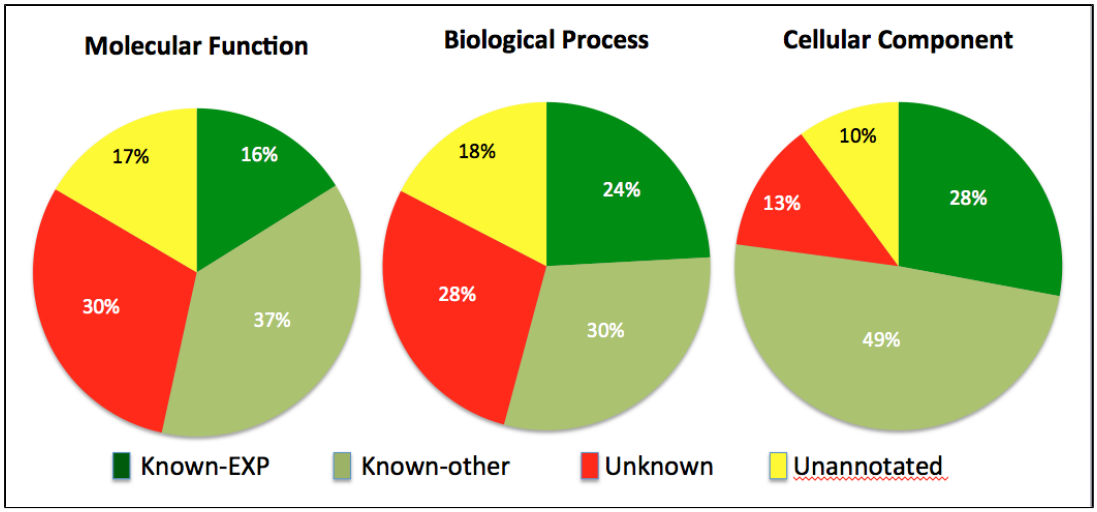
Genome Snapshot

This page provides information on the status of the Arabidopsis thaliana genome. Genome statistics are based on the Araport11 release dated June 2016.

Summary of Gene Functional Annotation

The pie charts below summarize the state of functional annotation of the Arabidopsis genome (excluding pseudogenes) based on links to terms in the three Gene Ontology (GO) aspects (dark green:known, from experimental evidence, light green: known, from other evidence, yellow:not yet curated, red: curated but unknown). The pie charts for GO process, function and component are based on annotation data as of May 24, 2016.



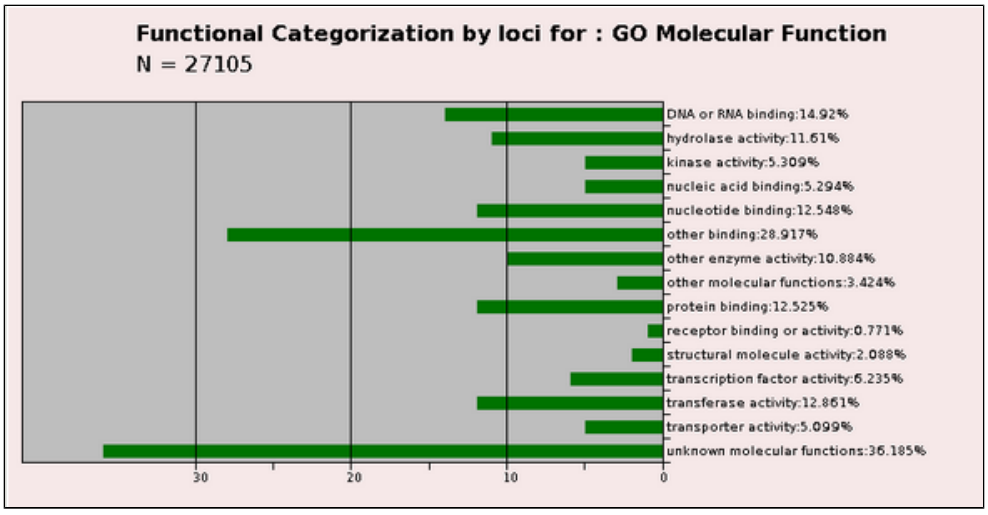
The bar graphs below represent the distribution of Arabidopsis genes among high level Gene Ontology, or GOslim, categories based on their annotations to terms falling within these categories. Bar graphs are based on annotation data as of May 24, 2016.

