# Diversity of data descriptions results in inconsistent nomenclature



Planteome provides consistent terminology for all things plant biology related, all the way from the molecular to environment level.

	Environment Ontology (ENVO)				
	Plant Environmental Conditions (EO)				
GRANULARITY	Plant Taxonomy	NCBI, uBio	s Ontology (PSO)	Phenotypic Quality (PATO)	Biological Process (GO)
	Anatomy	Plant Anatomical Entity Plant Ontology (PO)		Plant Trait Ontology (TO)	Plant Structure Development Stage (PO)
	Cell	Plant Cell (PO)			
		Cell (CL)			
	Cellular Components	Cellular Component (GO)	Plant Stress		
	Molecules	Molecular Entity (ChEBI, PR)	Plar	Molecular Function (GO)	Molecular Process (GO)

**Key to Colors:** Yellow & Orange: to be developed and maintained by Planteome. Blue: external reference ontologies

#### Contact us:

Visit <u>www.planteome.org</u> and click on the **Contact Tab** to send a message

## Goals of the Planteome:

- Develop and maintain a network of reference ontologies to link plant traits, phenotypes, gene expression, genomes and genetic diversity data across a wide range of plant species on a centralized platform
- Align reference ontologies with descriptors from species-specific vocabularies to link to breeding data (intersects on networks)
- Create mappings (links) to other ontologies and databases





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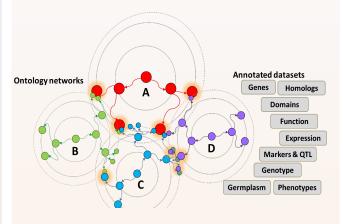


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### What is the Planteome?

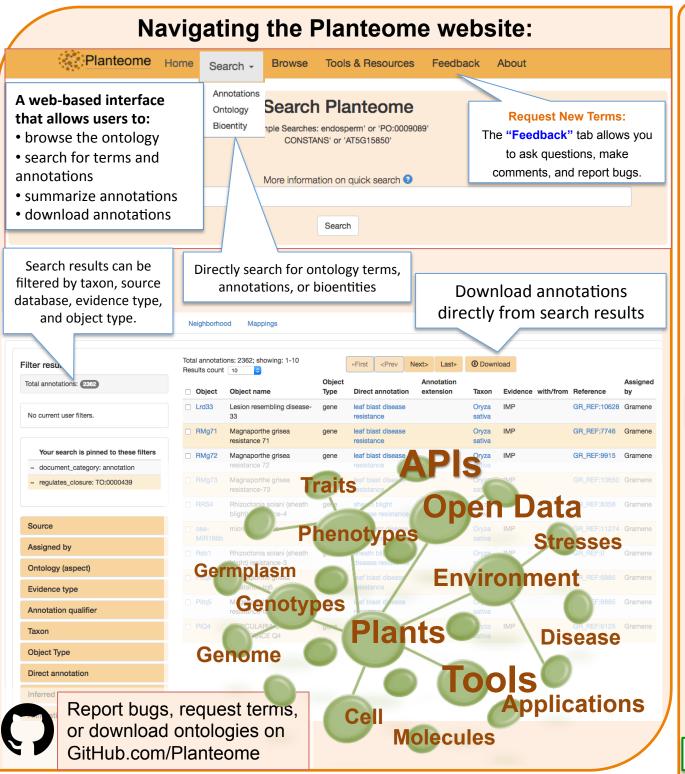
A suite of ontologies and annotations for all plants that covers all things plant related.



A source for standard definitions reviewed by experts & links to annotations from plant genome databases

www.planteome.org





### **Using the Planteome**

Hierarchical structure allows for taxon-specific annotation and comparisons across taxa.

#### You can ask questions such as:

- Is there lentil germplasm with known plant height characteristics?
- What genes are expressed that have an effect on a plant's height?
- What traits have been characterized in lentil variety REDCHIEF?

