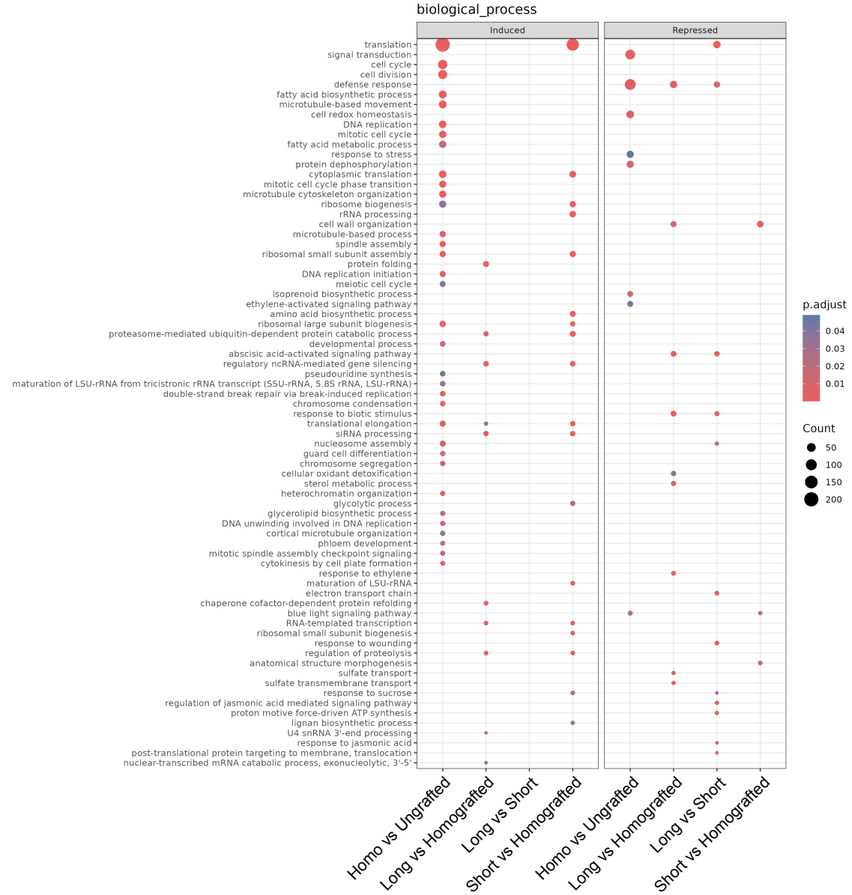
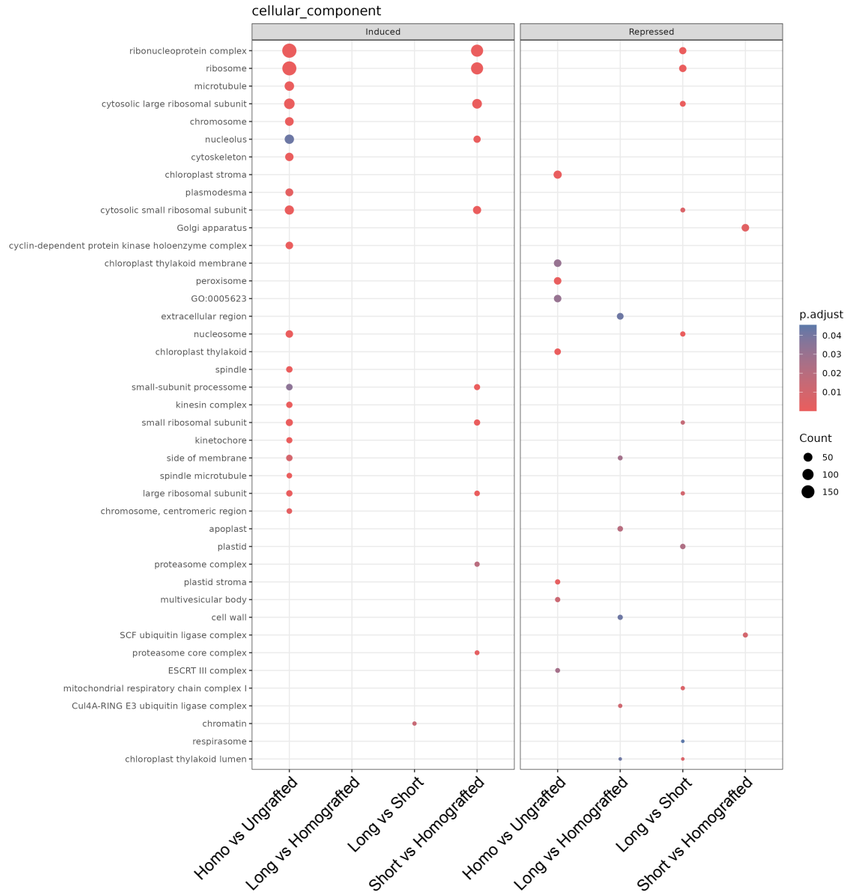
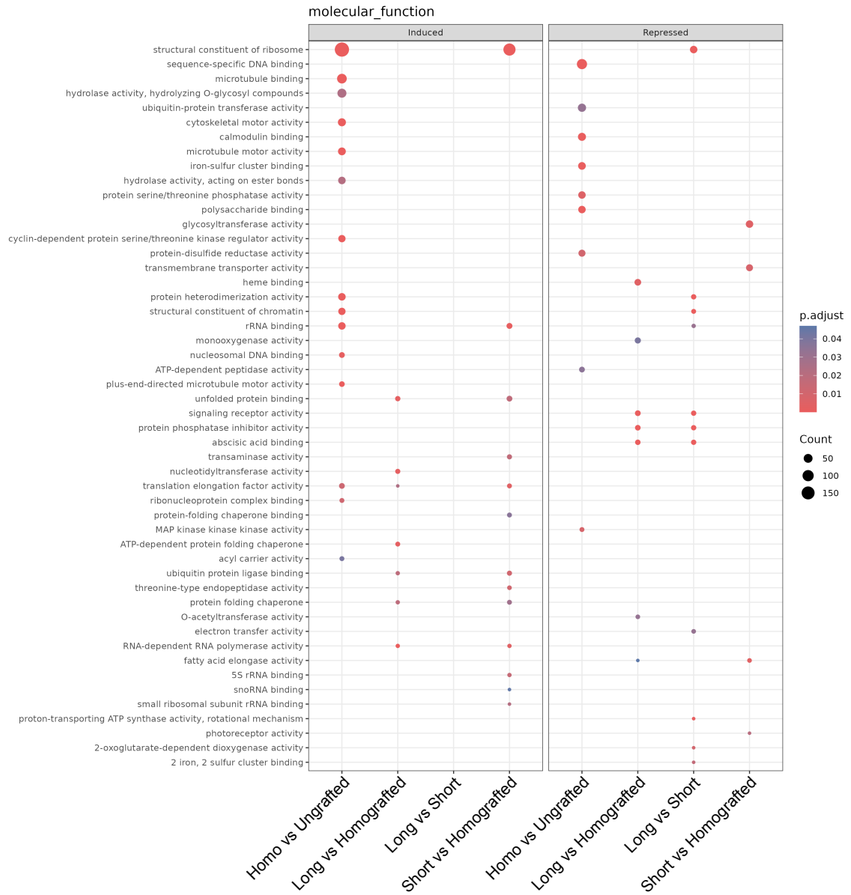
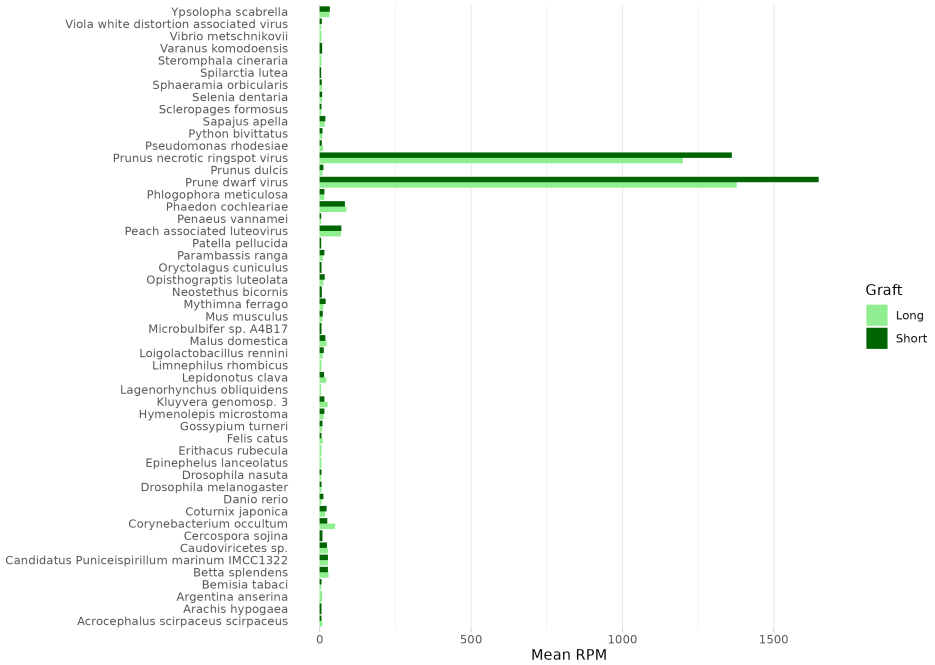
Gene ontology of differentially expressed genes in the various conditions tested





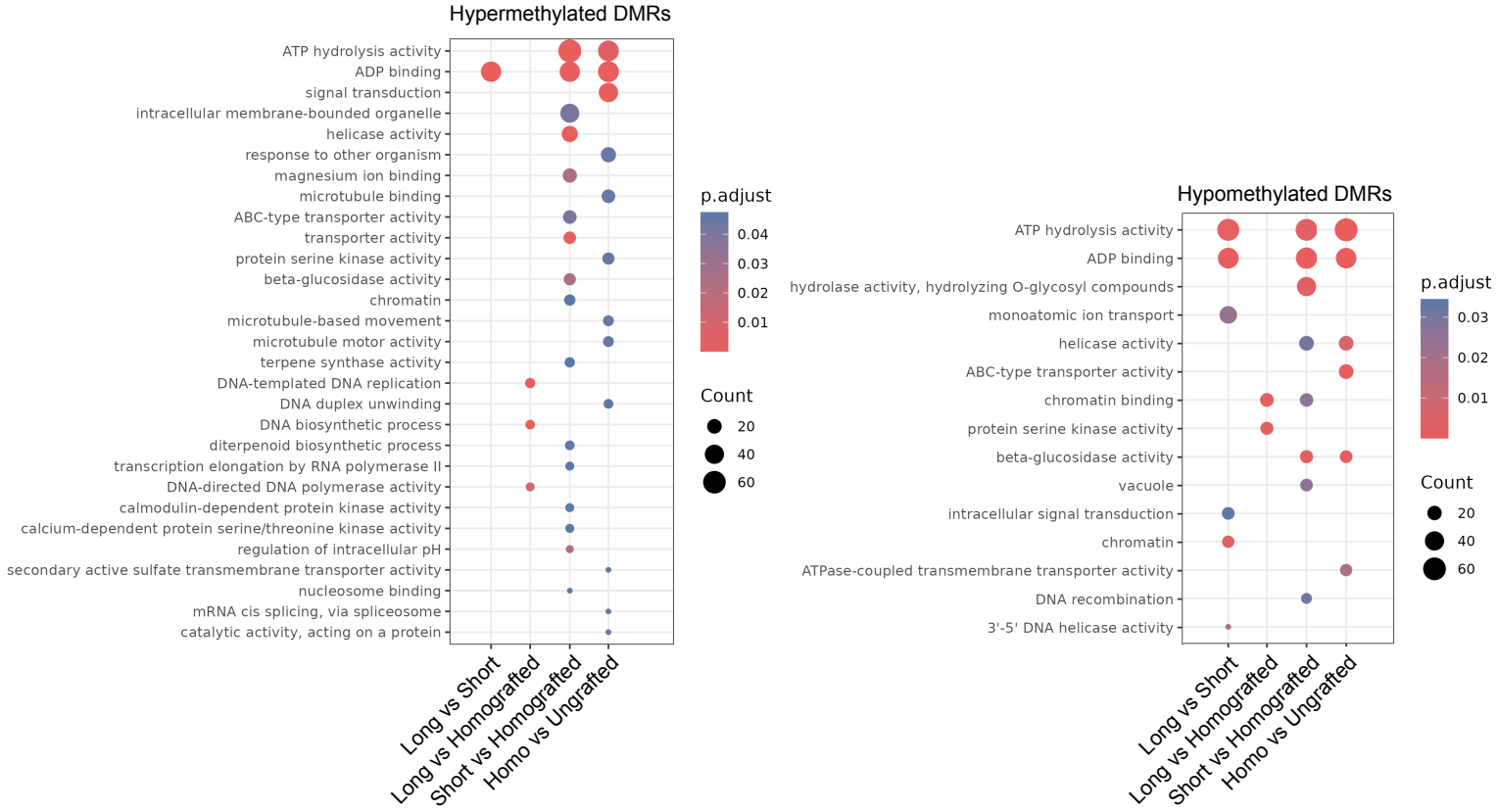


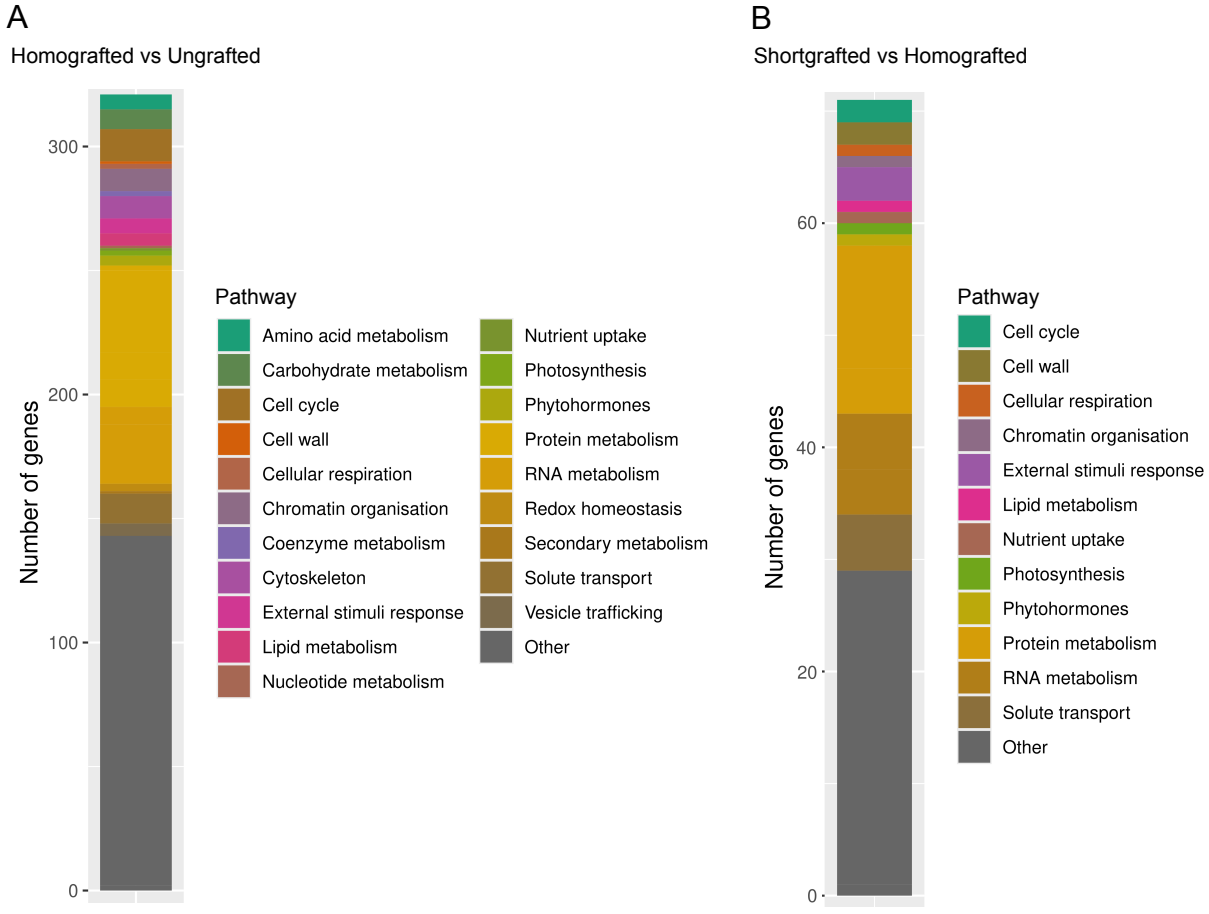
A



B

Sample	Replicate	Mapped (%)
Ungrafted	1	41,92
Ungrafted	2	47,65
Ungrafted	3	47,85
Homografted	1	60,52
Homografted	2	56,82
Homografted	3	62,02
Long graft	1	42,16
Long graft	2	47,87
Long graft	3	45
Short graft	1	56,99
