Integrated Breeding Platform (IBP)
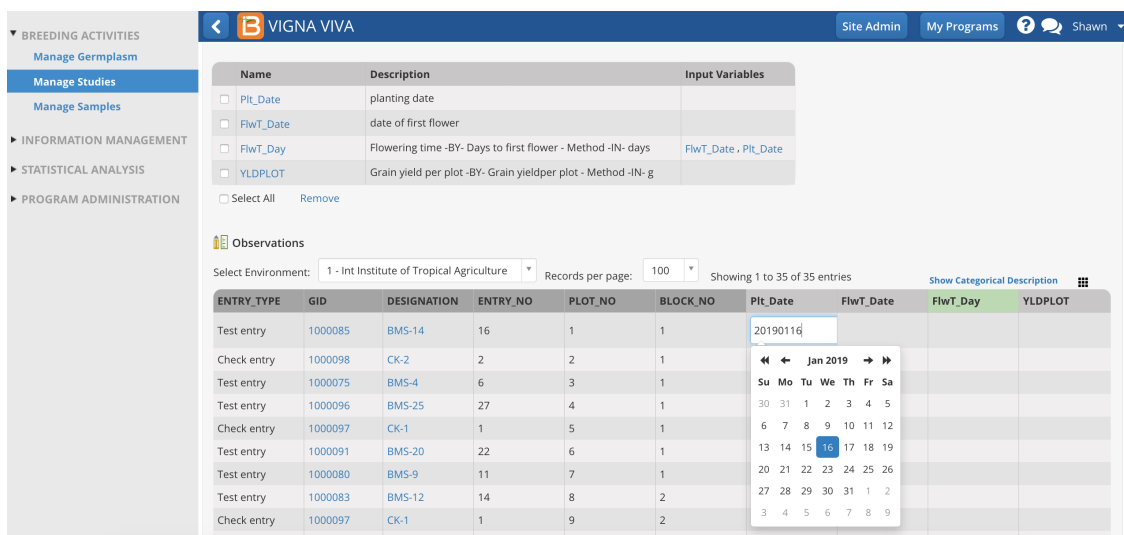
Data Collection

About

Once you have your observation datasets in place you can start collecting data for your study. You can do this in several ways:

- Inline editing
- Study Book file export and import

Inline Edits

You can modify trait observations by directly clicking on them and typing.

- Click on a cell that you want to modify. The cell should now become editable. Once you've described the desired value you can click outside of the cell to save the input value. In this case you don't need to click on the Save button, the value is automatically saved for you.

Export

Exporting a study book from Manage Studies allows you to export the Study Book in Excel format (one instance per .xls), where measurements can entered offline and then imported back. If you would like to export the entire study in a single .xls file see [Browse Studies.](#)

- Click on **Actions>Data Collection Options>Export study book** to download the study book file. Then select the

study instances that you want to consider for download.

- If your study has more than one dataset, choose the appropriate one and Continue.

File Format

Observation, or plot-level, datasets have several export format options. Sub-observation data sets only offer .csv format - expect expanded options for sub-observations datasets in upcoming releases. **Note:** If you export more than one instance at a time you'll get a .zip file containing on excel/csv per instance.

- CSV
- Excel: Format for manual offline measurements taking. This format is compatible with the[DIB handheld data capture](#) application
- Fieldbook KSU: Format compatible with the[KSU fieldbook](#) data capture application (.csv & .xls)

- Select the export format and the data collection order. Serpentine data collection order is available after a field map has been created (see more [Make Field Map)](#).

The exported file is ready for data entry or for label printing.

- Note: OBS_UNIT_ID is a unique observation id suitable for barcode labeling of individual observations.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	ENTRY_TYPE	GID	DESIGNATION	ENTRY_NO	OBS_UNIT_ID	REP_NO	BLOCK_NO	PLOT_NO	PLANT_NO	PH_M_cm				
2	Test entry	351041	IB69-1-1-1	69	306e6c23-a45f-401d-bfe3-c52ea6b54b58	1	1	1	1					
3	Test entry	351041	IB69-1-1-1	69	b7a58c5d-0ebe-4872-aaa0-b0495686996e	1	1	1	2					
4	Test entry	351041	IB69-1-1-1	69	64c8f4f5-b4e3-4db5-92f7-69714f4dc783	1	1	1	3					
5	Test entry	351041	IB69-1-1-1	69	c22c8cfb-8c90-4271-8629-cba4cdcce427	1	1	1	4					
6	Test entry	351041	IB69-1-1-1	69	c4583d33-1ef8-46d9-96c1-02a6d7271d9f	1	1	1	5					
7	Test entry	350991	IB19-1-1-1	19	d45069c9-337b-422c-8d75-980414ca2145	1	1	2	1					
8	Test entry	350991	IB19-1-1-1	19	e53b0c26-f916-4ce0-bc2d-83b51c3e9703	1	1	2	2					
9	Test entry	350991	IB19-1-1-1	19	43c6f0d2-95b7-4b66-9895-41644c859cb0	1	1	2	3					
10	Test entry	350991	IB19-1-1-1	19	048e070a-54ce-448a-a955-41dd984bc117	1	1	2	4					

