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 5.5 of Field Book App released Nov 30, 2023

Field Book Manual
https://docs.fieldbook.phenoapps.org/en/latest/field-book.html

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/using-fieldbook-app.html

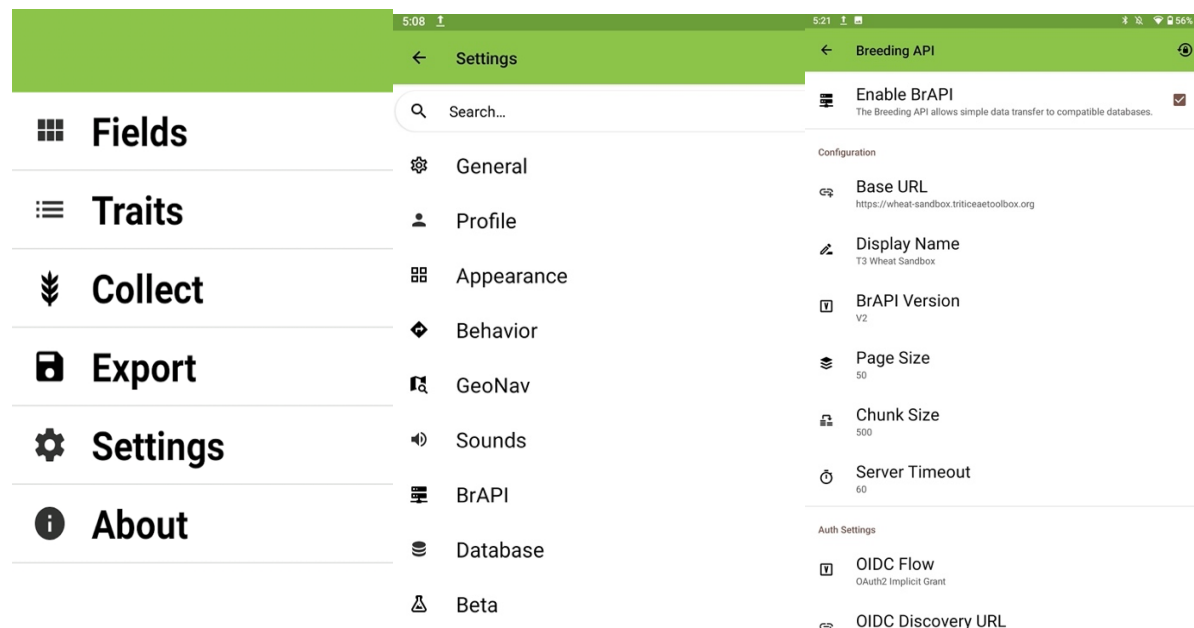Using files to transfer trials and traits between the Field Book App and computer
1. design the trial on the computer
2. connect the Android device to the computer using USB cable
3. move the files from computer to the correct folders on the Android device
4. import trial and traits into the Field Book 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. select "Enable BrAPI"
   b. Configuration: set BrAPI Version = V2
   c. Page Size: 50
   d. BrAPI Base URL:
       https://wheat-sandbox.triticeaetoolbox.org/
       https://barley-sandbox.triticeaetoolbox.org/
       https://oat-sandbox.triticeaetoolbox.org/
       https://wheatcap.triticeaetoolbox.org/

