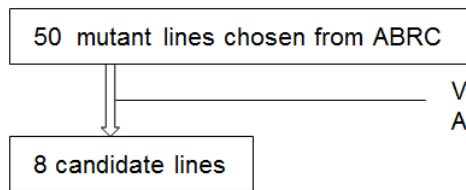
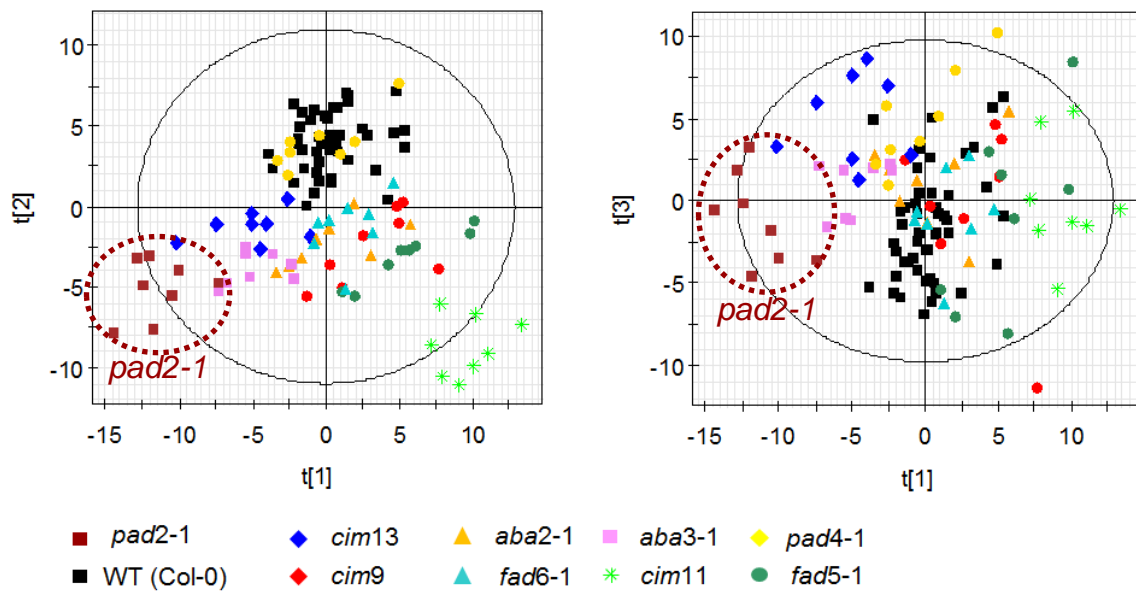


A

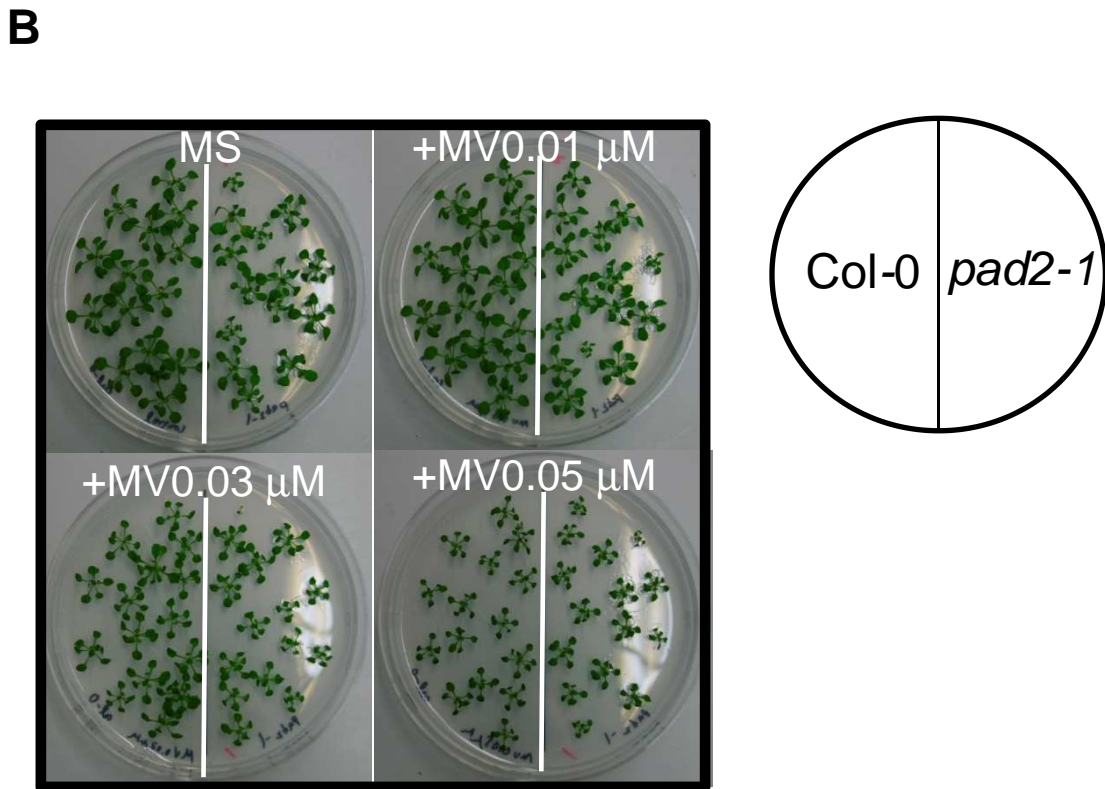
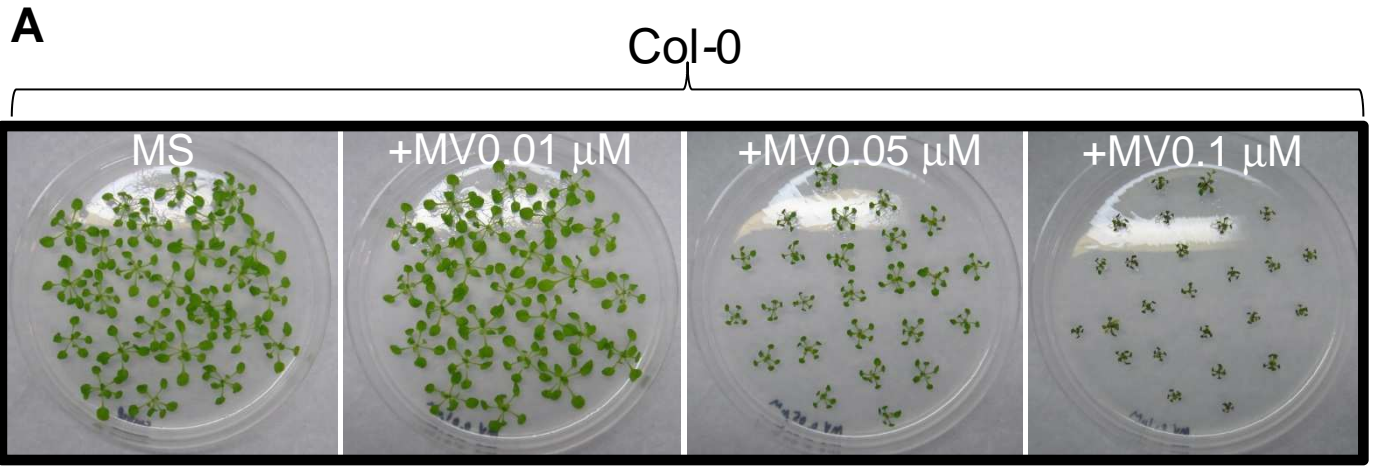


