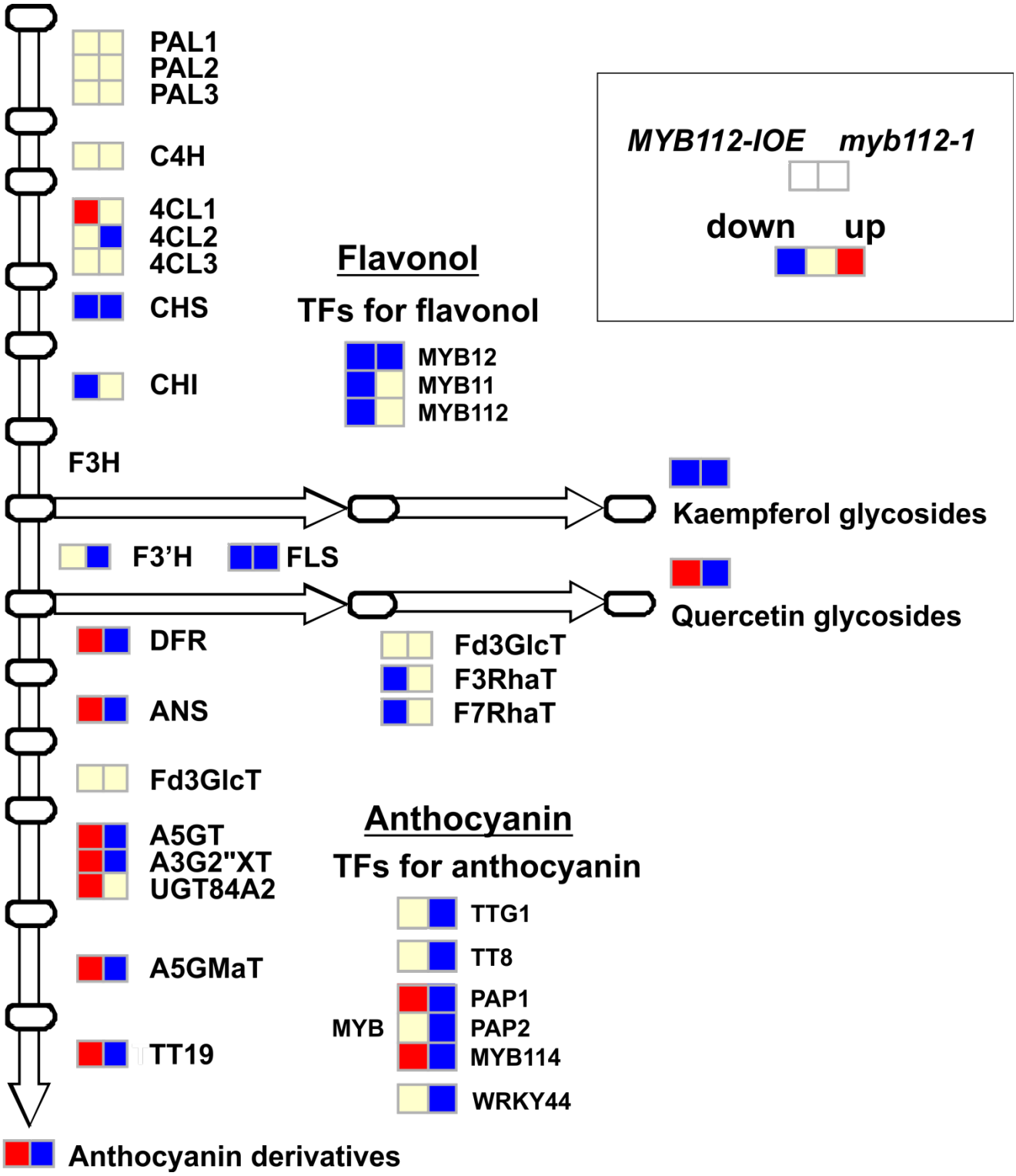
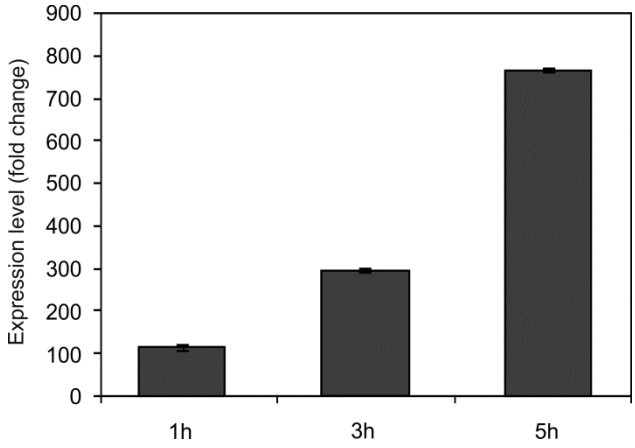
Supplemental Figure 1