Sub-Sampling_1_Ibadan_PLANT_SUB

Import

- Click on **Actions>Data Collection Options>Import measurements options** to browse for the file to upload

- Select the file and format you want to upload

At this point you can review the imported data. If there is a problem, you can **Discard** the whole dataset or manually modify the problematic values (see below).

- Click on **Save** to store the reviewed measurements. **Note:** It's important to note that existing data will be overwritten. If you don't want data for a particular trait to be overwritten you can erase the corresponding trait column from the imported file

Out-of-Bounds

If the value for a given trait variable exceeds the expected range defined in the ontology (see [Manage Ontology](#)), the BMS will flag these values in red. You are not able to save the data until the out-of-bounds values have been validated, corrected or accepted.

Review & Validate

- Review out-of-bounds data from the Actions Menu under Data Collection Options.

Out-of-bounds values for the aleurone color scale (1-5) are highlighted red and are preventing the data from being saved.

- Choose how to proceed with out-of-bounds data.
  - Review Details
  - Accept all data as-is
  - Set all exceptions to missing
- Review details and select Next to navigate out-of-bound values and make individual decisions about them.
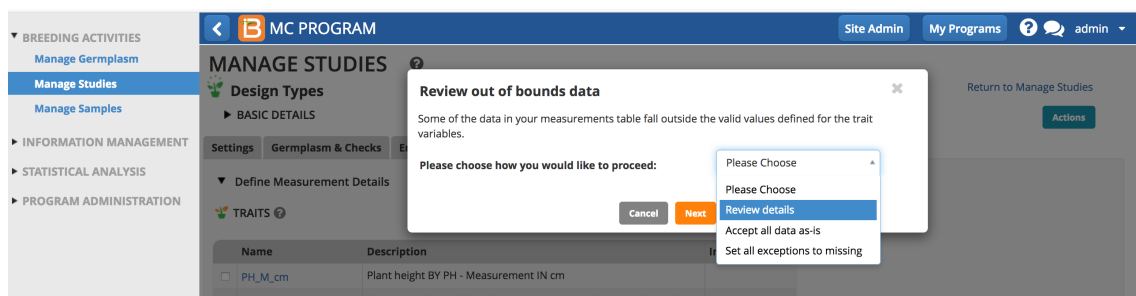
- Review the details of out-of-bounds data. Enter revised values, accept the out of range values, or set the data to missing. Finish
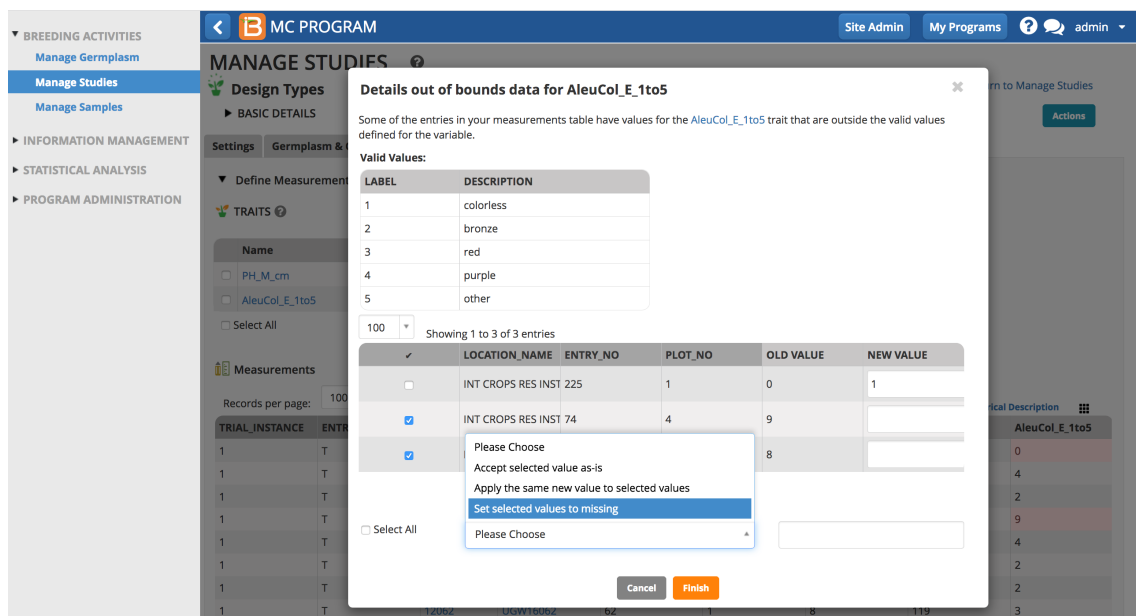
Aleurone color (scale 1-5) has three out-of-bounds values. Plot number one was given a revised value of 1 and the other two plots are set to missing.

