MyIPM for Vegetables

Commercial vegetable producers have a new tool to assist with integrated pest management (IPM) of diseases and insects in vegetables. MyIPM for Vegetables is the newest resource in the MyIPM app series (**https://myipm.app/**) for smartphones and smart devices. It currently includes modules for diseases and insects of cucurbits and tomatoes; modules for diseases and insects of additional vegetable crops are planned.

Modules contain images and descriptions of diseases and insects; information on available chemical, biological, and cultural management methods for each disease/insect; and tables of labeled fungicides and insecticides that include active ingredients, product names, FRAC/IRAC codes, efficacy ratings, application rates, preharvest intervals (PHIs), and restricted-entry intervals (REIs). Links to additional resources may also be included.

App content is focused on commercial vegetable production in the southeastern U.S., but users outside this area and home gardeners may also find information in the app useful. MyIPM for Vegetables content development was led by vegetable entomology and plant pathology specialists from universities within the southeastern U.S. who are part of the Southeastern Vegetable Extension Workers (SEVEW). The SEVEW are also responsible for the popular *Southeast U.S. Vegetable Crop Handbook* (**www.vegcrophandbook.com**) that has been a key resource for commercial vegetable producers in the southeastern U.S. for over 20 years. Author and image credits for specific disease or insect profiles and pictures are available at **https://myipm.app/vegetables/**.

MyIPM for Vegetables is not intended to replace product labels. It is a tool to help vegetable producers make informed IPM decisions. Pesticide users should always read and follow label instructions prior to use. Product labels may change. Product rates may differ depending on the site of application (e.g., field or greenhouse) or type of application (e.g., foliar-applied or soil-applied). Check product labels for additional instructions, precautions, and/or restrictions not listed in the app. Also, check the state registration status of products prior to purchase and use; products may not be registered for use in all states.

MyIPM for Vegetables is free to download for Apple (**Apple Store**) and Android (**Google Play**) devices. Content is downloaded directly to phones/devices; an internet connection or cell signal is not required to access content once it is downloaded. Updates, however, do require an internet connection or cell signal, and notifications will pop up when updates for downloaded modules and the appropriate internet/cell connection is available.

The MyIPM series began with MyIPM Fruit & Nut, which was originally developed by Clemson University in 2012 and focused on peaches and strawberries; the app has since expanded to include other small fruits, tree fruits, and pecans. Other apps in the series include MyIPM Row Crops and MyIPM Hawaii. The Southern IPM Center maintains the databases for the MyIPM series apps.

Scan to visit the MyIPM for Vegetables website.

Acknowledgment

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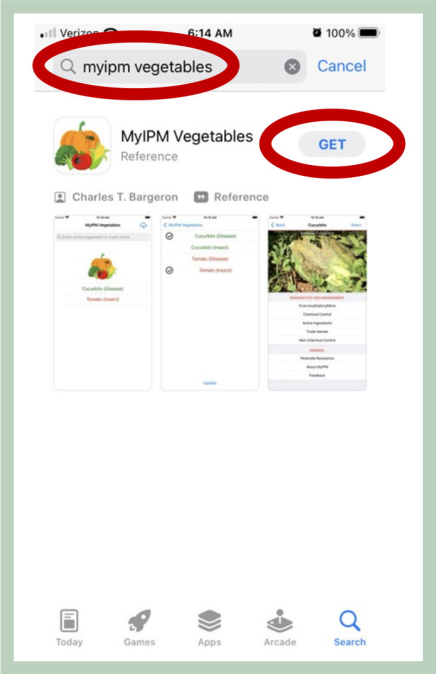
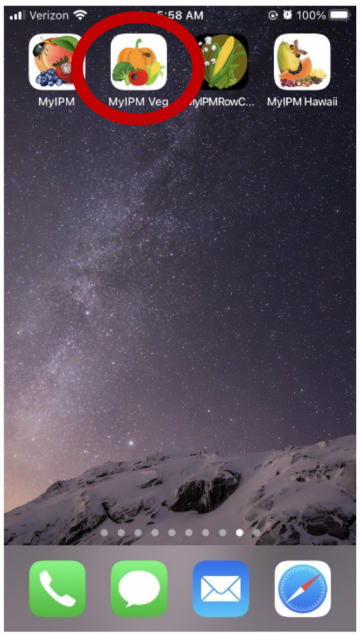
MyIPM for Vegetables How-To Guide

