User Manual on Mobile based Expert System for Banana Crop



Version 1.0

Developed
by
e-Extension Centre,
Tamilnadu Agricultural University(TNAU), Coimbatore in Collaboration with
Centre for Development of Advanced Computing(C-DAC), Hyderabad

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1. Installing Banana Expert System Mobile Application

a) Banana Expert System can be installed on any Android mobile device by directly clicking on below Google play link

https://play.google.com/store/apps/details?id=com.cdac.tnau banana eng&hl=en

(OR)

Type Banana Expert System in Google play store. From list of displayed result select "Banana Expert System".

b) Click on "Install" button to install Banana Expert System.

Wait for sometime, depending on the available network speed mobile application will be installed on to the device.

2. Starting Application

To start the **Banana Expert System** application follow the steps given below:

- 1. Click on Banana Expert System icon on application menu.
- 2. On clicking the Banana Expert System icon, the application starts and displays "Splash Screen".
- 3. Click on PROCEED button, on Clicking it Home page will be displayed.

Home page contains the following options

- a. Decision Support System
- b. Crop Doctor
- c. Information System



Banana Expert System



This Mobile Application is Jointly Developed by TNAU, Coimbatore & C-DAC, Hyderabad



Splash Screen



Home Page

3. Decision Support System

To start the **Decision Support System** follow the steps given below:

- 1. Click on Decision Support System button in Home page.
- 2. On clicking Decision Support System button, list of sub topics related to Banana Decision Support System will be displayed.
- 3. Click on list to read related content.



Decision Support System First Screen

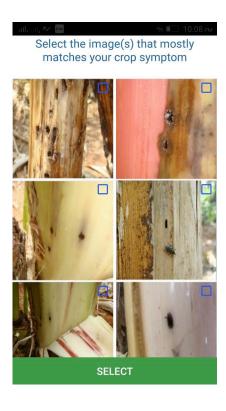
4. Crop Doctor

To start the **Crop Doctor** follow the steps given below:

- 1. Click on Crop Doctor button in Home page.
- 2. On clicking Crop Doctor button, it displays list of primary symptoms.

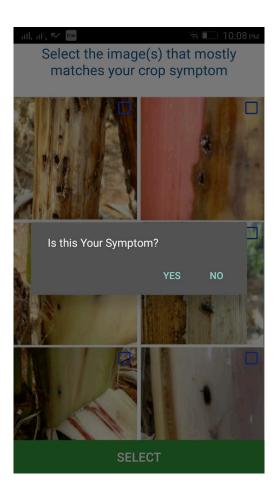


- 3. Click on primary symptoms that has been observed in banana plant.
- 4. On clicking primary symptom, images related to respective primary symptom will be displayed.

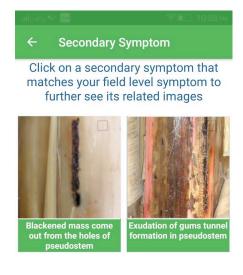


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- 5. Select images that are related to primary symptom and click on "Select" button. (Upto 3 Images can be selected)
- 6. On clicking "Select" button it will prompt with a message "Is this your Symptom?". If symptom is related to observed symptoms click on YES button else click on NO button.



7. On clicking on YES button it will display "Secondary Symptoms" related to selected primary symptoms.



CONTINUE

8. Click on secondary symptoms that has been observed in banana plant.



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- 9. On clicking secondary symptom, images related to respective secondary symptom will be displayed.
- 10. Select images that are related to secondary symptom and click on "Select" button. (Only 3 Images can be selected)
- 11. On clicking "Select" button it will prompt with message "Is this your Symptom?"If symptom is related to observed secondary symptom click on YES button else click on NO button.
- 12. After selection of secondary symptoms click on CONTINUE button.
- 13. On clicking CONTINUE button it will display list of selected images. Click on DIAGNOSE button.

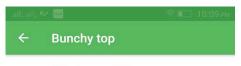


- 14. On clicking DIAGNOSE button, list of disease(s) caused will be displayed.
- 15. Click on Symptoms, Identification and Control measure to read related content.



Click on above Symptoms / Identification / Control measures for more details

16. Click on VIDEO icon (bottom left icon) to view diseases related video.



Nature of Damage

- Initially, dark green streaks appears in the veins of lower portion of the leaf midrib and the leaf stem
- Dark green, hook-like extensions of the leaf lamina veins can be seen in the narrow, light-green zone between the midrib and the lamina.
- On mature plants infected with BBTV, new leaves emerge with difficulty, are narrower than normal, are wavy rather than flat, and have yellow (chlorotic) leaf margins.
- They appear to be ?bunched? at the top of the plant, the symptom for which this disease is named.
- Severely infected banana plants usually will not fruit, but if fruit is produced, the banana hands and fingers are likely to be distorted and twisted.



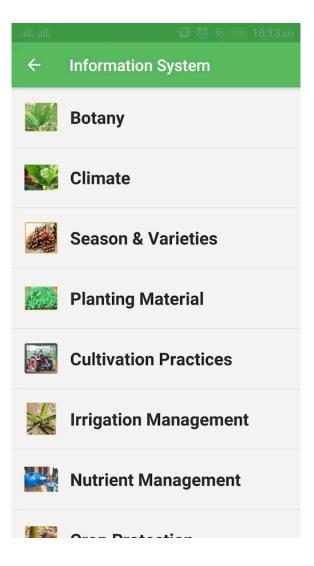




5. Information System

To start the **Information System** follow the steps given below:

- 1. Click on Information System button in Home page.
- 2. On clicking Information System button, list of subtopics related to Banana Information System will be displayed.
- 3. Click on list to read related content.



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6. Closing Application

To close the application follow the steps given below:

1. Navigate to Splash screen.2. Press back button on the device, prompt will be displayed with message "Are you sure?". Click on YES button to close the application.