Supplemental Figure 1. Integrated Transcriptomics and Metabolomics Data.
Expression of 23 flavonoid biosynthetic genes and nine TFs as measured by qRT-PCR and metabolite content analysed by LC-MS in *MYB112-IOE* seedlings treated with estradiol for 5 days (left box) and in *myb112-1* mutant (right box). Gene expression level and metabolite content changes against DMSO-treated and wild-type plants, respectively, is indicated by colour (cut off: 2-fold).

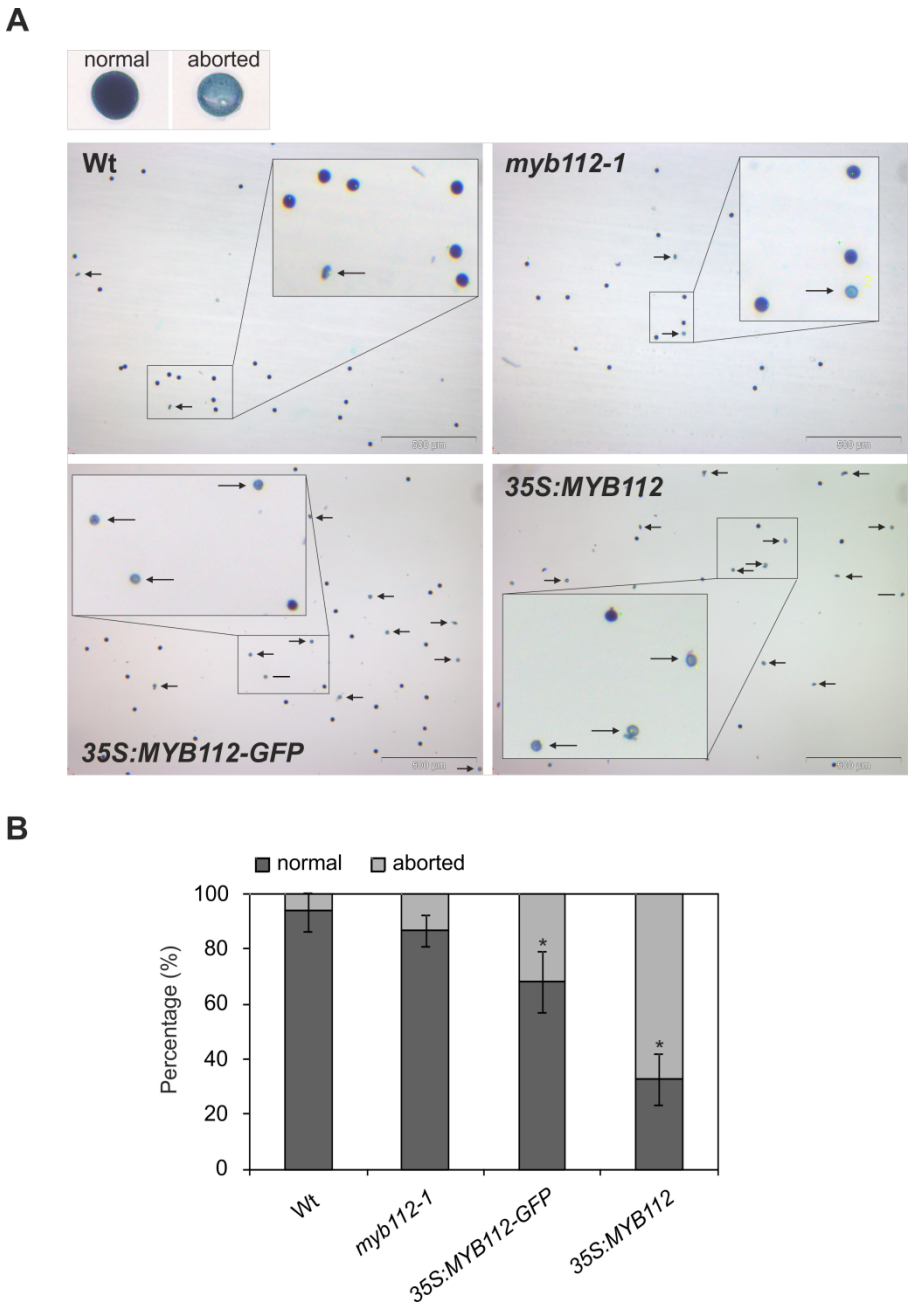
Supplemental Figure 2



Supplemental Figure 2. *MYB112 E*xpression in *MYB112-IOE* Plants after 1 h, 3 h and 5 h Induction with Estradiol.

