## T3/Oat: Status update August 2016

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T<sub>3</sub>/Oat is the repository of oat phenotype and genotype data for the Oat Global Initiative (<u>www.oatglobal.org</u>) and provides flexible queries for extracting desired datasets for analysis, as well as integrated tools for data analysis (<u>http://triticeaetoolbox.org/oat/</u>).

## Uniform Oat Winter Hardiness Nursery

Data from the 2016 Uniform Oat Winter Hardiness Nursery (UOWHN) has now been uploaded to T3/Oat. The winter survival data from 13 entries measured in two phenotype trials were presented in the 2016 nursery report and these trials join the 65 UOWHN trials already stored in T3/Oat, which date back to 2004 and provide winter survival data for a total of 77 oat lines.

## Featured T3/Oat tool: Select Markers

The T3 marker selection tool allows the selection of markers by name, map position, or by genotyping experiment. Public and private marker panels can also be created to make it easy to select marker sets of interest. Table 1 outlines the important information for selecting markers using each of the available selection fields.

The current marker selections are displayed at the top of the select markers tool. The available marker information for markers in the current selections can be viewed by clicking 'Show marker information'. Marker information includes synonyms for the marker name, the marker type, the A and B allele, and sequence information. Please contact the T3 curator if you are able to supplement the marker information available in T3/Oat.

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

Table 1. The selection fields that can be used in the T<sub>3</sub> 'Select Markers' tool.

Field	Description
Marker	The unique identifier for a T3 marker. Lists of names can be pasted into the
name	'Name' search window. If a search terms matches a T3 marker synonym, then the
	T3 primary marker name will be returned in the results. The pattern-matching
	window allows the use of wildcard characters to expand the search. Selections
	made by marker name will be added to the existing marker selection.
Мар	A list of the genetic maps available in T3/Oat, along with map descriptions, can
position	be viewed through the 'Select' menu under 'Genetic Map'. To select markers by
	map position, first choose a single chromosome on a genetic map and then define
	a range within the selected chromosome. The default range incorporates the
	entire chromosome. Multiple markers can then be selected by holding Ctrl (PC)
	or $\mathfrak{H}$ (Mac). Only highlighted markers will be added to the current selections.
	Selections made by map position will be added to the existing marker selection.
Genotype	Genotype experiments are organized by genotyping platform. Hold Ctrl (PC) or
experiment	st (Mac) to select more than one genotype experiment. The markers and lines
	from the selected genotype experiment(s) will be added to the current selections,
	and the selection will replace any data that is already selected.
Preselected	Predefined marker panels can be created to make marker selection easy.
marker sets	Registered users can create their own private marker panels using the 'My
	Marker Panels' tool, which appears in the 'Select' menu after login. Private
	marker panels can be made public upon request.