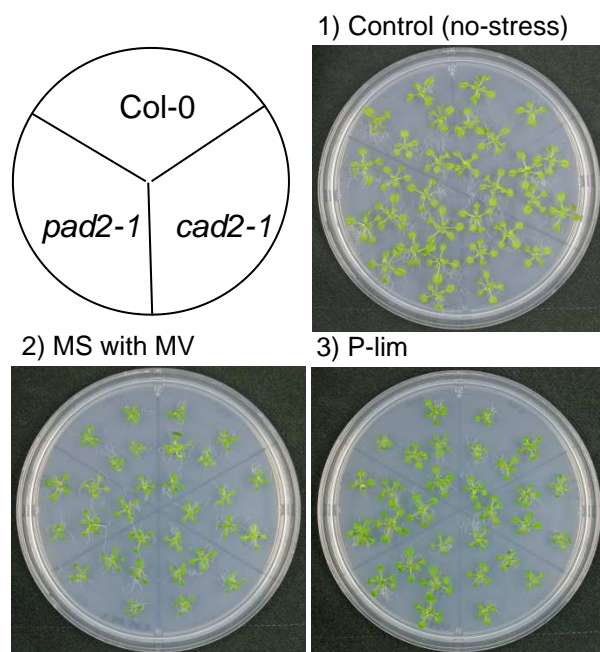
Visual phenotypes: leaf shape, color, and size
Analysis for metabotyping: GC-TOF-MS

