

Using Field Book App with T3

Used on Android phones and tablets

Google Play <https://play.google.com/store/apps/details?id=com.fieldbook.tracker>

GitHub <https://github.com/PhenoApps/Field-Book>

Version 5.1.0 of Field Book App released Oct 18, 2021

General Tutorial

Breedbase: Interfacing with the Field Book App

https://youtu.be/s0b_kzutQTc

Breedbase manual for Field Book App

https://solgenomics.github.io/sgn/03_managing_breeding_data/03_09.html

Using files to transfer trials and traits between the Field Book App and computer

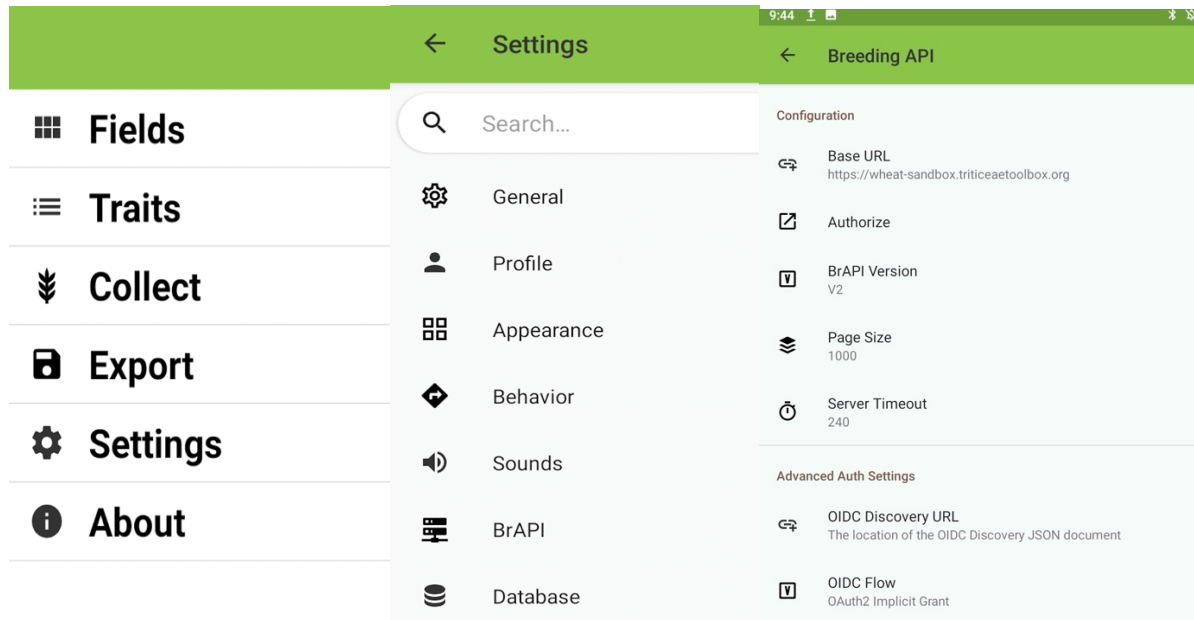
1. design the trial on the computer
2. connect the Android device to the computer using USB cable
3. move the files from computer to the correct folders on the Android device
4. import trial and traits into the Field Book App
5. collect data
6. export trial data
7. move the files from Android device to the computer using USB cable

Using the BrAPI feature on T3

1. design the trial on the computer
2. submit the trial to production machine so the trial won't be erased
3. import trial and traits into the Field Book App using BrAPI
4. collect data
5. export trial data to the computer

Setting up Android device to use BrAPI

1. On Field Book App go to Settings => BrAPI



2. Select Settings, BrAPI

- a. Configuration: set BrAPI Version = V2
- b. Page Size: 50
- b. Advanced Auth Settings: set OIDC Flow = OAuth2 Implicit Grant
- c. BrAPI Base URL:
<https://wheat-sandbox.triticeaetoolbox.org/>
<https://barley-sandbox.triticeaetoolbox.org/>
<https://oat-sandbox.triticeaetoolbox.org/>
<https://wheatcap.triticeaetoolbox.org/>