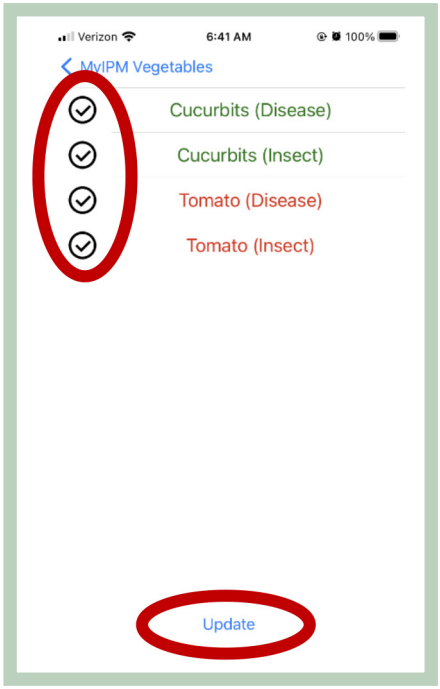
Step 1: Search your app store (Apple Store shown) for “MyIPM for Vegetables” and download the app to your smartphone or smart device.



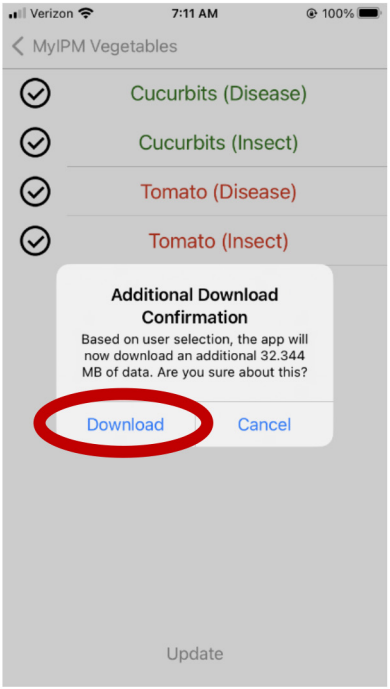
Step 2: Locate the MyIPM for Vegetables app on your smart device screen and tap the icon to open the app.



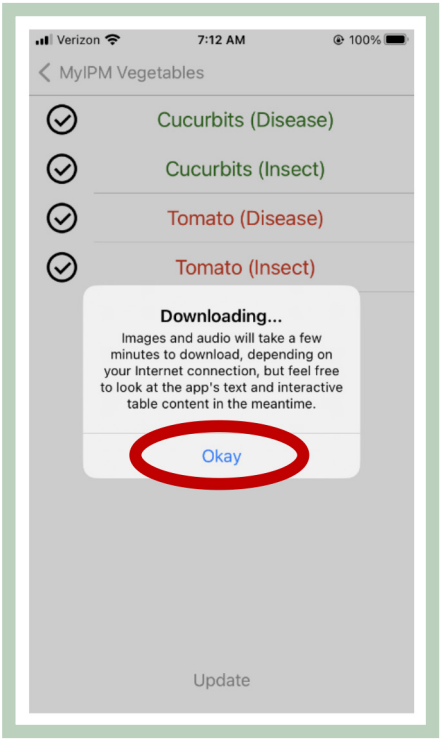
Step 3A: Select the module(s) you want to download. Then tap “Update” at the bottom of the screen.



Step 3B: A download notification will appear to indicate the size of the data to be downloaded. Tap “Download” to start the download.

