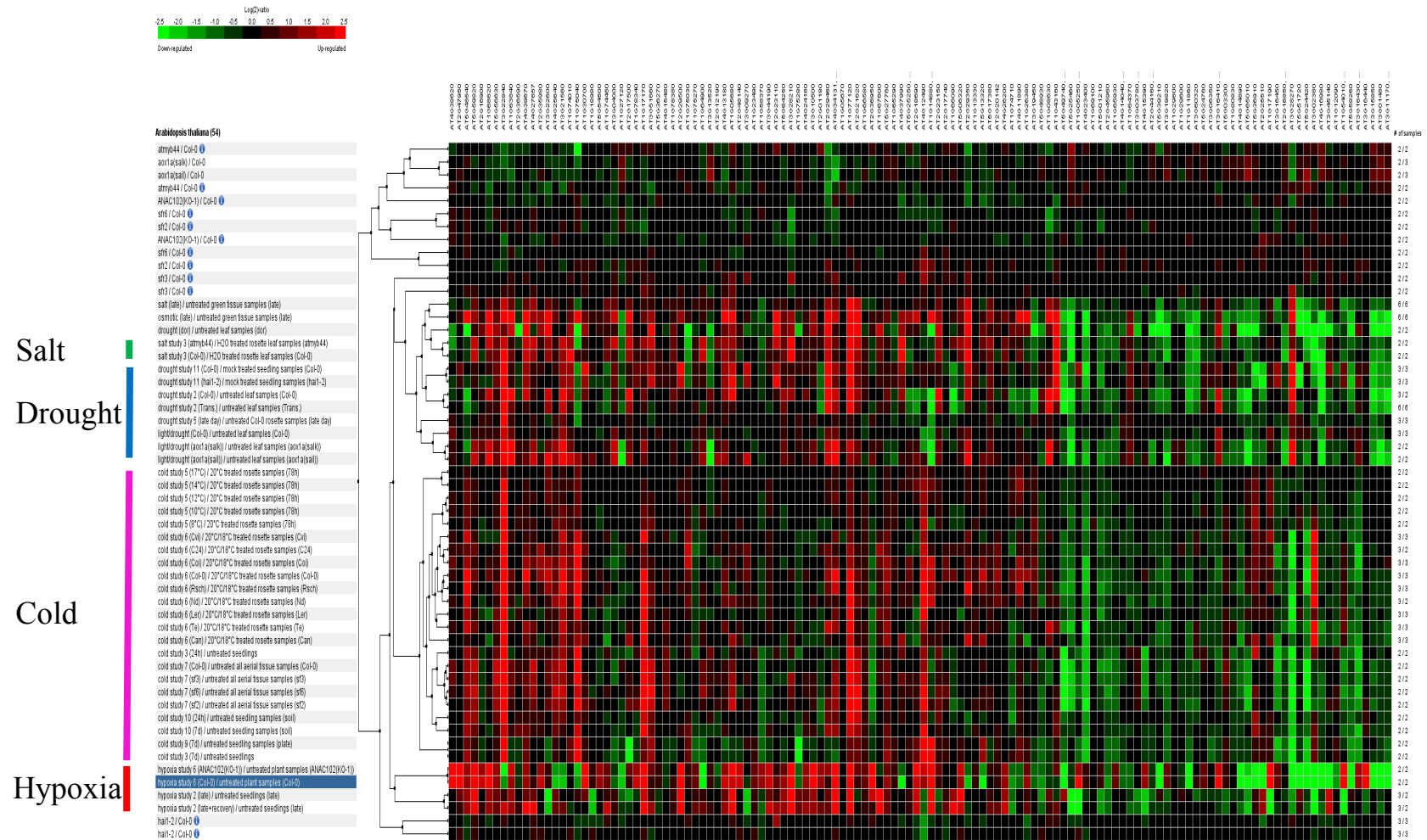


A: Stress selection



B: biotic selection

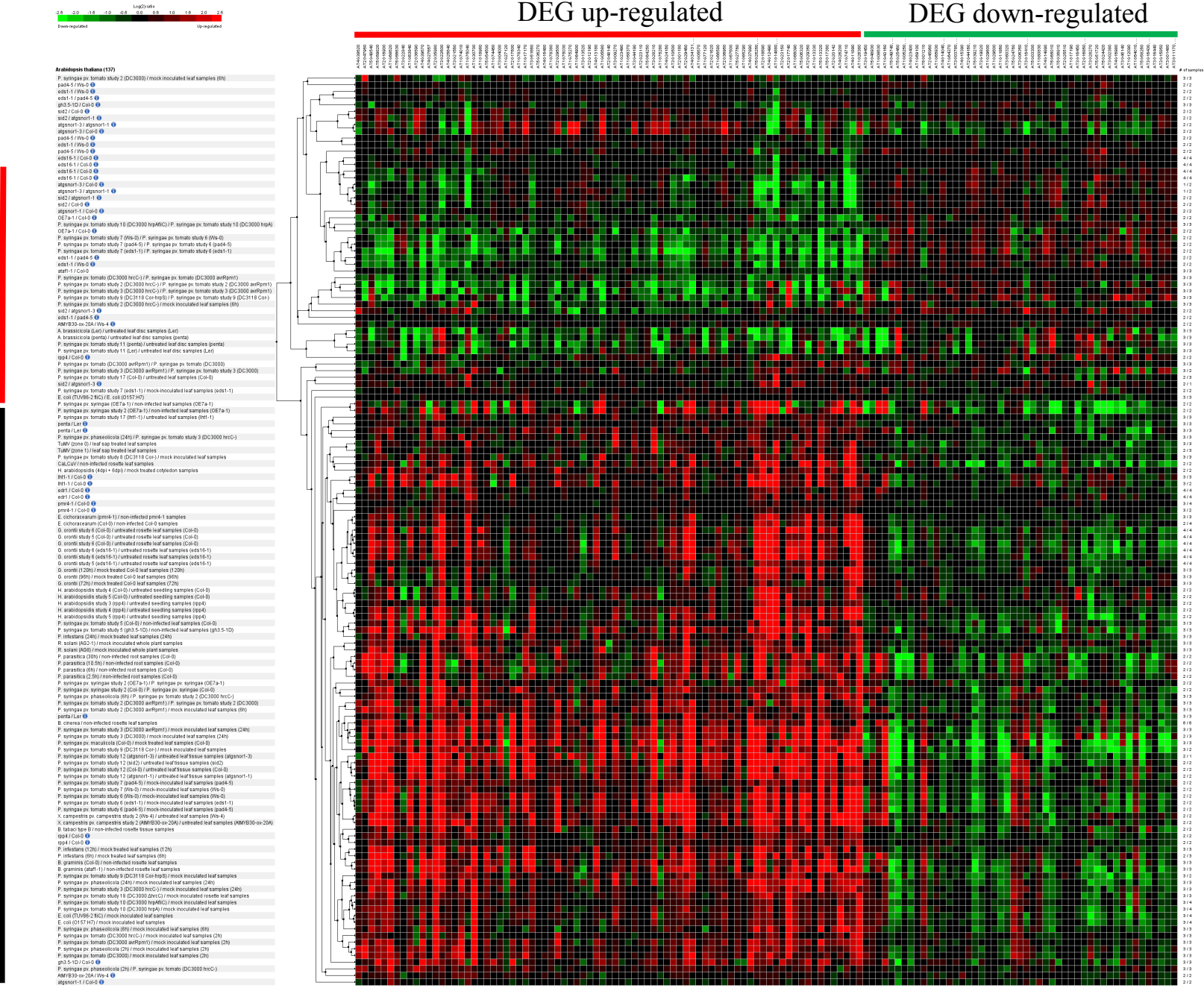
Wild type, mutant and transgenic plants response to mutated avirulent or non pathogenic bacteria and fungus

Wild type, mutants and transgenic response to pathogens: virus, bacteria, fungi

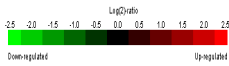
Our top list (Table I)

DEG up-regulated

DEG down-regulated



C: Chemical selection



Our top list (Table I)

DEG up-regulated

DEG down-regulated

Herbicides, pesticides, growth retardant, protein synthesis inhibitors, proteasome inhibitors

