

[illegible]

lipid metabolic process

organic acid  
metabolic process

nitrile biosynthetic process

glycosinolate  
metabolic process

photosynthesis

**response to stimulus**

**fatty acid derivative metabolism**

small molecule metabolic process

carbon fixation

secondary  
metabolic process

nitrile

metabolic

glycosyl  
compound  
metabolic  
process

hydroxy	fatty acid derivative
biosynthetic	fatty acid derivative biosynthesis
	biosynthetic process

hydroxy  
**synthesis**  
biosynthetic  
process

**protein-chromophore linkage**

response to  
inorganic substance

response to herbivore

response to wounding

regulation of  
plant-type  
hypersensitive  
response

## regulation of stomatal movement

cellular lipid

## compound metabolism

## plastid organization

## plastid organization

photosynthesis,  
light harvesting

response to inorganic substance stress

acid chemical

regulation of cellular homeostasis

metabolic process  
metabolic movement

cell wall modification

light harvesting

## response to stress

response to  
phenylpropanoic

response to water

response

auxin-activated  
signaling pathway

negative regulation of anion transport

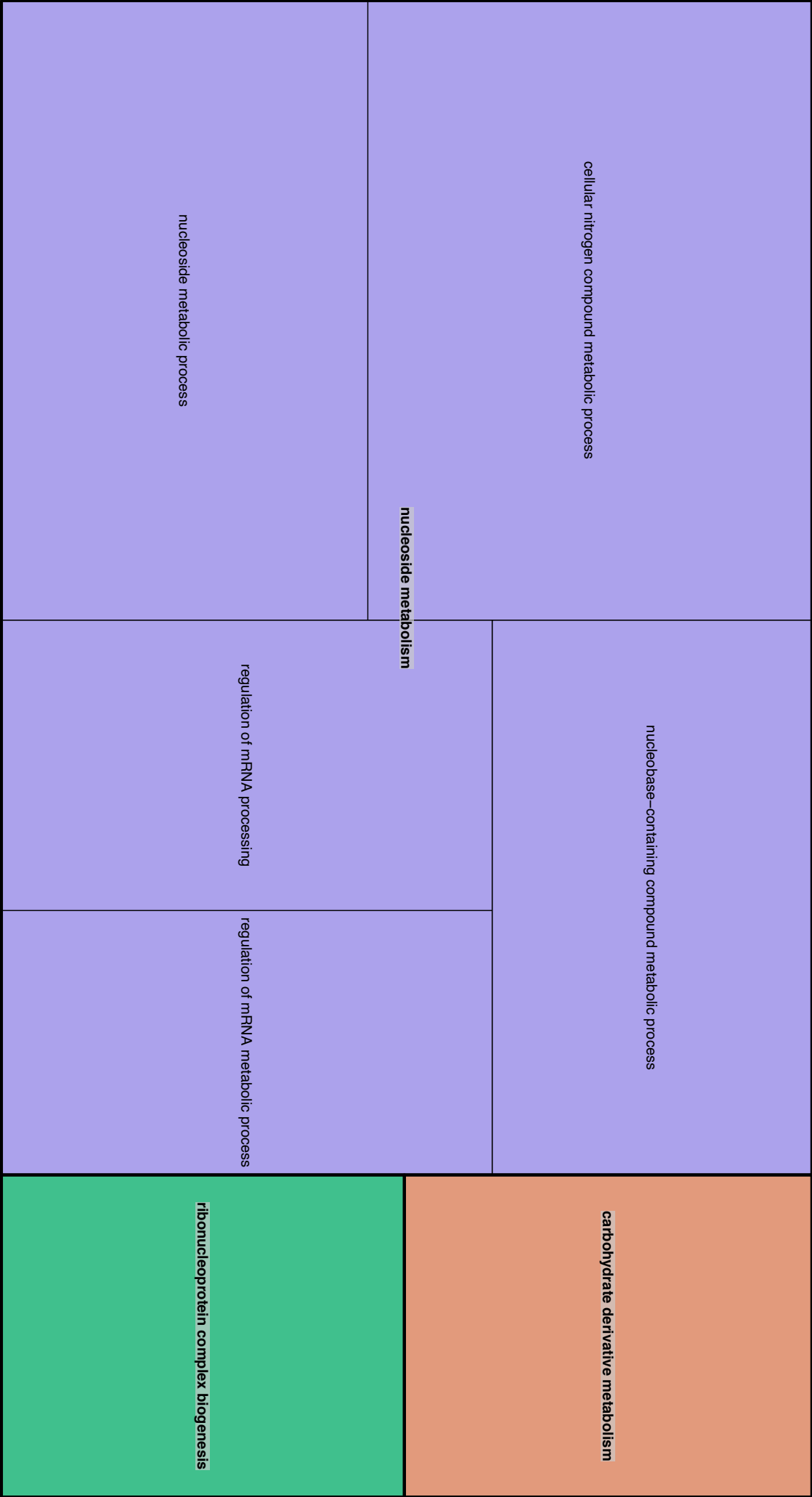
biological quality	metabolic processes
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plant organ	aging
senescence	aging