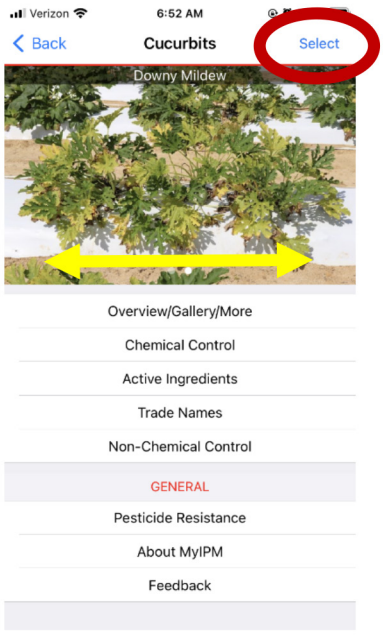


Step 3C: A second download notification will appear. Tap “Okay.” *Note: It may take a few minutes for audio and image files to download completely.*

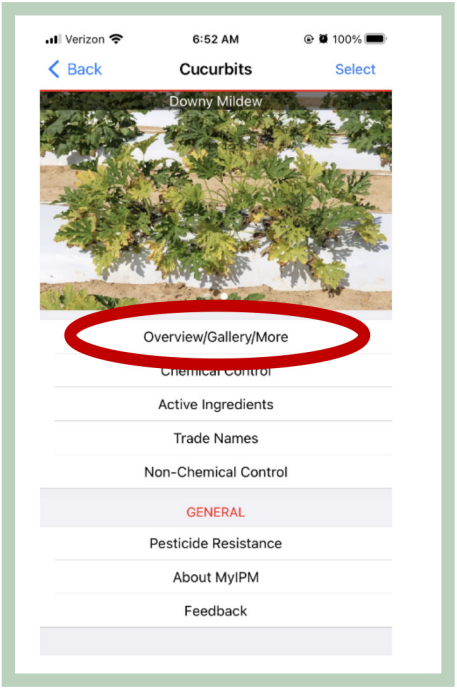


Step 4: After downloading the desired module(s), locate and select the module you want to open.

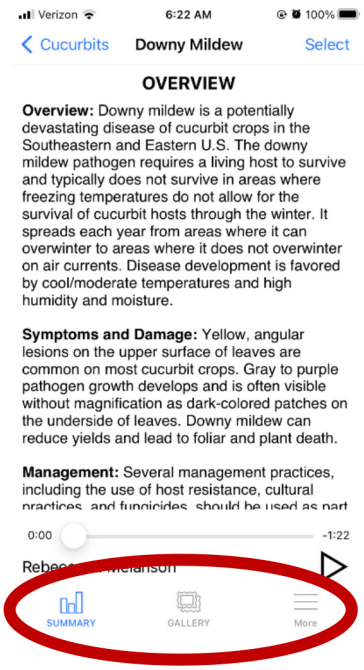
Step 5: Once a desired module is open, swipe left or right to view images of the diseases/insects or tap "Select" for a list of the diseases/insects in the app.



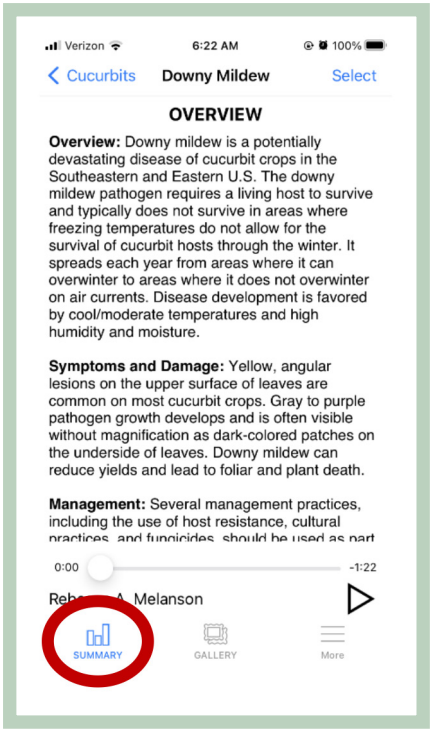
Step 6A: Tap "Overview/Gallery/More" to access the disease or insect summary, image gallery, and additional information.