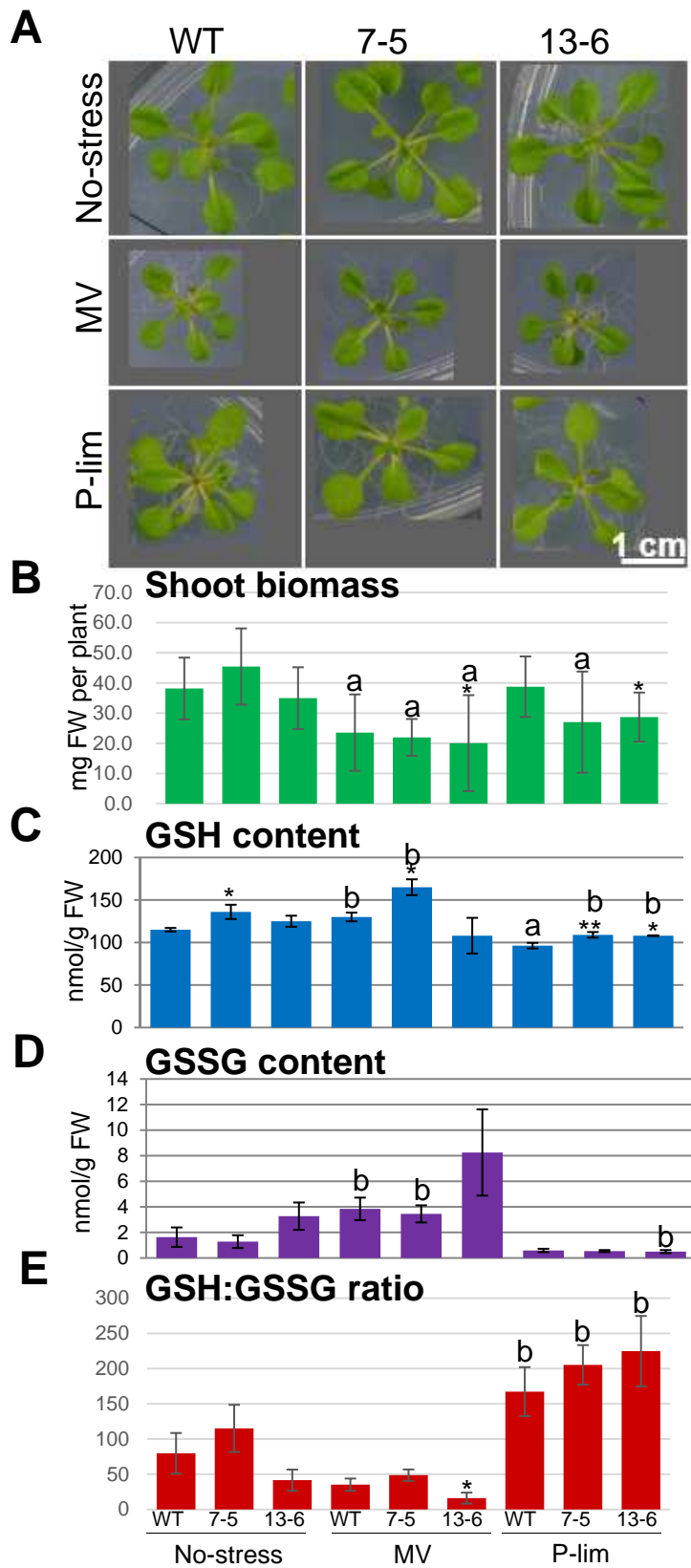
B



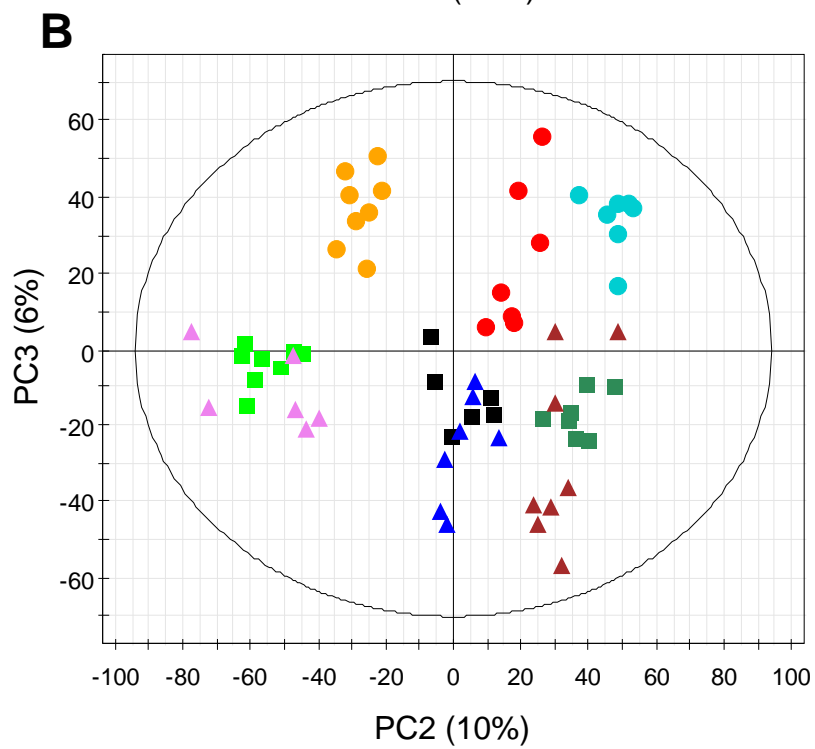
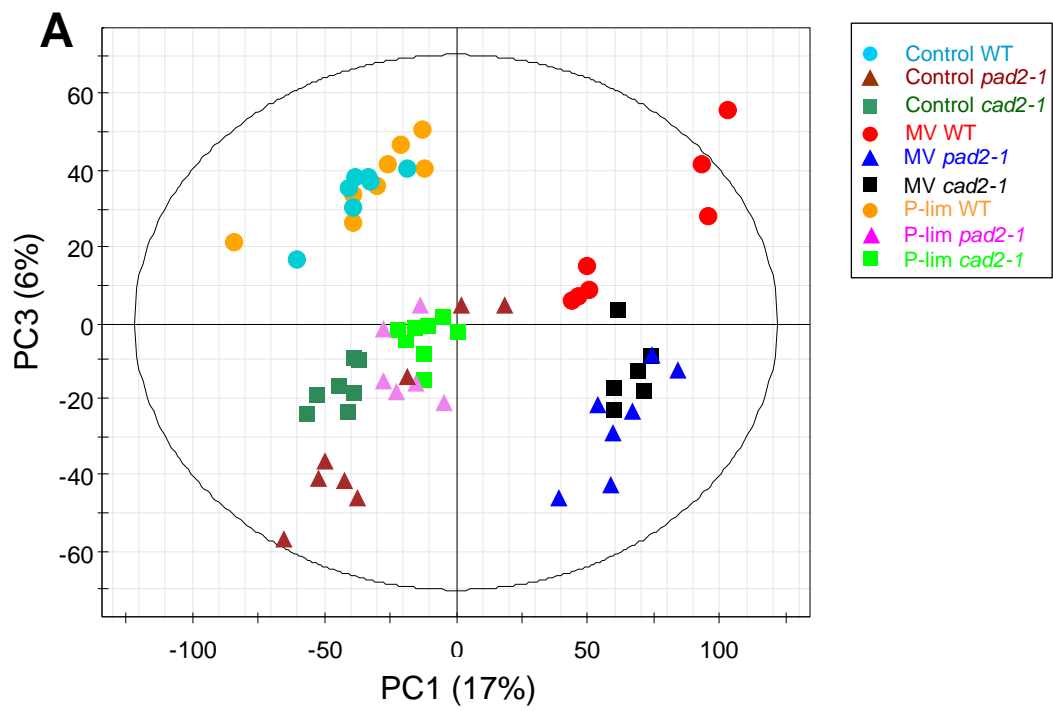
Fukushima et al., Supplemental Figure S1







Fukushima et al., Supplemental Figure S4



Fukushima et al., Supplemental Figure S5

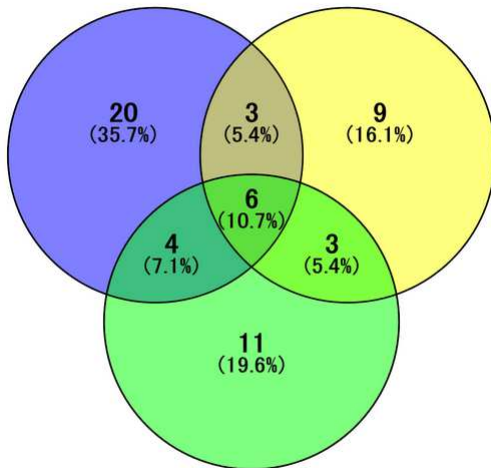
A**pad2 vs WT**(FDR < 0.05, $|\log_2\text{fold-change}| \geq 1$)**Increased metabolite set** **Decreased metabolite set**

pad2 in ctrl

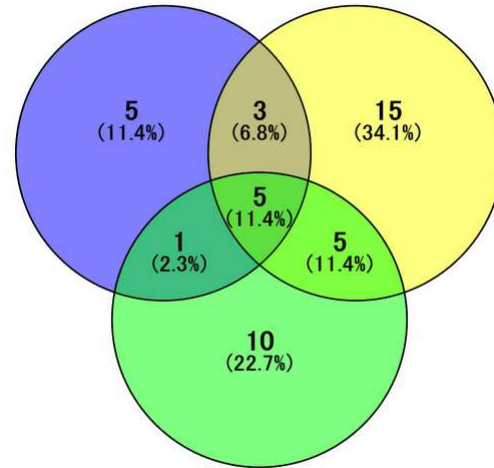
pad2 in MV

pad2 in ctrl

pad2 in MV



pad2 in P-lim



pad2 in P-lim

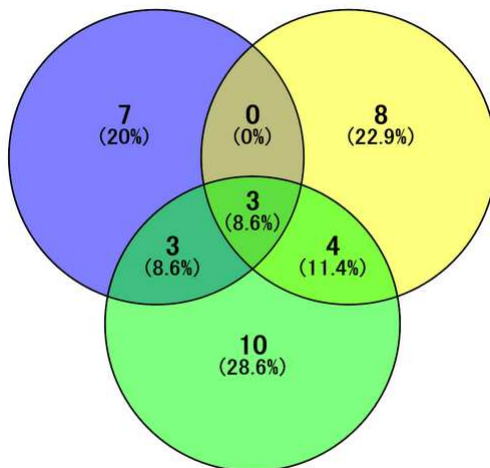
B**cad2 vs WT**(FDR < 0.05, $|\log_2\text{fold-change}| \geq 1$)**Increased metabolite set** **Decreased metabolite set**

