Germplasm Search and Results

Using the Germplasm Search

The germplasm search allows you to search TAIR's database for individual and pooled lines, and to place orders for seeds that are ABRC stocks. You can perform simple searching by name or add certain restrictions to narrow down the results. If you want to search only Ecotypes and restrict by geographic features (e.g. collection site, country of origin), please try the Ecotype/Species Search.For help on searching Ecotypes/Species see Ecotype/Species Search Help

Search by Germplasm type

Use this drop down menu to select from the following types. Choosing 'Any Germplasm type" will return all types.

- individual line: A germplasm from a single plant. For example mutant lines, transgenic lines and ecotypes.
- individual pool: A mixture of germplasms from a number of individual plants. For example, individual T-DNA insertion lines that have been pooled together to facilitate screening and genotyping.
- sets of lines: Individual lines that can be obtained as sets of related lines. For example, sets of individual recombinant inbred lines for mapping, or sets of individual GFP lines for examining gene expression patterns.
- sets of pools: Pooled lines that have been grouped into larger sets. For example, pools of insertion lines are available as larger sets. These sets of pools are used for the initial screening to identify smaller sets of pools and then individual pools containing the individual line(s) of interest.

Search by species, name, description and stock number

You can restrict your search to one or more of the following features. Note that if you choose to search by multiple features, only germplasms that meet ALL of the entered criteria will be returned. For example a search for gene name starts with GA AND description contains dwarf will NOT return results for all strains that are dwarf.

Species

The majority of germplasms in TAIR are from Arabidopsis thaliana. However, some other species are also available from the ABRC.The default parameter is set to Arabidopsis thaliana.

Germplasm name /stock number

For germplasm that are ABRC seed stocks, the germplasm name usually corresponds to the ABRC stock id. The stock id begins with CS followed by a numerical accession (e.g. CSnnnn). Notable exceptions to this rule are all of the SALK T-DNA insertion lines which retain their SALK ids.

Phenotype/Description

Use this field to search within the description of a germplasm or associated phenotype. For example, if you are searching for strains that are both male sterile and have lobed leaves, enter description contains 'male sterile' in one row and description contains 'lobed leaves' in the second row.

Gene names

You can also search by gene names including AGI locus IDs or symbolic names.

Search by Allele

Use this search to find strains with specific alleles or combinations of alleles. Note that if you search for multiple alleles, you will only see results where ALL alleles are found in the same strain. To find strains with either AP1 or CAL mutant alleles you will need to perform two separate searches.

Examples:

- To find lines containing mutant alleles of both CAL and AP1: in the first row type in AP1 and in the second row type in CAL.
- To find any line heterozygous for AP1 choose: AP1 and select heterozygous from the drop down menu.

Restrict by Features

If you have a very specific search in mind you can choose one or more features to return only those germplasms that meet these parameters. NOTE: These parameters may be used in addition to name and genotype restrictions but more complicated queries will be very slow and may return less than the number of expected results. These features are useful to return broad categories of germplasm.

Germplasm Features

Germplasms can be searched by a number of features.You can choose more than one option. Note that choosing more than one treats the search as a logical 'AND'. For example, is ABRC stock AND is transgenic.

- is ABRC stock: Restricts your search to include only germplasm that are ABRC stocks in the results.
- has polymorphisms: Restricts your search to include only germplasm associated with known variants (e.g. alleles, T-DNA insertions, small insertions or deletions, single base pair substitutions).
- is transgenic: Restricts your search to only include germplasm that contains a transgene.
- has images: Restricts your search to germplasms with associated images such as pictures of mutant phenotypes.

Ploidy

This feature allows you to limit your search to diploids (2N) or aneuploid/polyploids (not 2N)

Background Ecotype

This feature allows you to limit your results to only include strains having one or more specified ecotypes in its genetic background. To select multiple ecotypes, hold down the APPLE key (MAC) or CTRL key (PC) while selecting from the list..

Mutagen

You can restrict your search to include only germplasms that have been treated with one or more specific mutagens.To select multiple mutagens (e.g. you want strains that have been either treated with X-rays or mutated with EMS), hold down the APPLE key (MAC) or CTRL key (PC) while selecting from the list.

Insertion type

For strains that contain insertions (e.g.transposons, or T-DNAs) this feature allows you to define the type of insertion to include in the results.

Transgene Construct type

For germplasms that contain a transgenic DNA construct, this feature allows you to restrict your search to only those strains having a specified construct.

Restrict by Map Locations

Use this function to restrict your search to germplasms containing elements mapped to the reference genome. For example to search for T-DNA insertion lines that lie within a given range.