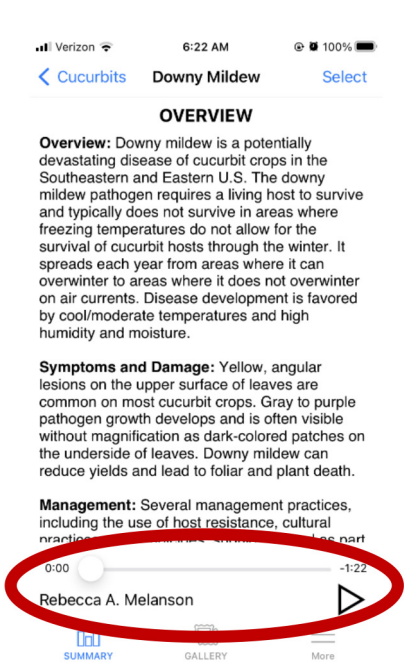
Step 6B: Select "Summary," "Gallery," or "More" to access the overview, images, and additional information, respectively.



Step 6C: The "Summary" provides a brief overview and description of the symptoms, damage, and management of the selected disease or insect.

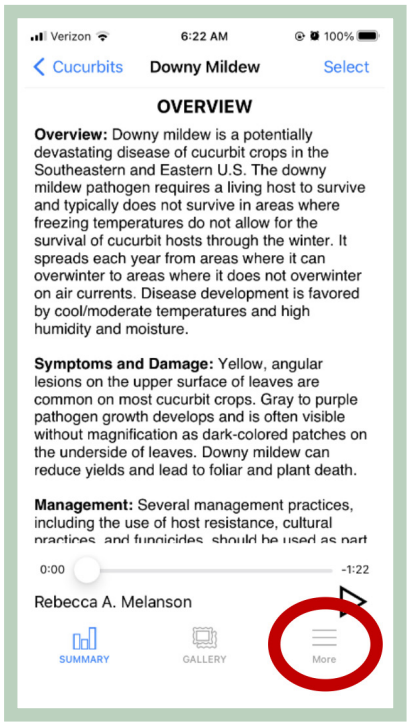


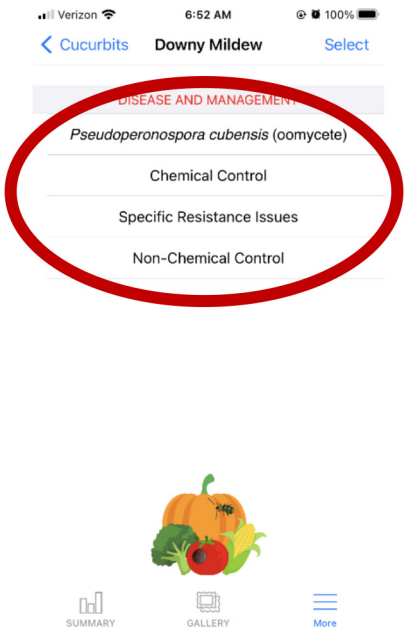
Step 6D: Short, 1- to 3-minute audio recordings may also be available. These are accessible from the bottom of the "Summary" page.