## Electrometal movement

**sulfur compound  
metabolism**

Kale vs TO1000 Lower Expressed Genes



Kale vs Cabbage Higher Expressed Genes

response to herbivore		response to external stimulus		nitrile biosynthetic process		carbon fixation		isoprenoid biosynthetic process	
response to herbivore		response to herbivore		nitrile metabolism		carbon fixation		isoprenoid biosynthetic process	
response to stress		response to other organism		nitrile metabolic process		photosynthesis		carbohydrate metabolism	
negative regulation of gene expression		regulation of localization		amylopectin biosynthetic process		glycosinolate catabolic process		fatty acid derivative metabolism	
negative regulation of gene expression		negative regulation of ion transport		amylopectin biosynthesis		fatty acid derivative metabolism		vacuole organization	
positive regulation of protein serine/threonine kinase activity		regulation of anion channel activity by blue light		amylopectin metabolic process		fatty acid derivative metabolism		vacuole organization	

Kale vs Cabbage Lower Expressed Genes

sulfur compound metabolism

glycosinolate metabolism

cellular response to sulfur starvation

carbohydrate derivative metabolism

Cabbage vs TO1000 Higher Expressed Genes

secondary metabolite biosynthetic process	small molecule metabolic process		sulfur compound biosynthetic process		response to wounding				cellular response to sulfur starvation		response to oxidative stress		sulfur compound metabolism							
	organic substance biosynthetic process		glycosyl compound biosynthetic process		response to osmotic stress		response to insect		response to stress		response to inorganic substance									
					response to water deprivation		response to wounding		response to oxygen-containing compound		response to chemical									
organic acid metabolic process	secondary metabolite biosynthesis		response to other organism		response to chitin		cellular response to oxidative stress		photoprotection		indole-containing compound metabolic process			indole-containing compound biosynthesis		organic hydroxy compound metabolism				
secondary metabolic process	hydrogen sulfide metabolic process		glycosyl compound metabolic process		organic acid biosynthetic process		response to stimulus				oligosaccharide transport			biosynthesis						
	organic hydroxy compound biosynthetic process		regulation of RNA metabolic process		small molecule biosynthetic process		peptidyl-proline modification		protein oligomerization		response to stimulus			hydrogen peroxide catabolism		seed maturation		cellular homeostasis		
	lipid metabolic process						translational termination		regulation of cell growth											
RNA biosynthetic process																				

Cabbage vs TO1000 Lower Expressed Genes

nucleobase-containing compound metabolic process

heterocycle metabolic process

nucleobase-containing compound metabolism

cellular aromatic compound metabolic process

cellular nitrogen compound metabolic process

isoprenoid biosynthetic process		fatty acid derivative biosynthetic process		nitrile biosynthetic processnitrile metabolismnitrile metabolic process	plastid organization
isoprenoid biosynthesis		lipid biosynthetic process			
fatty acid derivative metabolic process		lipid biosynthetic process			
lipid metabolic process		cellular response to iron response to other organismresponse to other organism		negative regulation of ion transport	polysaccharide catabolism

isoprenoid biosynthetic process

fatty acid derivative biosynthetic process

nitrile biosynthetic process

**tabolism**nitrile metabolic process

plastid organization

negative regulation of ion transport

**polysaccharide catabolism**

**isoprenoid biosynthesis**

fatty acid derivative metabolic process

**isoprenoid biosynthesis**

fatty acid derivative metabolic process

lipid biosynthetic process

cellular response to iron **response to oxygen**

other organismse to other organism

lipid metabolic process