cad2 in ctrl

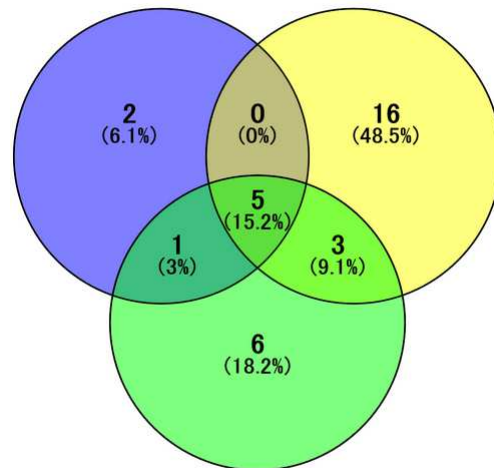
cad2 in MV

cad2 in ctrl

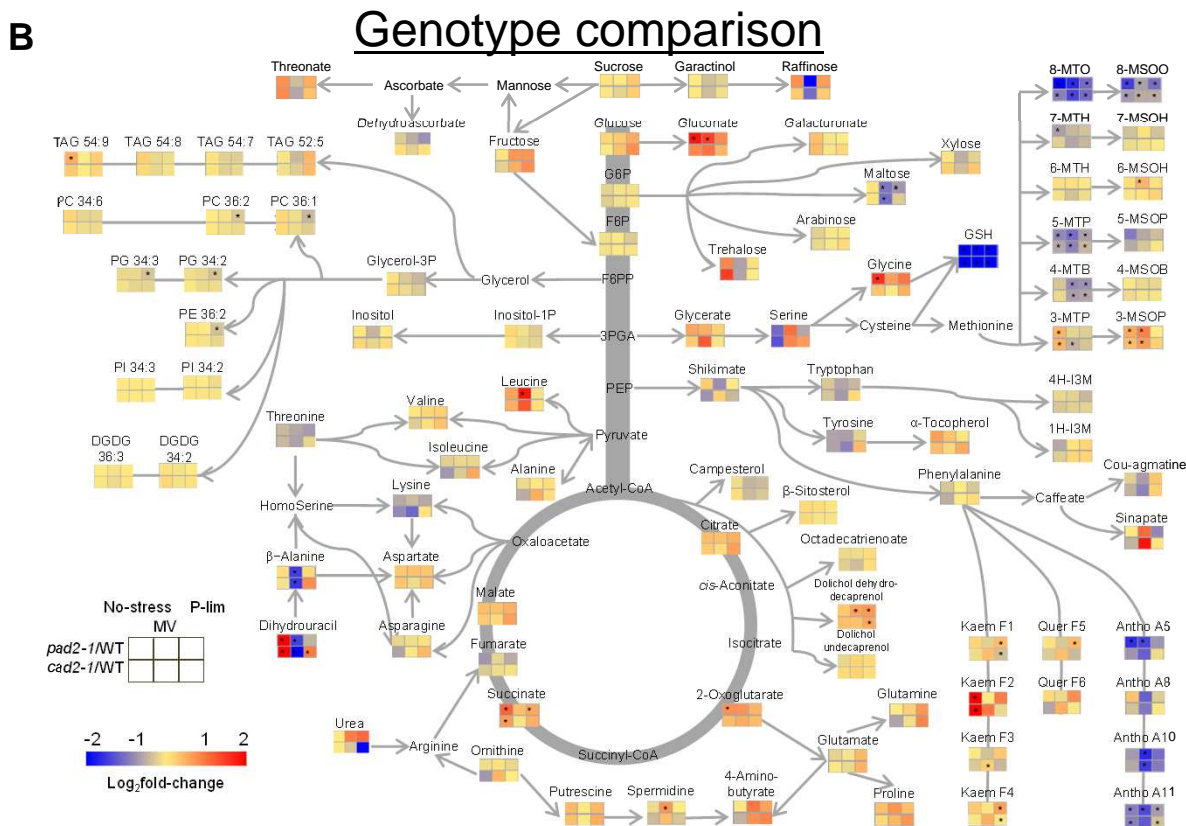
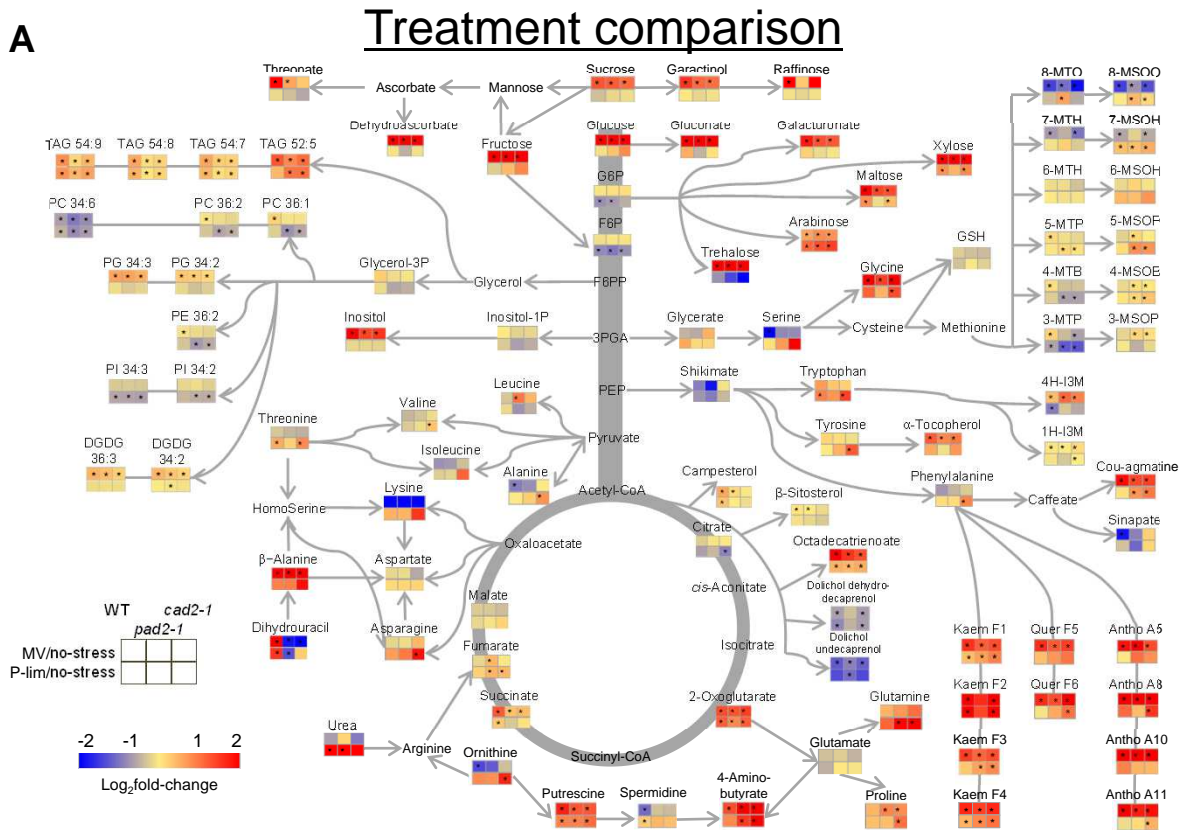
cad2 in MV



