

### T3/Oat status update, May 2016

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T3/Oat is the repository of oat phenotype and genotype data for the Oat Global Initiative ([www.oatglobal.org](http://www.oatglobal.org)) and provides flexible queries for extracting desired datasets for analysis, as well as integrated analysis tools (<http://triticeaetoolbox.org/oat/>).

#### 2015 Uniform Winter Oat Yield Trials

Data from the 2015 Uniform Winter Oat Yield Trials (UWOYT) have now been uploaded to T3/Oat. There are currently data from 185 UWOYT phenotype trials stored in T3/Oat dating back to 2003 and providing data on 46 phenotypic traits and over 200 lines.

#### Select Lines by Phenotype

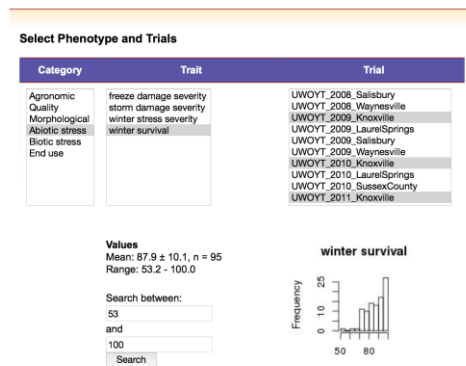


Figure 1. The T3/Oat “Select Lines by Phenotype” tool interface.

#### Featured T3/Oat tool: Select Lines by Phenotype

The “Select Lines by Phenotype” tool can be used to select T3 lines based on their performance in phenotypic trials.

The first stage of selection is to choose a phenotypic trait of interest (Figure 1). A full list of the phenotypic traits currently available in the database, along with further information about these traits, can be found in the “About T3” menu under the heading “Trait descriptions”.

A list of trials that measured the selected trait will be generated. More than one trial may be selected by holding control (PC) or command (Mac).

The data selection is summarized by the mean and range, and a histogram is generated. The “Search between” boxes can be used to restrict the data selection to lines that performed within a defined phenotypic range. The default values will select all of the lines that were tested by the selected trials.

The lines that fall into the selected phenotypic range will appear in a table along with details of the breeding program, trial name, and the phenotypic value recorded.



### Select Lines by Phenotype

**Select Phenotype and Trials**

Combine with 33 currently selected lines:

Replace  
 Add (OR)  
 Intersect (AND)

Category	Trait	Trial
Agronomic	agronomic score	UWOYT_2007_SussexCounty
Quality	breakage incidence	UWOYT_2008_BatonRouge
Morphological	emergence	UWOYT_2008_CollegeStation
Abiotic stress	forage rating	UWOYT_2008_Griffin
Biotic stress	grain yield	UWOYT_2008_Kinston
End use	groat content	UWOYT_2008_Knoxville
	groat content hand	UWOYT_2008_Newton
	heading date	UWOYT_2008_Plains
	lodging incidence	UWOYT_2008_Prattville
	lodging severity	UWOYT_2008_Prospers

**Values**  
 Mean: 323.9 ± 96.5, n = 95  
 Range: 135.6 - 517.9

Search between:  
 135  
 and  
 516

**grain yield**

The selected data will be added to the “Current selections”, which can be reviewed in the “Quick Links” sidebar. Current selections can be replaced or combined with any additional selections that are made (Figure 2). In this manner, T3’s selection tools can be used together to create a customized dataset for download or for analysis using one of T3’s integrated analytical tools.

An up-to-date summary of all of the data that is available in T3/Oat can be obtained from the “Content Status” page, which can be reached through the “About T3” menu.

*Figure 2. The T3/Oat selection tools can be used in sequence to create a custom dataset.*

Please contact the curator with any suggestions or questions, or to discuss uploading data to T3/Oat; any feedback will be gratefully received.