d. Auth Settings:
    set OIDC Flow = OAuth2 Implicit Grant
    set OIDC Discovery URL to the same as Base URL
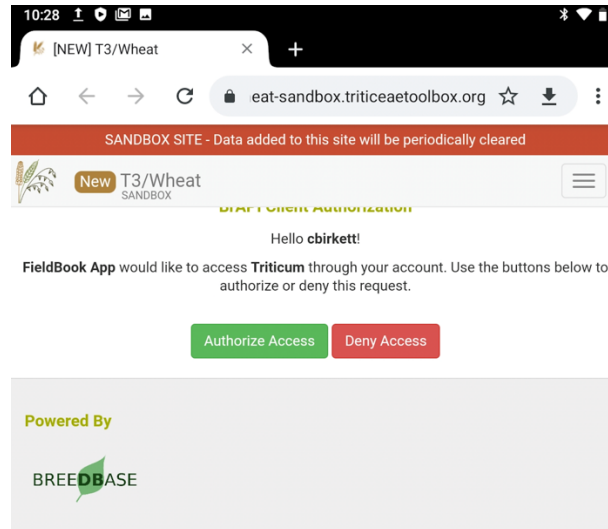   before v5.3 the OIDC Discover should be set manually using the following QR
    https://wheat-sandbox.triticeaetoolbox.org/.well-known/openid-configuration

https://barley-sandbox.triticeaetoolbox.org/.well-known/openid-configuration

https://oat-sandbox.triticeaetoolbox.org/.well-known/openid-configuration

https://wheatcap.triticeaetoolbox.org/.well-known/openid-configuration
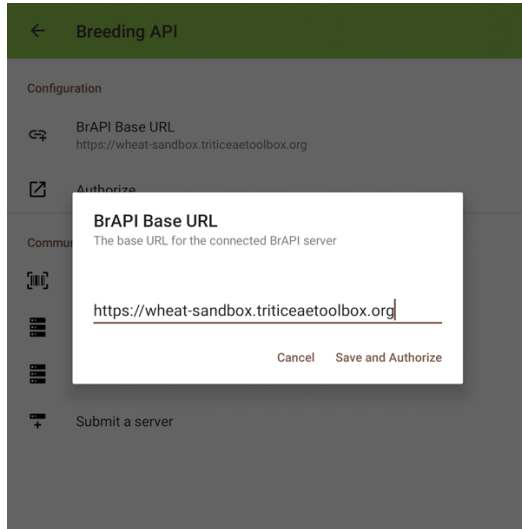

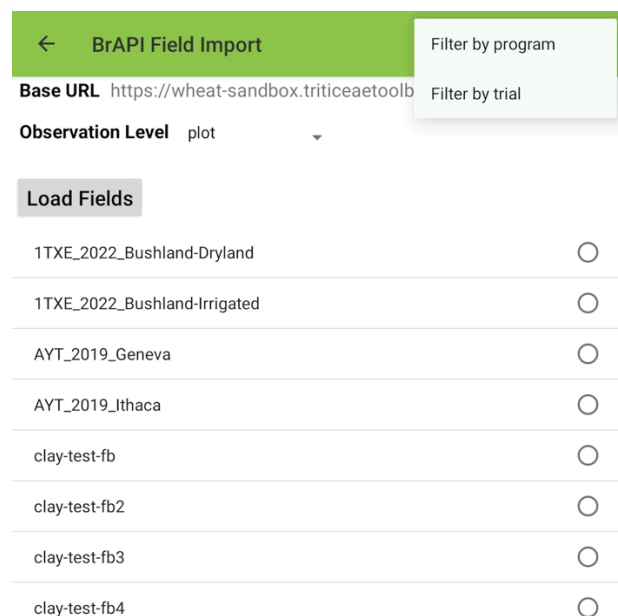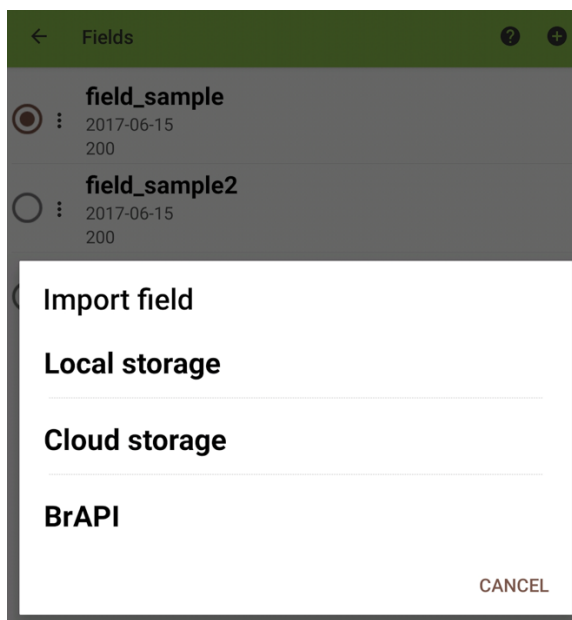3. Authorize - if you didn't authorize in the previous step
Select "Authorize"
login to the server, select "Authorize Access"