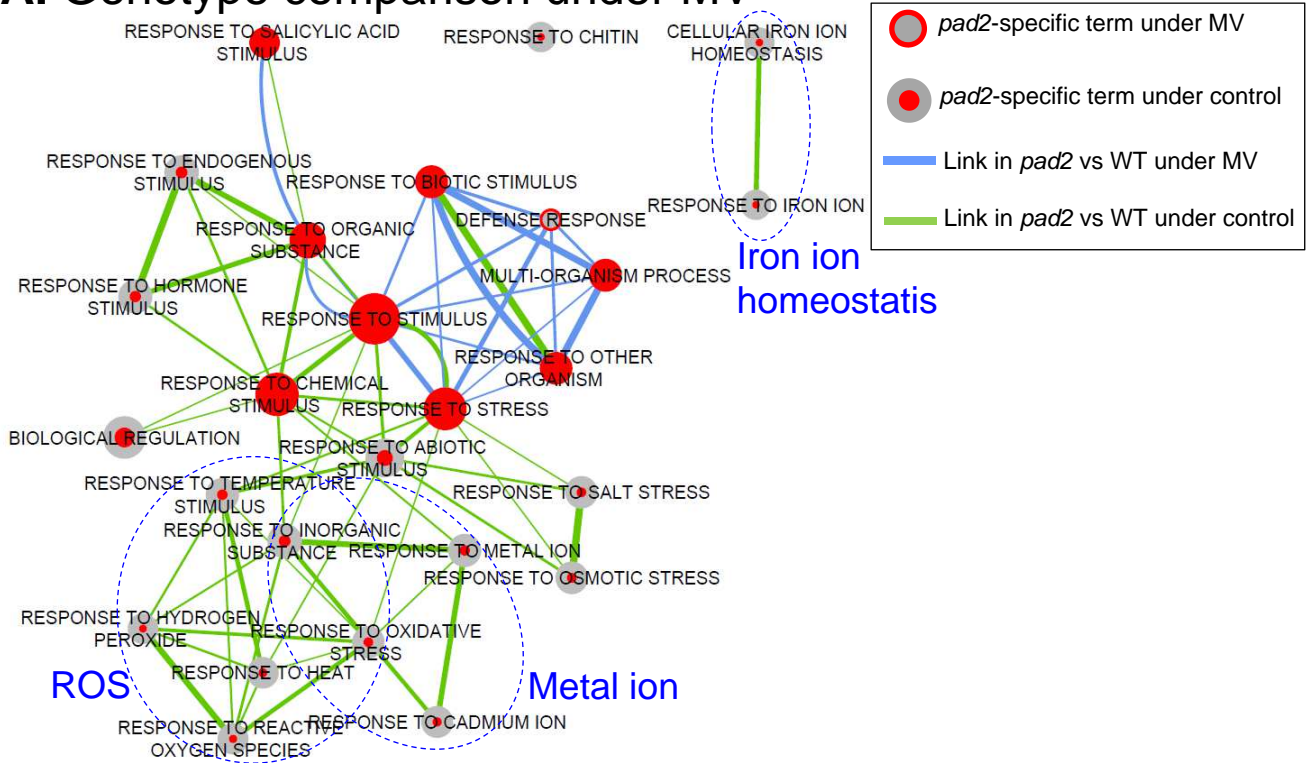
cad2 in P-lim



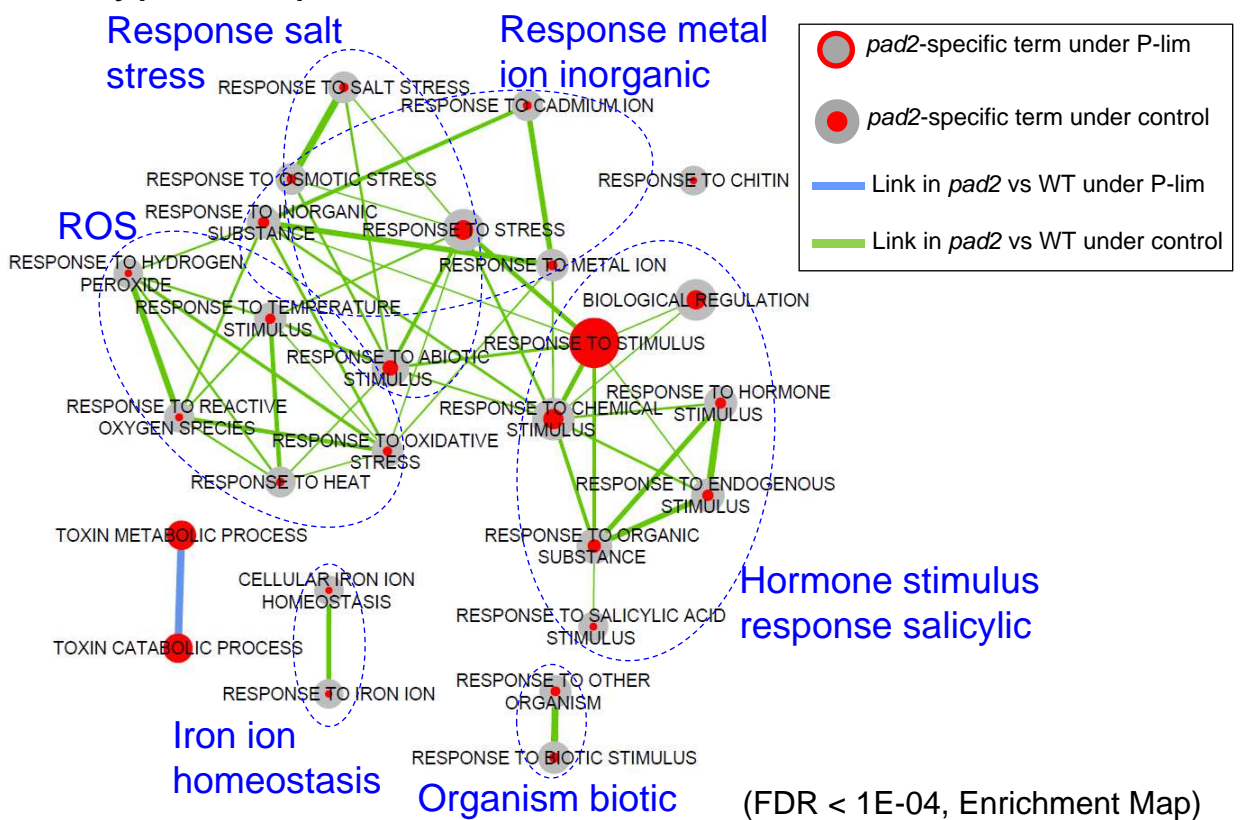
cad2 in P-lim



A. Genotype comparison under MV