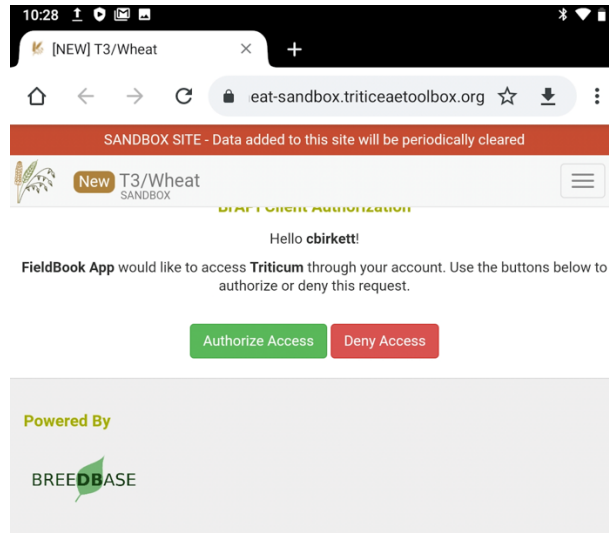
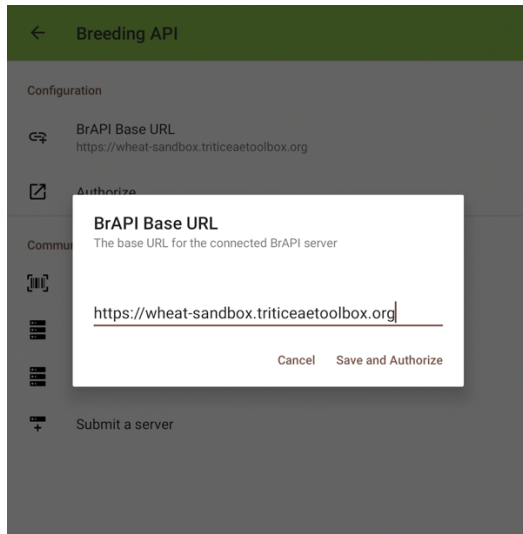
Note: The "scan a server barcode" and "Community Servers" features do not work.

3. Authorize - if you didn't authorize in the previous step

Select "Authorize"

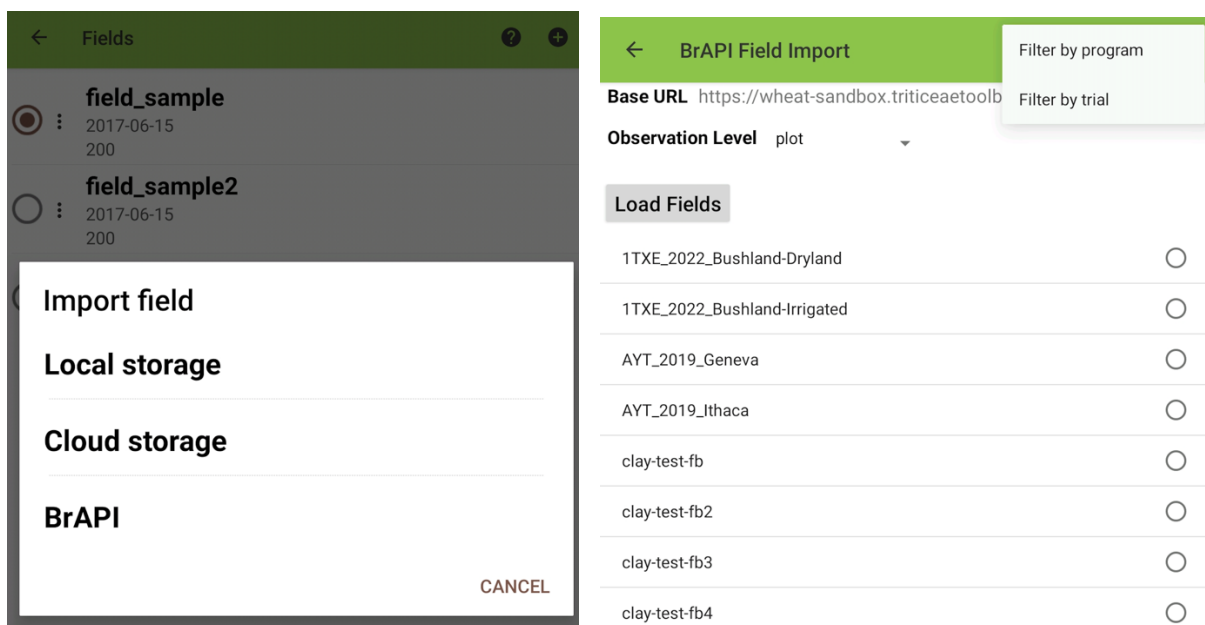
login to the server, select "Authorize Access"