- Arabidopsis thaliana (45)
- tpa2-5-6 / Col-0
- mi4 / Col-0
- mi41mK2 / Col-0
- benzothiadiazole (Col-0) / mock treated rosette tissue samples (Col-0)
- benzothiadiazole study 2 / mock treated rosette tissue samples (mi40a)
- benzothiadiazole (mi4) / mock treated rosette tissue samples (mi4)
- clothianidin (4d) / mock treated Col-0 rosette leaf samples (4d)
- imidacloprid (4d) / mock treated Col-0 rosette leaf samples (4d)
- ozone study 3 (Col-0) / fresh air treated leaf samples (Col-0)
- phenanthrene / untreated Col plant samples
- imazapyr (24h) / mock treated leaf samples (24h)
- primisulfuron-methyl (24h) / mock treated leaf samples (24h)
- cloransulfuron-methyl (24h) / mock treated leaf samples (24h)
- sulfomethuron-methyl (24h) / mock treated leaf samples (24h)
- paclobutrazole study 3 / untreated leaf disc samples (Lai)
- fenclorim (4h) / solvent treated root culture samples (4h)
- fenclorim (24h) / solvent treated root culture samples (24h)
- CMP (24h) / solvent treated root culture samples (24h)
- CMP (4h) / solvent treated root culture samples (4h)
- oligomycin (4h) / solvent treated seedling culture samples (4h)
- Agl103 / mock treated seedlings
- DFPW (Col-0) / solvent treated seedling samples (Col-0)
- ozone / air treated seedlings
- ozone study 2 (ag1-2 gpa1-4) / fresh air treated leaf samples (ag1-2 gpa1-4)
- ozone study 2 (Col-0) / fresh air treated leaf samples (Col-0) (late)
- syngolin study 3 (jale) / solvent treated leaf samples (Col-0) (late)
- syngolin study 2 / solvent treated leaf samples (ag1_404_3c2)
- phytoprostane A1 (tpa2-5-6) / solvent treated (tpa2-5-6) seedlings
- phytoprostane A1 (Col-0) / solvent treated (Col-0) seedlings
- TIBA / mock treated seedlings
- 4-thiazolidinoneacetic acid / solvent treated seedlings
- furyl acrylate ester / solvent treated seedlings
- phytoprostane A1 (cell culture) / solvent treated cell culture samples
- hydrogen peroxide (ZAT12) / untreated seedlings (ZAT12)
- hydrogen peroxide (Col-0) / untreated seedlings (Col-0)
- oligomycin (1h) / solvent treated seedling culture samples (1h)
- cycloheximide study 4 (BeaconRFP_OR-AB3) / mock treated root protoplast samples (BeaconRFP_OR-AB3)
- cycloheximide / deamethasone study 2 (BeaconRFP_OR-AB3) / mock treated root protoplast samples (BeaconRFP_OR-AB3)
- cycloheximide / mock treated seedlings
- chlor / mock treated seedlings
- ZAT12 / Col-0
- ZAT12 / Col-0
- cycloheximide / deamethasone study 2 (BeaconRFP_OR-AB3) / cycloheximide study 4 (BeaconRFP_OR-AB3)
- ag1-2 gpa1-4 / Col-0
- ag1-2 gpa1-4 / Col-0

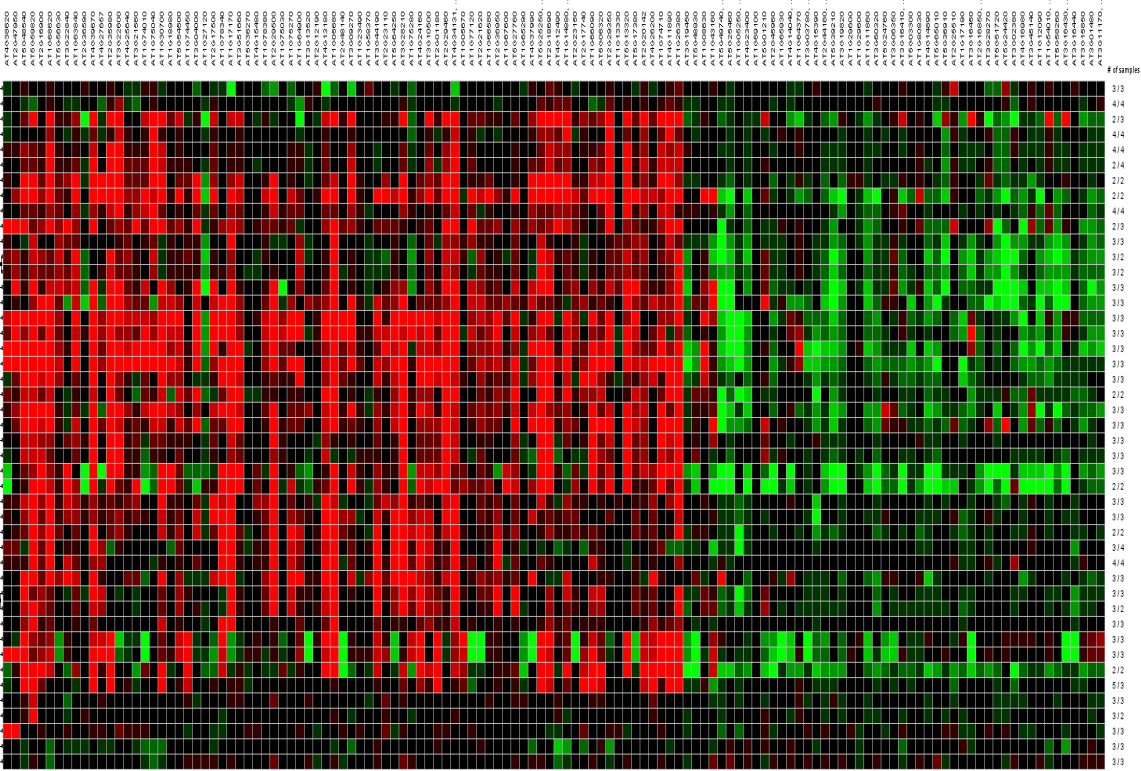


Figure S9: Hierarchical clustering analysis within Genevestigator public data. Clustering analysis was performed using our top list of differentially regulated genes (Table I) using the clustering tool available at www.genevestigator.com. (A) Clustering using subset “Stress selection”, (B) clustering using subset “Biotic selection”, (C) clustering using subset “chemical stress selection”. Red arrow: Weisman et al. (2010) study.*, Denclorim and phytoprostane A1 examples cited in this article.