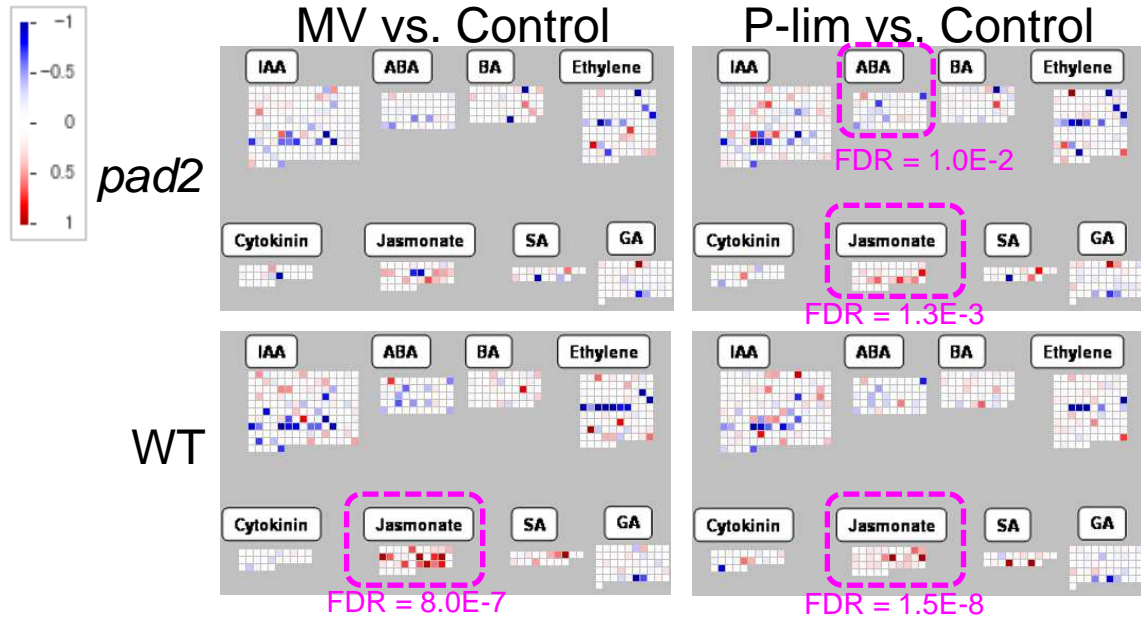
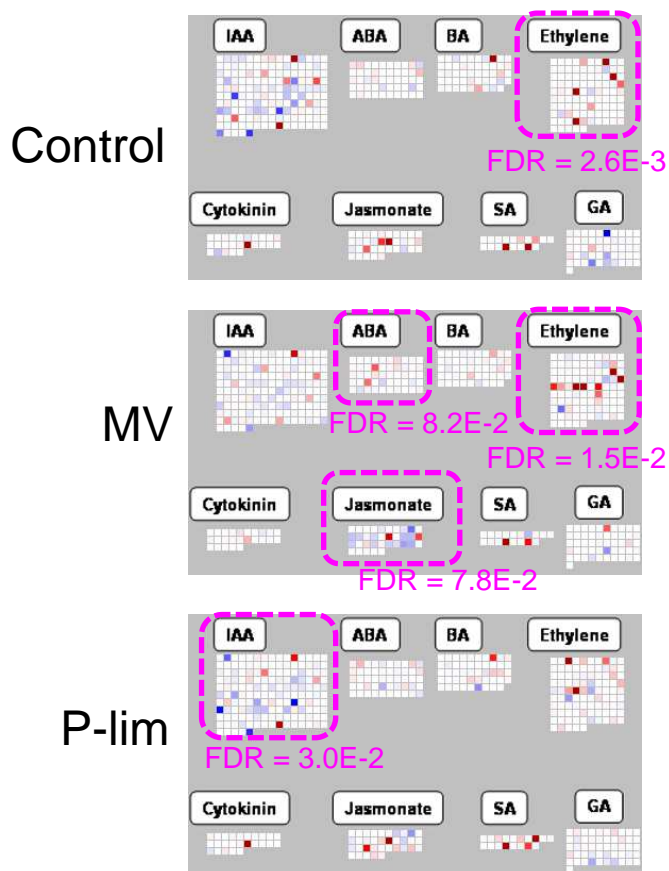
B. Genotype comparison under P-lim

