MLN Electronic Survey Manual

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1. Introduction

Electronic versions of the MLN Field Survey and the MLN Seed Survey forms have been developed using ODK software. The survey tools are free to download and will work on any Android device (smartphone or tablets that have GPS capacity). No internet connection is required to collect data in the field. All data will be stored on the device and saved data forms will be sent when a connection is available.

All standardised survey data collected using the tools will be stored on a secure server in the MLN Toolbox data management system developed in partnership with Aarhus University, Denmark. No survey data from any country will be released in the public domain until it is approved and authorised by the appointed country focal point – a country designated national plant protection officer.

2. Download and Installation

1. Download ODK collect
   https://play.google.com/store/apps/details?id=org.odk.collect.android&hl=en
2. Download ZXing barcode scanner
   https://play.google.com/store/apps/details?id=com.google.zxing.client.android&hl=en

NB: Device GPS MUST be switched on in order to complete the survey forms

3. Required Device Settings (First time Use Only)

- Open ODK and add settings (**NB: settings needed for first time use only**).
- Click on Apps button on device then scroll to ODK Collect icon. Click to open
- For first time use only, create the server settings:
  - Click on menu icon on main ODK page (see fig. 1).
  - Select "General Settings"
  - Click on "Configure platform settings" and enter the following
    - URL: https://kc.kobotoolbox.org
    - Username: mlnsurvey_*yourcountryname* (e.g., mlnsurvey_malawi)
    - Password: mlnsurvey_*yourcountryname* (e.g., mlnsurvey_malawi)
    - If you want to change the password
      - go to kc.kobotoolbox.org
      - login using old password.
      - click on the three lines at the top left corner of the page

- choose settings among the list in the left column
- click on change password
- submit the new passwork and click ok

  o In "AUTO SEND". It is recommended to select "Auto send with Wi-Fi" and "Auto send with network" [This will ensure automatic sending of data forms when connected].
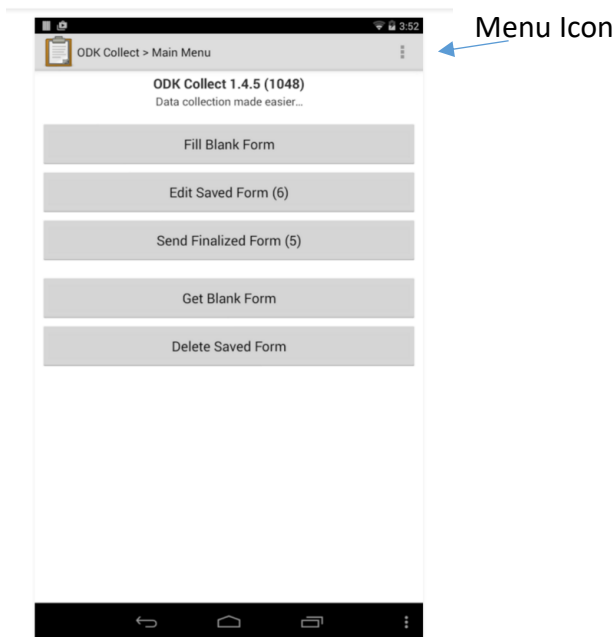

Menu Icon

Fig 1. ODK Collect Main menu Screen

4. Loading the MLN Survey Forms (Field and Seed Surveys)

Load the MLN FIELD and SEED survey forms (**NB: for first time use only, or if an updated version of the forms is available**)

- On main ODK page. Click on "Get Blank Form" (see Fig 1)
- Enter username and password if needed. Click OK for server authentication
- Select MLN FIELD survey form and MLN SEED survey form (**NB: For both forms ALWAYS select the HIGHEST form version number. This will ensure that you have most up-to-date version of the forms**}
- Click on "Get Selected"

5. Using the MLN Field Survey Form

Open the MLN FIELD Survey Form
- On main ODK page. Click on "Fill Blank Form" (see Fig 1)
- Select MLN FIELD Survey Form
- Swipe screen and fill in form. Enter text or select options from lists.

- To collect GPS coordinates. Click on "Record Location" button. Once the GPS signal has been received the latitude, longitude and elevation will be automatically recorded.
- If MLN symptoms are observed in a plot, you have the option to take a photo of a symptomatic leaf. It is recommended to take a photo of a leaf that has clear symptoms.
- For ALL leaf samples collected the unique QR code for the sample MUST be recorded. Stick a unique QR code label on each sample bag and also on the bulk sample bag. Click on the "Get Barcode" button in the survey form. The camera will open. Align the camera directly over the QR code. Once the QR code is scanned the code will automatically appear in the survey form. Check that this matches the code on the sample bag (If it does not match – click on "Replace barcode" and repeat).
- Please note some of the questions on the survey form are conditional – selection of a response will lead to additional relevant questions
- Note: If a number (e.g. number of other diseases etc) needs to be changed. It is possible to scroll back, edit the number and add the additional data without losing any previously entered data.

5. Saving the Form.
- Once the survey is completed click on "Save Form and Exit"

6. Sending the Completed Form
- When a WIFI connection is available. Open ODK. Saved forms will either be sent automatically or click on "Send Finalized Form" button on the main ODK menu screen (See Fig 1)

6. Using the MLN SEED Survey Form

1. Open the MLN SEED Survey Form
- On main ODK page. Click on "Fill Blank Form" (see Fig 1)
- Select MLN SEED Survey Form
- Swipe screen and fill in form. Enter text or select options from lists.
- To collect GPS coordinates. Click on "Record Location" button. Once the GPS signal has been received the latitude, longitude and elevation will be automatically recorded
- It is essential that you enter the number of seed samples of collected
- For ALL seed samples collected the unique QR code for the sample MUST be recorded. Stick a unique QR code label on each sample bag. Click on the "Get Barcode" button in the survey form. The camera will open. Align the camera directly over the QR code. Once the QR code is scanned the code will automatically appear in the survey form. Check that this matches the code on the sample bag (If it does not match – click on "Replace barcode" and repeat).
- Please note some of the questions on the survey form are conditional – selection of a response will lead to additional relevant questions

2. Saving the Form.
- Once the survey is completed click on "Save Form and Exit"

3. Sending the Completed Form

- When a WIFI connection is available. Open ODK. Saved forms will either be sent automatically or click on "Send Finalized Form" button on the main ODK menu screen (See Fig 1).

For more information contact:

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