



### **T3/Oat status update, April 2017**

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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/>).

#### *T3/Oat experiments*

A phenotype experiment is one hierarchical level above phenotype trial, and can be used to link together related trials in T3. The “Selection Wizard” allows users to easily select a group of phenotype trials that are connected under a single experiment.

The “Search phenotype trials by experiment tool” on the homepage displays the existing experiments in T3/Oat, and the tool returns the list of trials that make up a selected experiment. The trial report for each trial can be reached from the resulting experiment page by clicking the link over the trial name of interest.

Details of the experiments in T3/Oat, including a description of the experiment and the name of the experiment coordinator, can be accessed using a link next to the “Search phenotype trials by experiment tool” or from the “Content Status” page, which is found under the “Resources” menu.

Genotype trials may also be linked by experiment to provide additional information about a connected series of genotype trials; for example, the Public Oat Genotyping Experiment.

#### *Featured T3/Oat tool: Traits and trials histogram*

The “Traits and trial histogram” tool produces side-by-side histograms to summarize the data in the current selections. This tool is found in the “Analyze menu” under the subheading “Traits and trials statistics”.

Histograms can only be generated for a single phenotypic trait at a time. The buttons above the histograms on the results page can be used to easily switch between the different phenotypic traits in the current selections. The histograms can be downloaded using a button at the bottom of the tool (Figure 1).

### Histogram of selected phenotypes

Display a histogram of the selected phenotype data for each trial

Trait	
heading date	<input type="button" value="Histogram"/>
plant height	<input type="button" value="Histogram"/>
test weight	<input type="button" value="Histogram"/>

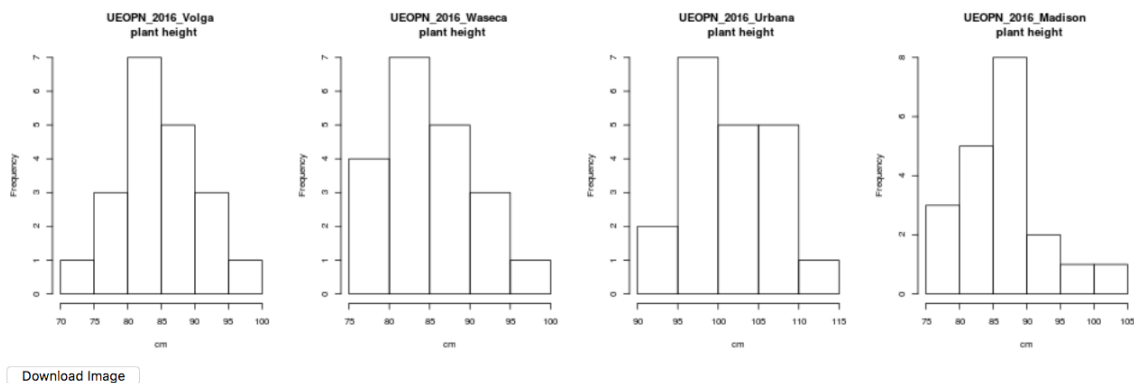


Figure 1. An example output from the “Traits and trials histogram” tool.

A summary of all of the data that are available in T3/Oat can be obtained from the “Content Status” page, which can be reached through the “Resources” menu. Please contact the curator with any suggestions or questions, or to discuss uploading data to T3/Oat; any feedback will be gratefully received.