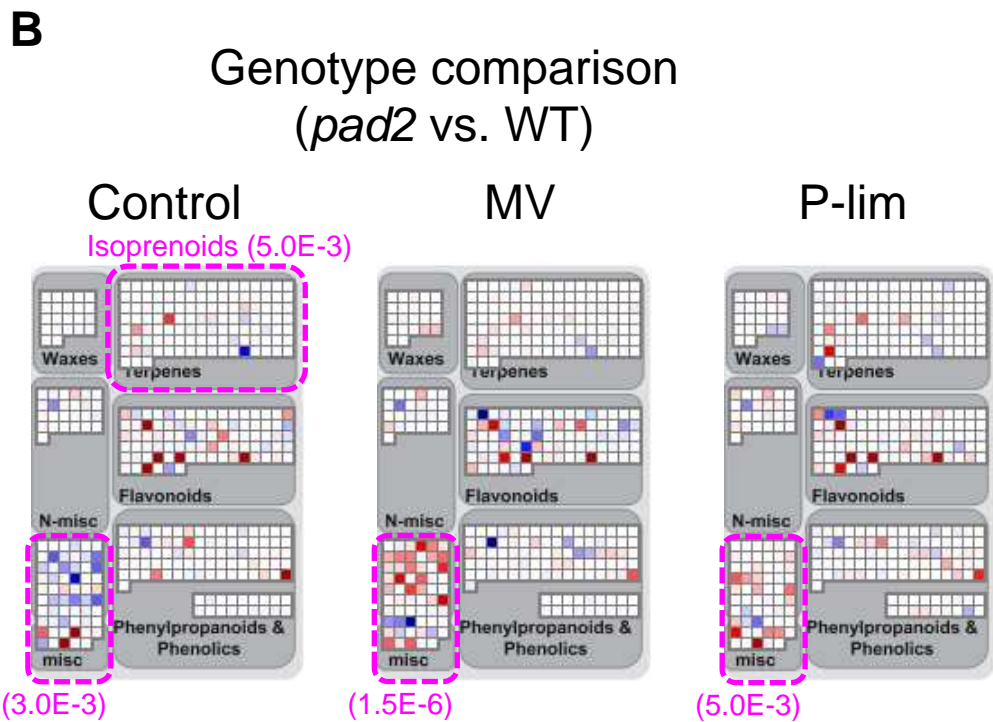
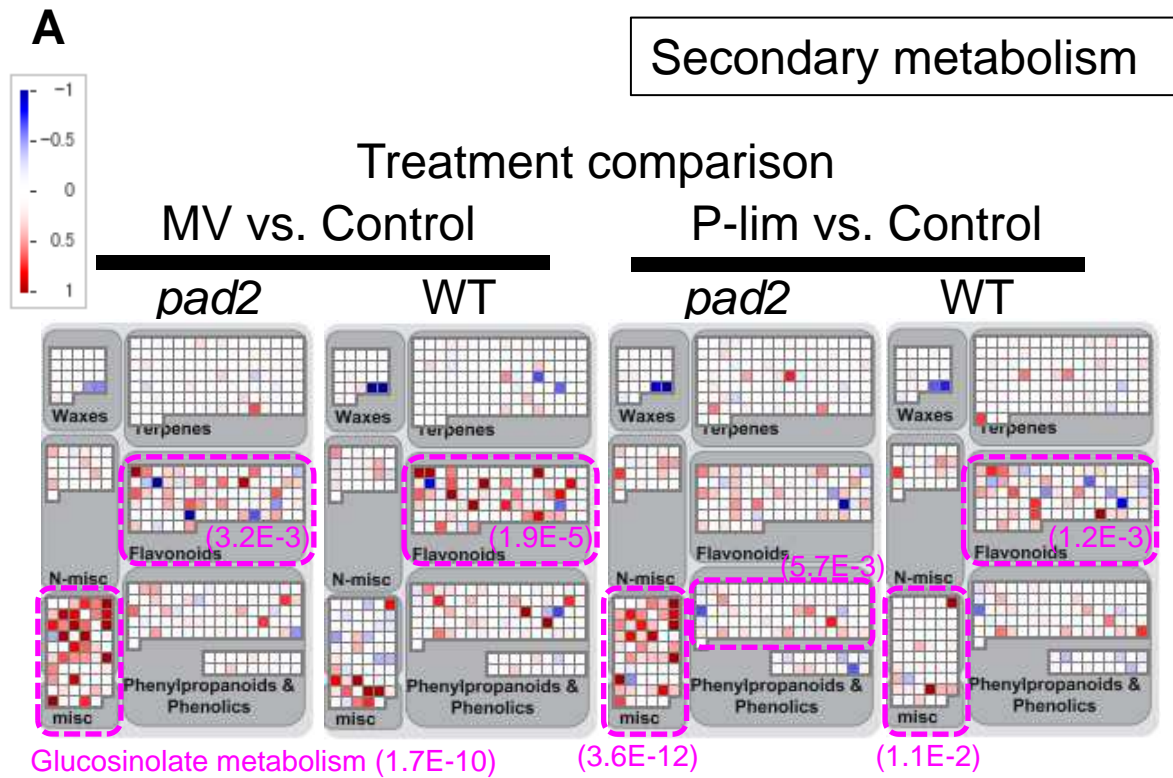