Note: When you see "Your connection is not private", you should select the "Advanced" button then select "Proceed to fieldbook.phenoapps.org (unsafe)". The first time you do this step the Field Book App will crash but on the second try it should succeed. You should see that the "Authorize Access" section has changed to "Reauthorize: Brapi is currently authorized with ..."



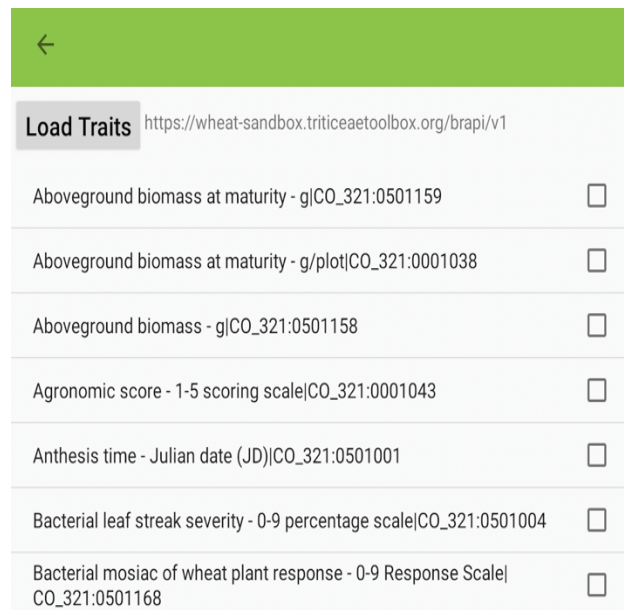
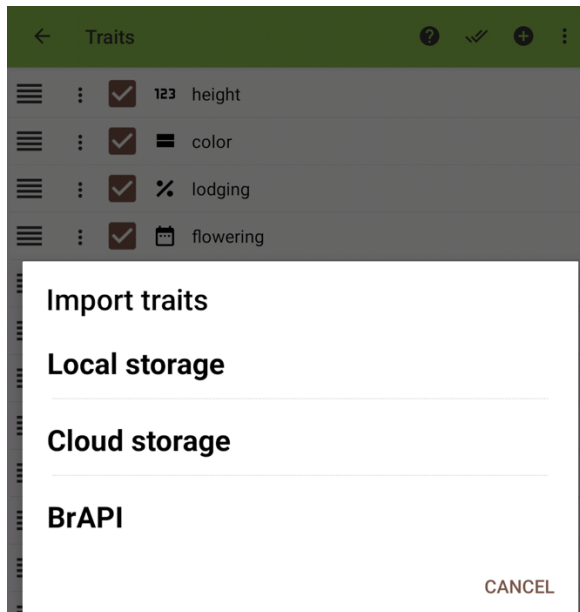
4. Import Field from using BrAPI

- 1) go to Fields
- 2) select "+" icon in upper right corner
- 3) select "BrAPI"
- 4) If you haven't set the page size to 50 you will get an endless activity indicator. To restrict your search, select the 3 dots in upper right corner, "Filter by program", select the desired program, then select the "Select program" button.
- 5) Select the **Observation Level**. This should normally be "plot". If you have used the Breedbase Experiment Design to load plant entries then you can use "plant".
https://wiki.brapi.org/index.php/Observation_Levels
- 6) select Field trial, then select "Save Field"
- 7) select the Field trial you would like to collect data for



5. Import Traits using BrAPI

- 1) go to Traits
- 2) select three vertical dots in upper right corner (more options)
- 3) select "Import/Export", then select "Import", then select "BrAPI"
- 4) Export current trait List? - select No
- 5) select "BrAPI"
- 6) select the traits you want to use then "Save Traits"



6. Select traits from the list of traits

7. Collect data

8. Exporting using BrAPI

Initially the "New Observations" will show the number of measurements that you collected. After exporting this number will go to 0.