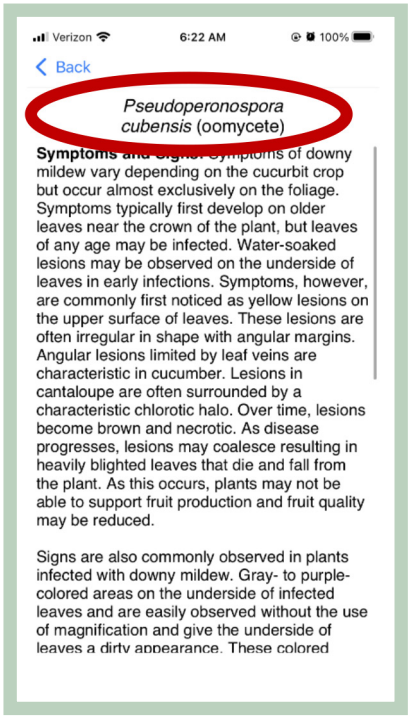


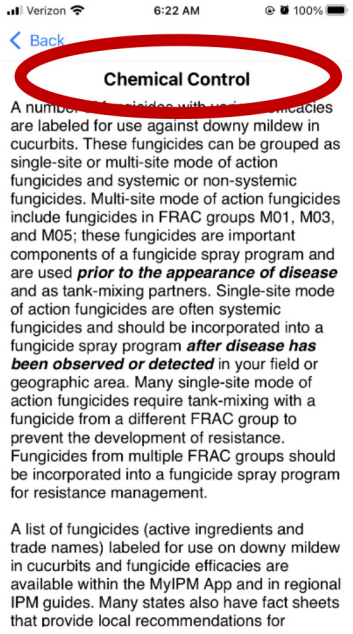
Step 6E: The "Gallery" contains images of disease signs and symptoms or insect stages and damage. Users can tap an image to enlarge it and can also zoom in on an image.

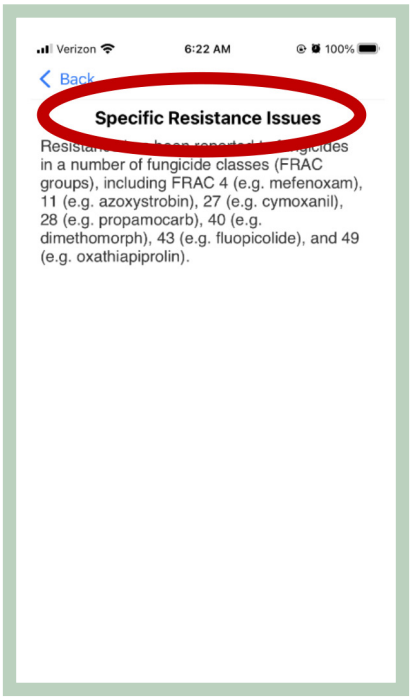
Step 6F: The "More" page provides additional information on the disease or insect, including more detailed descriptions of signs and symptoms or insects and damage and information about the disease cycle or insect life cycle (accessible by clicking on the **pathogen or insect name**), information about **chemical** and **non-chemical management**, and information about known pathogen or insect **resistance issues** to chemicals.