- After correction and acceptance, save the study.

Set all exceptions to missing will designate out-of-bounds as "missing".
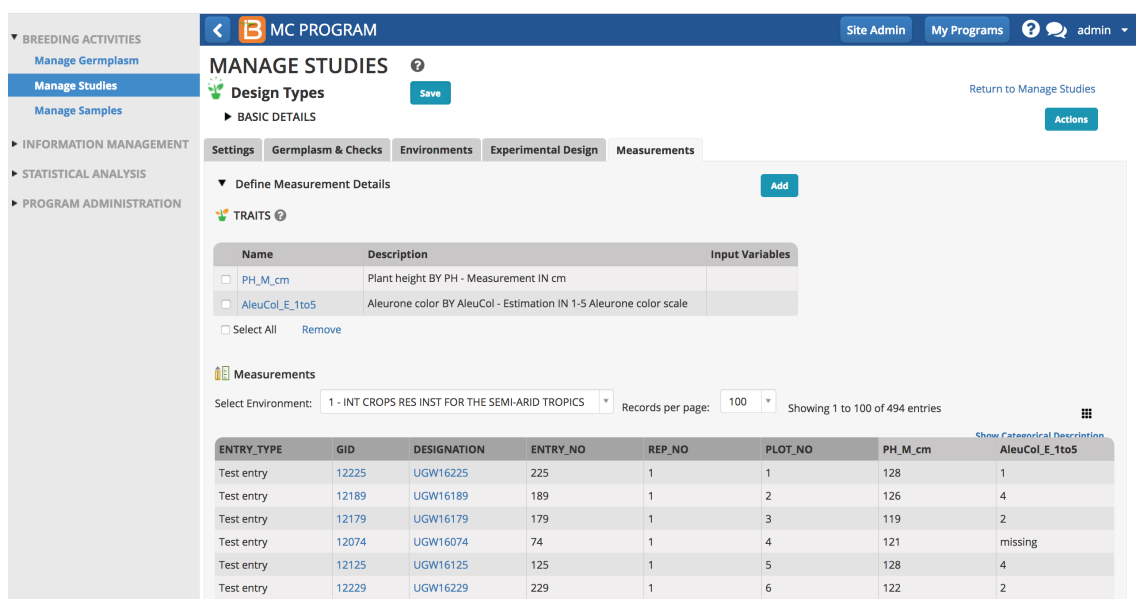
Accepting data as-is will not change the out-of-bounds values. Accepted out-of-bounds values are highlighted a light blue color.

Inline Validation

- Perform inline decisions with out of bound data by editing a given cell. Either enter new value or right click to accept or exclude.

Derived Variables

Derived variable names are highlighted green within the measurements tab. The input variables are visible in the trait summary. (See more on adding **Formulas** to traits in the Ontology).

Add Derived & Input Variables

You must add the inputs for derived variable calculations to the dataset. Saving a study when an input variable is missing results in a notification.

Warning message that one of the input variables needed to calculate Fod_Moi_pct is missing from this study

Execute Calculations

- Select execute calculated variable.

FlwT_day is a trait derived from a calculation of inputs from two other traits, Plt_Date and FlwrT_Date.

- Select the derived variable and study instance to calculate. Calculations are done by individual trait and instance to avoid performance problems.

- Save the calculations. Keep in mind that derived variables are subject to the same out-of-bounds validation (see above) as other variables. Out-of-bounds values will need to be accepted, rejected, or corrected to save.

- Repeat for all instances of the study.

Related Topics

- [Study Design](#)
- [Observations & Sub-Observations](#)
- [Data Collection](#)
- [Crossing](#)
- [Advancement](#)
- [Manage Ontology](#)