Note: If you see "Your connection is not private", you should select the "Advanced" button then select "Proceed to fieldbook.phenoapps.org (unsafe). You should see that the "Authorize Access" section has changed to "Reauthorize: BrAPI is currently authorized with ..."
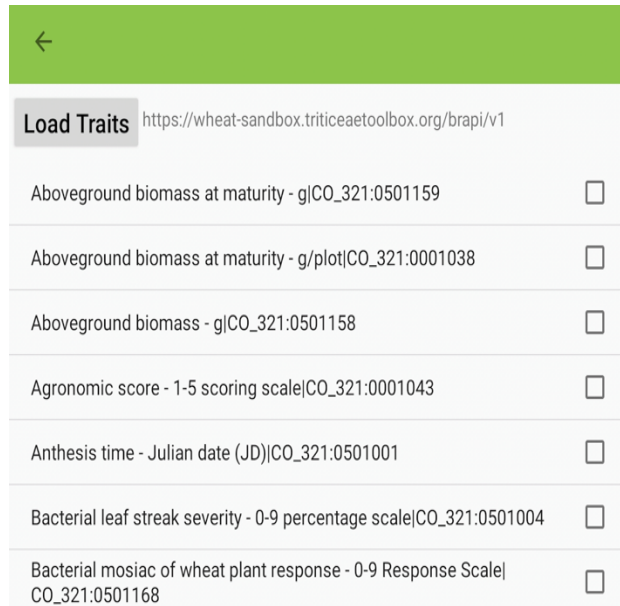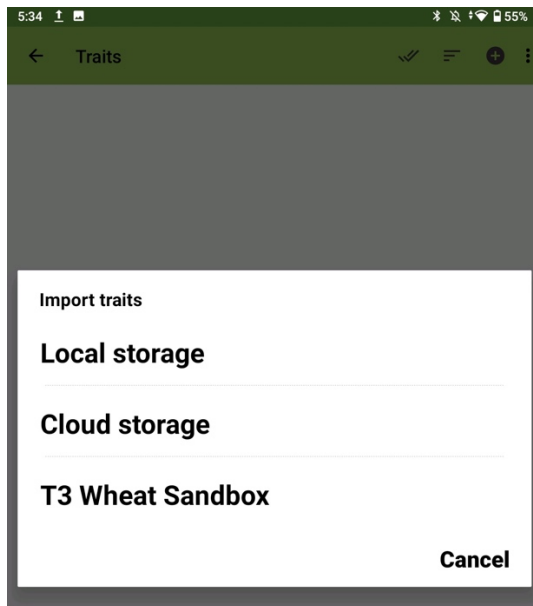
4. Import Field from using BrAPI
1) go to Fields
2) select "+" icon in upper right corner
3) Select the server you want (T3 Wheat Sandbox)
4) If you haven't set the page size to 50 you will get an endless activity indicator. To restrict you search, select the 3 dots in upper right corner, "Filter by 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://plant-breeding-api.readthedocs.io/en/latest/docs/best_practices/Observation_Levels.html
6) select Field trial, select "Preview", then select "Save."
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 the server you want (T3 Wheat Sandbox)
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
1) Go to Export
2) Select your server (T3 Wheat Sandbox)
3) Select Export
Initially the "New Observations" will show the number of measurements that you collected.
After exporting this number will go to 0.