THE IPM APP FOR PLANT PESTS – UConn Extension

The IPM app will provide direct access in the field to a database of information on plant pests, help the user identify the plant pest by comparing photos of the pest itself and damage caused by the pest on the crop, provide resources about the pest and how to manage it using photos, videos, text, and links to online resources. The IPM app would provide information on:

- Pests that are found in Connecticut (New England, Northeastern US)
- Pests that are found on many crops:
  - Vegetables (sweet corn, tomatoes, peppers, etc.)
  - Fruits (apples, peaches, blueberries, strawberries, etc.)
  - Ornamentals
    - Greenhouse crops: ornamentals (mums, Easter lilies, holiday crops), edible plants (herbs, vegetables, greens)
    - Nursery and garden center plants: trees, shrubs, and perennials
    - Landscape plants: trees, shrubs, and perennials
- Damage on plants caused by specific pests

Why is This App Needed?

- New and exciting diagnostic tools for commercial producers and businesses that grow or sell plants
- Make on-site, timely identification of plant pests and what is causing damage to their crops
- May reduce crop losses and increase profits
- The IPM Program Team will use the app to train growers and provide diagnostic tools onsite at grower locations.
- Proper identification and management of plant pests in agricultural crops is key to producing healthy food for the public and aesthetically-pleasing ornamental plants for landscapes.

To Use the App:

- A grower takes a photo of a plant pest or crop damage caused by the pest.
- Select one of the following: vegetables, fruits, greenhouse, nursery/garden center, or landscape.
- Select a particular plant within the crop grouping.
- Select the type of pest (insect, disease/abiotic, insect, mite, weed), or if the pest type is unknown, select where the damage is found on the plant (leaves, stems, flowers, fruits, roots) and match the pest and/or damage to images in the database to help identify what is causing the problem.
- Images in the app database would include
  - Pests that may cause the damage
  - Types of damage that occur on the crop.

Wish List

- Track the occurrence of pests in Connecticut, such as disease outbreaks
  - Provide GPS data and map pest locations
  - Allow the user to send information and questions to the UConn Diagnostic Center or the IPM Program team, with accompanying images and videos for pest diagnosis.
SELECT ONE OF THE FOLLOWING:

Vegetables  Fruits  Greenhouse  Nursery/Garden Center  Landscape

SELECT A PLANT OR PLANT GROUP:

Vegetables

Corn  Tomatoes  Peppers  Cucurbits

Fruits

Apples  Peaches  Strawberries  Blueberries
ORNAMENTALS

Greenhouse

Mums

Herbs

Holiday Crops

Nursery / Garden Center (Landscape will be similar)

Trees

Shrubs

Perennials
WHERE IS THE DAMAGE OCCURRING?

Leaves

Stem/Branches

Flowers

Fruits

Roots
The user takes or submits a photo:

The user searches the app database to match the symptoms on the plant to the plant pest that is causing the problem.

- **Additional information on the pest and the damage it causes to the crop**
  - Photos, videos, text, online resources (UConn IPM website, New England Vegetable Management Guide, New England Tree Fruit Guide, etc.)
  - Learn about the pest and its life cycle
  - Management recommendations