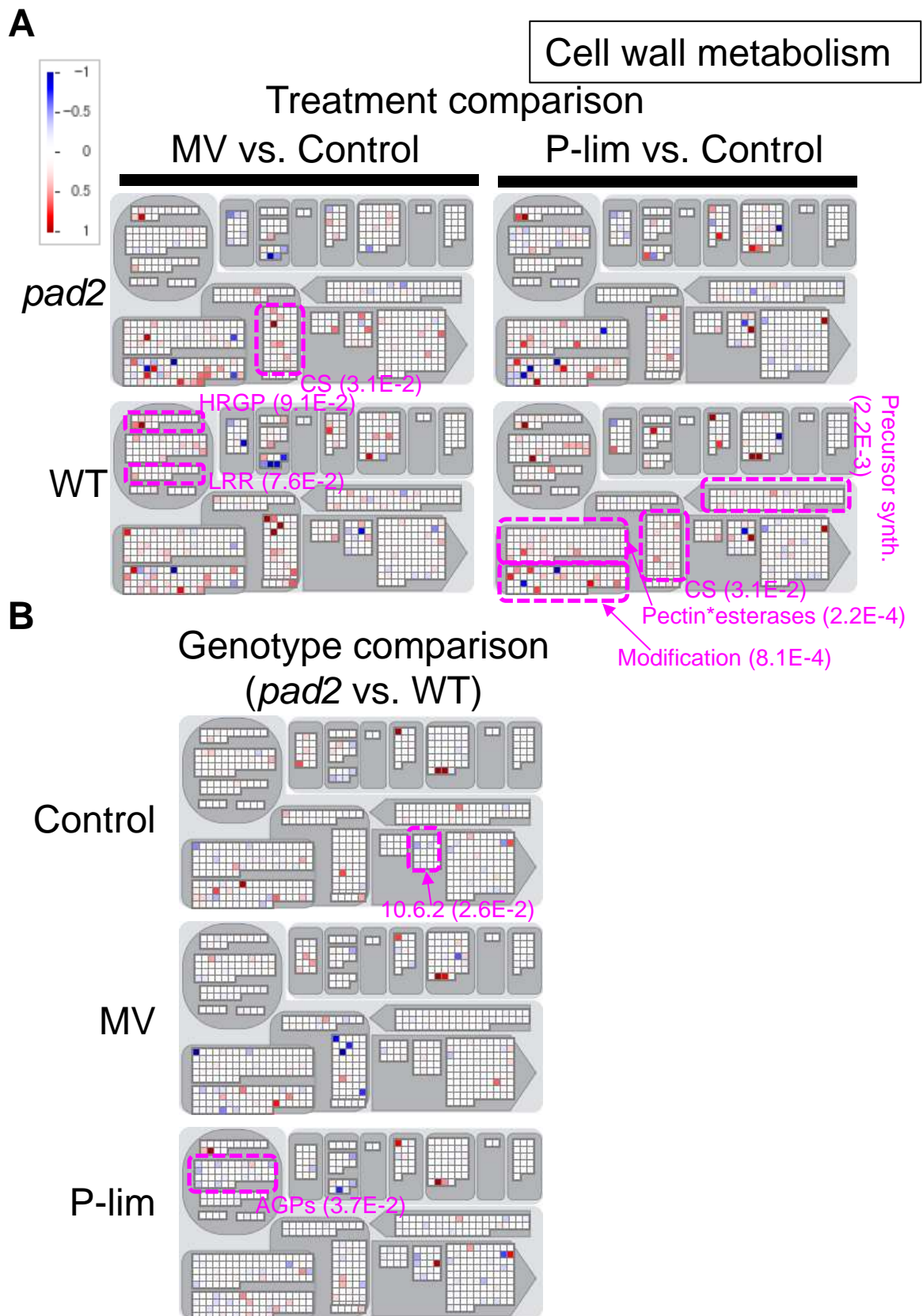
A

Hormone metabolism

Treatment comparison

**B**Genotype comparison (*pad2* vs. WT)

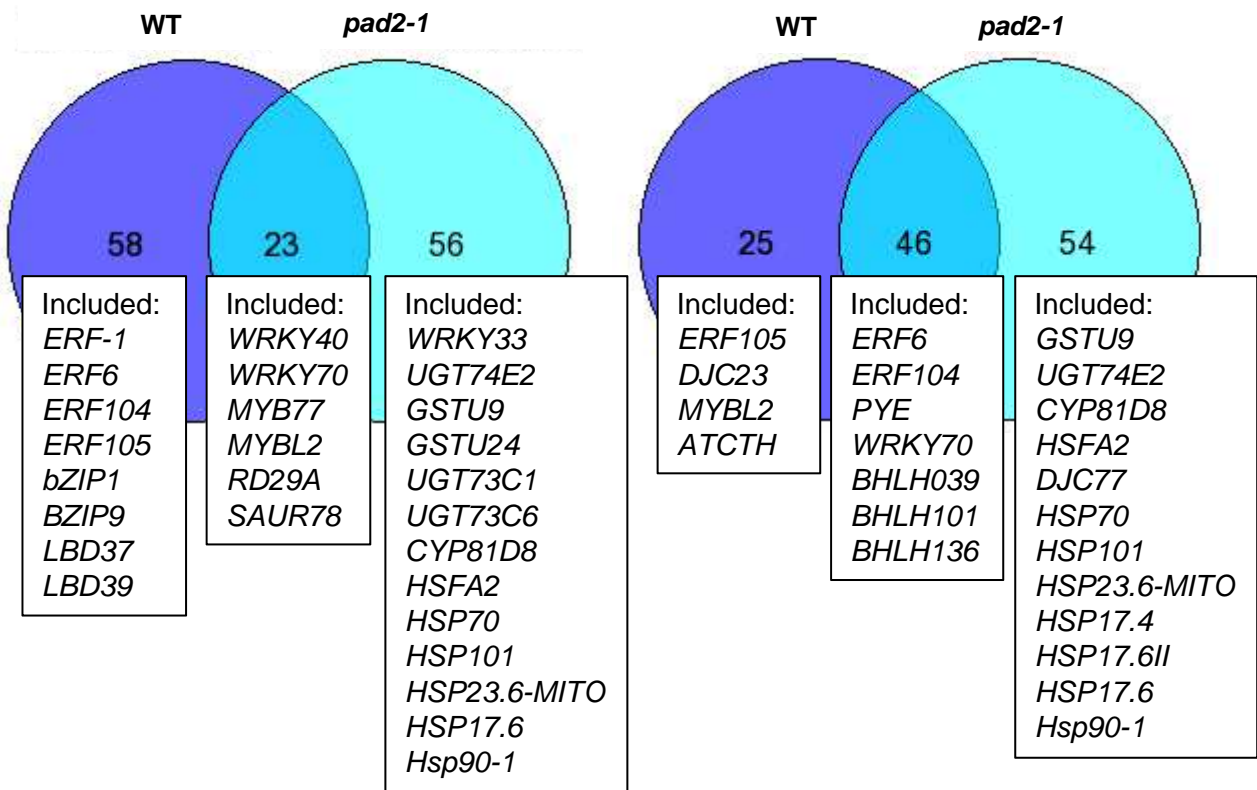




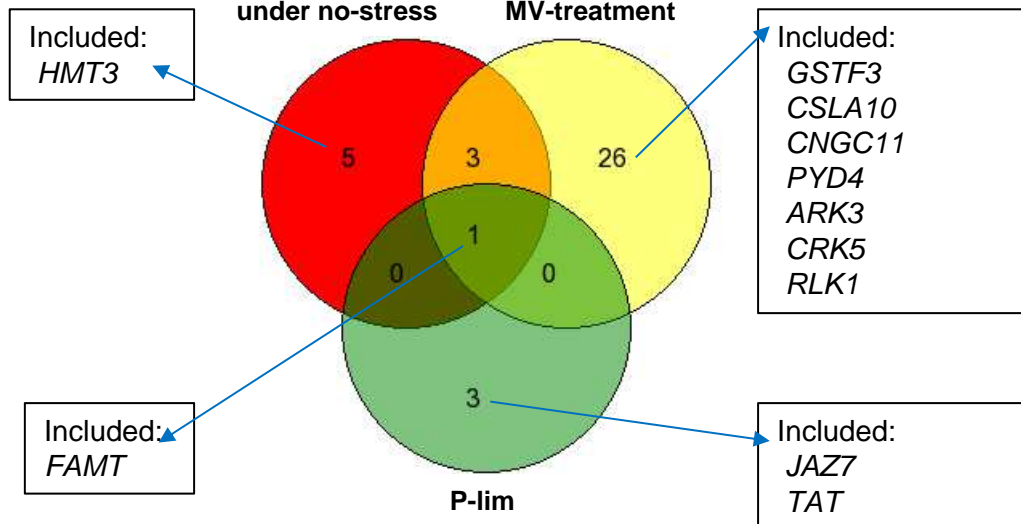
A**Treatment comparison**

Down-regulated genes under MV

Down-regulated genes under P-lim

**B****Genotype comparison**Down-regulation in *pad2-1*

under no-stress MV-treatment

(log₂fold-change ≤ 1 and FDR < 0.05, LIMMA)