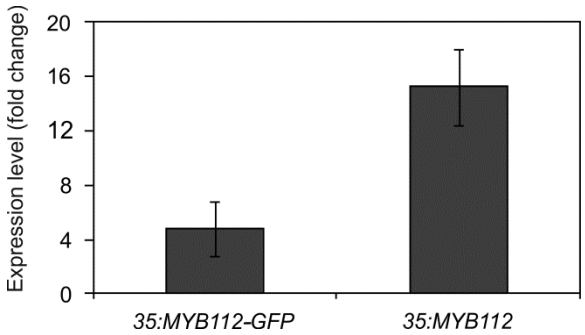
Two-week-old *Arabidopsis MYB112*-IOE seedlings were treated for 1 h, 3 h and 5 h with estradiol in liquid MS medium supplemented with 1% sucrose. Numbers on the y axis indicate fold-change expression compared to mock-treated *MYB112-IOE* plants. Data are the means of three biological replicates ± SD, as measured by qRT-PCR.

Supplemental Figure 3



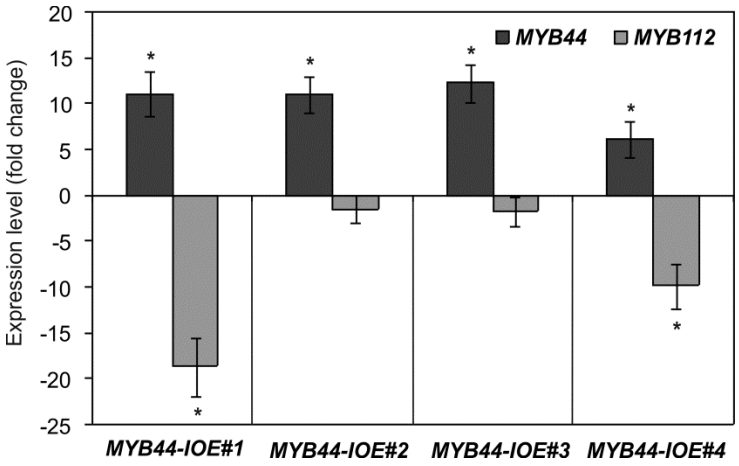
Supplemental Figure 3. *MYB112* Affects Pollen Viability.
(A) Appearance of pollen grains after staining with Alexander dye. Normal pollen grain stains purple, while sterile pollen stains blue (arrows). Note the increase in the number of aborted pollen in *MYB112* overexpression lines. **(B)** Percentage of viable and aborted pollen in *MYB112* transgenic plants determined after Alexander staining. Pollen was obtained from six plants and six individual microscope images were analysed. Mean values ± SD are shown. Asterisks indicate statistically significant differences to wild type (Wt) as determined by Student's *t*-test, $p < 0.05$.

Supplemental Figure 4



Supplemental Figure 4. *MYB112* Expression Level in *MYB112* Overexpression Lines.
Transcript level of *MYB112* in *35S:MYB112-GFP* and *35S:MYB112* seedlings measured by qRT-PCR. Data are represented as as fold change in comparison to the expression in empty-vector control plants. Mean values ± SD are shown for three biological replicates.

Supplemental Figure 5



Supplemental Figure 5. Negative Regulation of *MYB112* Expression by MYB44.
Two-week-old *Arabidopsis MYB44-IOE* seedlings (lines #1, #2, #3 and #4) were treated with estradiol for 5 h and then for an additional 2 h with 150 mM NaCl in liquid MS medium supplemented with 1% sucrose. Numbers on the y axis indicate fold change expression of *MYB44* and *MYB112* in estradiol-treated *MYB44* overexpression seedlings as compared to their expression in DMSO-treated control plants. Data are the means of three independent biological replicates ± SD, measured by qRT-PCR. Asterisks indicate statistically significant differences as compared to respective control plants determined by Student's *t*-test, $p < 0.05$.