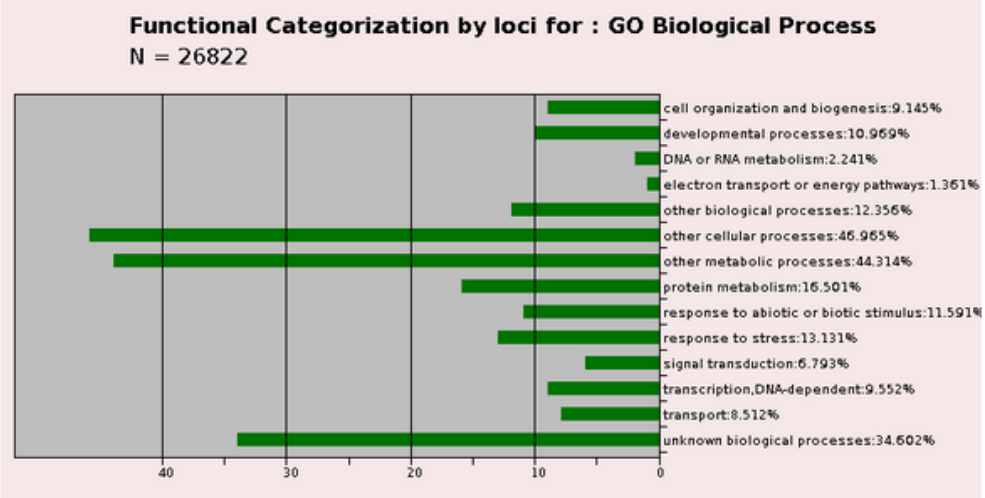
$$\left[\frac{\text{Number of genes annotated to terms in this GOslim category} \times 100}{N}\right] = \%$$

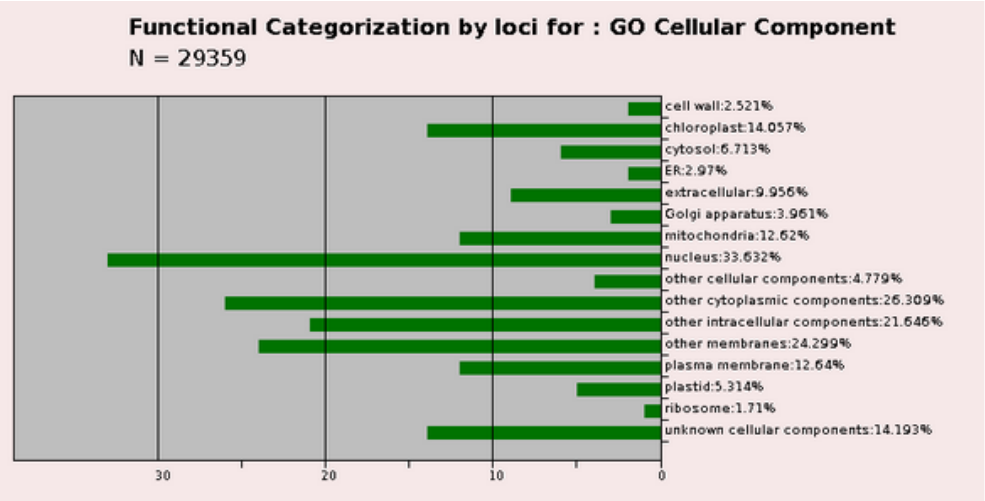
where

N = Total number of genes from input list annotated to any term in this ontology

For whole genome categorization, input list = all genes in the genome.







Summary of Gene Structure Annotation

The Araport11 release contains 27,655 protein-coding genes, 5,051 non-coding genes, 3,901 transposable element genes, 952 pseudogenes, 508 novel transcribed regions, and 111 upstream open reading frames. No changes were made to the genome assembly. For more detailed information about the Araport11 release, please see the Araport11 publication.

All Genome Versions Statistics

	Protein Coding Genes	Transposons and pseudogenes	Alternatively spliced genes	Gene density (Kb /gene)	Avg. exons per gene	Avg. exon length	Avg. intron length
Araport11 (06 /16)	27,655	4,853	10,695		6.7	335.5	
TAIR10 (11 /10)	27,411	4,827	5,885	4.35	5.89	296	165
TAIR9 (6/09)	27,379	4,827	4,626	4.35	5.67	304	165
TAIR8 (4/08)	27,235	4,759	4,330	4.37	5.62	306	165
TAIR7 (4/07)	26,819	3,889	3,866	4.44	5.79	268	165
TAIR6 (11/05)	26,541	3,818	3,159	4.48	5.64	269	164
TIGR5 (1/04)	26,207	3,786	2,330	4.54	5.42	276	164
TIGR4 (4/03)	27,170	2,218	1,267	4.38	5.31	279	166
TIGR3 (8/02)	27,117	1,967	162	4.32	5.24	266	166

TIGR2 (1/02)	26,156	1,305	28	4.48	5.25	265	167
TIGR1 (8/01)	25,554	1,274	0	4.55	5.23	256	168
Nature (12/00)	25,498	NA	NA	4.50	5.20	250	168