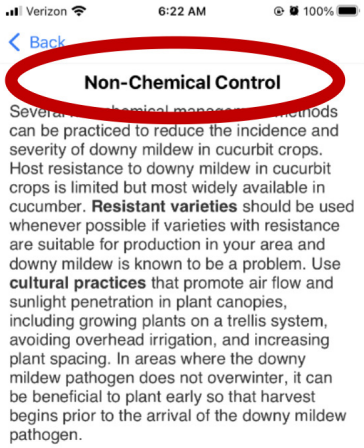




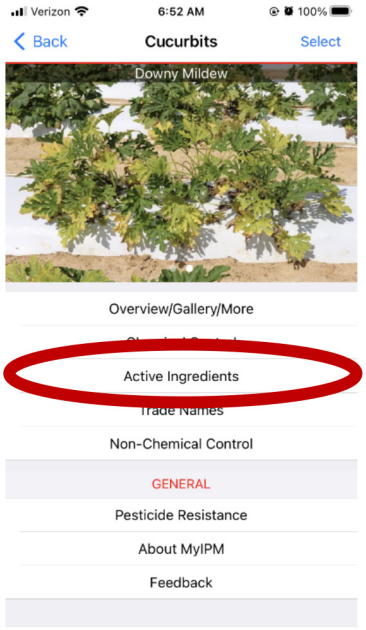


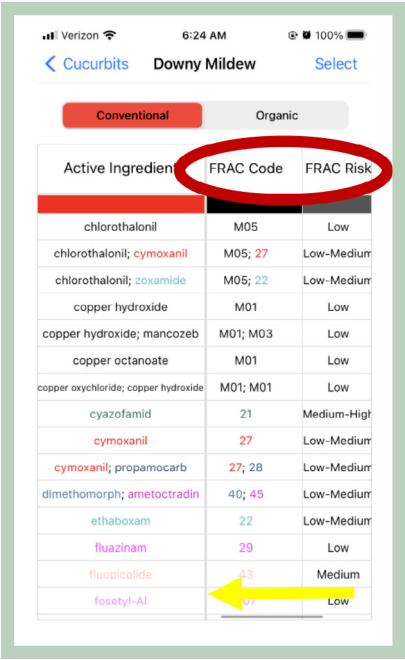


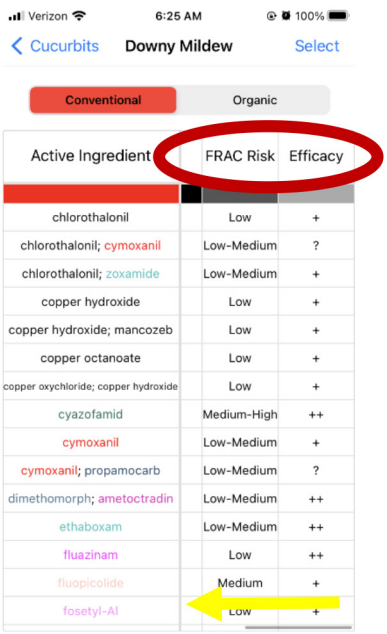




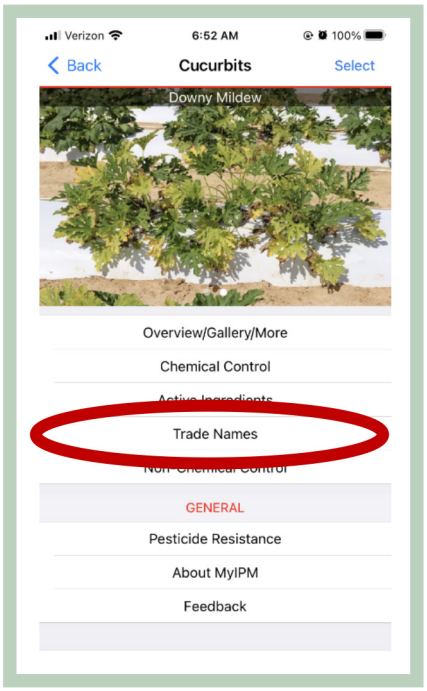
Step 7: Select “Active Ingredients” on the disease or insect home page to view a list of active ingredients labeled for use against the disease or insect. Swipe left on the table to access columns that display the **FRAC/IRAC code(s)**, **FRAC/IRAC risk**, and **efficacy rating**. The efficacy rating scale is: +++++ (excellent); ++++ (very good); +++ (good); ++ (fair); + (poor); and ? (unknown or no data). *Hint: Tap on a column name to sort the table by the entries in that column.*