Short graft	2	54,59
Short graft	3	50,87


Hypermethylated DMRs
ATP hydrolysis activity
ADP binding
signal transduction
intracellular membrane-bounded organelle
helicase activity
response to other organism
magnesium ion binding
microtubule binding
ABC-type transporter activity
transporter activity
protein serine kinase activity
beta-glucosidase activity
chromatin
microtubule-based movement
microtubule motor activity
terpene synthase activity
DNA-templated DNA replication
DNA duplex unwinding
DNA biosynthetic process
diterpenoid biosynthetic process
transcription elongation by RNA polymerase II
DNA-directed DNA polymerase activity
calmodulin-dependent protein kinase activity
calcium-dependent protein serine/threonine kinase activity
regulation of intracellular pH
secondary active sulfate transmembrane transporter activity
nucleosome binding
mRNA cis splicing, via spliceosome
catalytic activity, acting on a protein
Long vs Short
Long vs Homografted
Short vs Homografted
Homo vs Ungrafted
p.adjust
0.04
0.03
0.02
0.01
Count
20
40
60
Hypomethylated DMRs
ATP hydrolysis activity
ADP binding
hydrolase activity, hydrolyzing O-glycosyl compounds
monoatomic ion transport
helicase activity
ABC-type transporter activity
chromatin binding
protein serine kinase activity
beta-glucosidase activity
vacuole
intracellular signal transduction
chromatin
ATPase-coupled transmembrane transporter activity
DNA recombination
3'-5' DNA helicase activity
Long vs Short
Long vs Homografted
Short vs Homografted
Homo vs Ungrafted
p.adjust
0.03
0.02
0.01
Count
20
40
60


A
Homografted vs Ungrafted
Number of genes
300
200
100
0
Pathway
Amino acid metabolism
Carbohydrate metabolism
Cell cycle
Cell wall
Cellular respiration
Chromatin organisation
Coenzyme metabolism
Cytoskeleton
External stimuli response
Lipid metabolism
Nucleotide metabolism
Nutrient uptake
Photosynthesis
Phytohormones
Protein metabolism
RNA metabolism
Redox homeostasis
Secondary metabolism
Solute transport
Vesicle trafficking
Other
B
Shortgrafted vs Homografted
Number of genes
60
40
20
0
Pathway
Cell cycle
Cell wall
Cellular respiration
Chromatin organisation
External stimuli response
Lipid metabolism
Nutrient uptake
Photosynthesis
Phytohormones
Protein metabolism
RNA metabolism
Solute transport
Other