

**T3/Oat status update, February 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 Resources menu*

The “About T3” menu has been renamed to the “Resources” menu. This change is to reflect the variety of items found in the menu (Table 1).

*Table 1. An outline of the items found in the “Resources” menu of T3/Oat.*

<b>Menu item</b>	<b>Description</b>
Overview	Overview of the T3/Oat project and the team involved.
Content Status	Summary of the data currently available in T3/Oat.
Data Submission	Data submission templates and tutorials to aid in data submission.
Trait Descriptions	Details of the phenotypic traits used in T3/Oat.
Genetic Character Descriptions	Details of the genetic characters (line properties) used in T3/Oat.
Contributing Data Programs	Details of the programs that have contributed data to T3/Oat, including the 3-letter program code that is required when submitting data to T3.
Data Usage Policy	Details of the Toronto Statement, which users are asked to agree to in order to use T3, as well as a table where data contributors can outline their publication intentions/link to publications.

The pages found under the “Resources” menu provide context for the data in T3, and contain many internal and external links, making them a good place to start exploring T3/Oat.

*Featured T3/Oat tool: Manage phenotype trials*

The “Manage phenotype trials” tool is found under the “Manage” menu and can be used as an alternative to the trial description template to create a new phenotype trial in T3, or to generate a field layout for a new or existing T3 trial. The “Manage” menu is replaced by the “Curate” menu after logging in to the Oat Sandbox.



When an existing trial is selected, the trial description will be displayed. A field layout can then be generated using the lines that were involved in the phenotype trial stored in T3/Oat. To generate a field layout, first select an experimental design. Depending upon the experimental design it will be necessary to specify the checks, the number of replicates or blocks, the size of the block, etc.. The resulting field layout will be offered as a download and is in the format required for upload to T3.

To create a new trial using the “Manage phenotype trials” tool, first add a set of lines to the current selections using any of the line selection tools. Next, navigate to the tool and fill out the online form for a new phenotype trial. The fields in this online form match those in the phenotype trial description template, and the tool will generate a filled-in trial description template, which can then be uploaded to T3.

To simultaneously generate a field layout for the new trial, make a selection in the experimental design field, and follow the instructions outlined above for an existing T3 trial. The field layout will use the lines in the current selections.

This tool is covered in more detail at the start of the “T3 and the Android Fieldbook” tutorial, which can be found on the data submission page.

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.