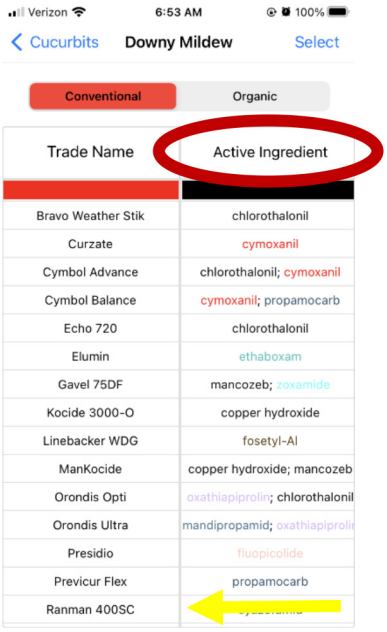


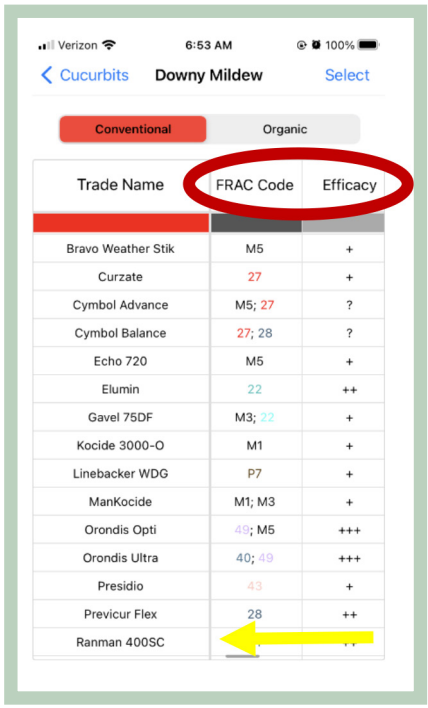


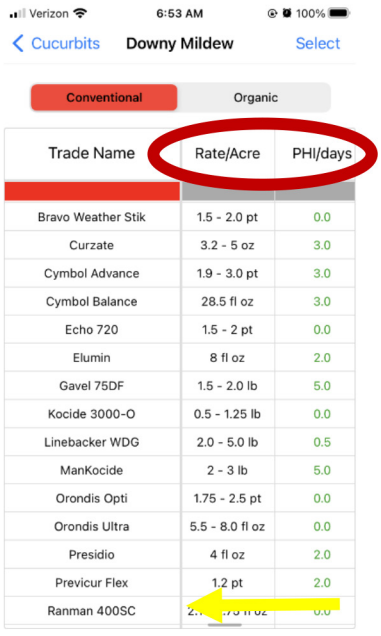


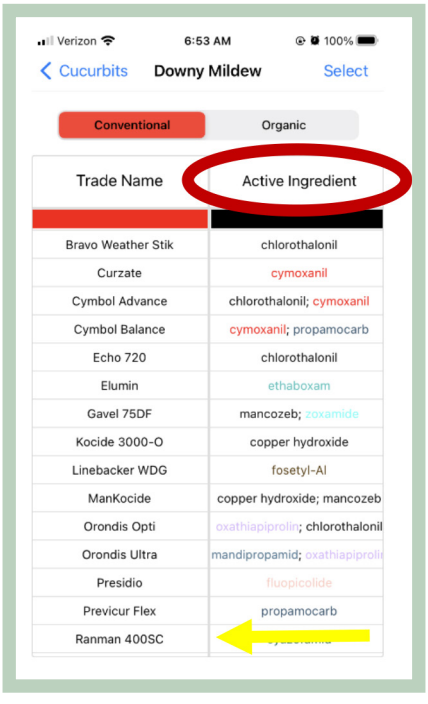
Step 8: Select “Trade Names” on the disease or insect home page to view a list of trade name products labeled for use against the disease or insect. Swipe left on the table to access columns that display the **active ingredient(s)**, **FRAC/IRAC code(s)**, **efficacy rating**, **rate/acre**, reentry interval (**REI**), preharvest interval (**PHI**), and **application limits**. The efficacy rating scale is: +++++ (excellent); ++++ (very good); +++ (good); ++ (fair); + (poor); and ? (unknown or no data). Switch between conventional and organic (OMRI-listed) products by tapping on “Conventional” or “Organic” at the top of the table. *Hint: Tap on a column name to sort the table by the entries in that column. Note: Additional products labeled for use against a particular disease or insect may also be available.*

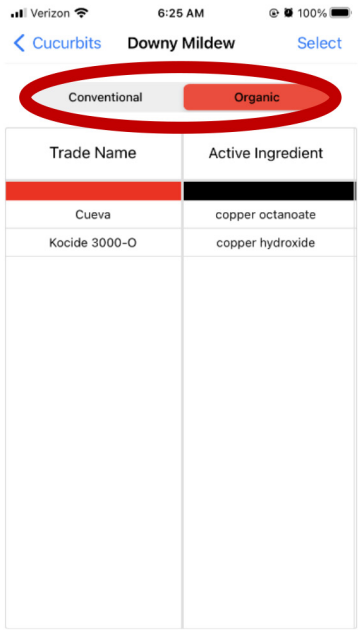






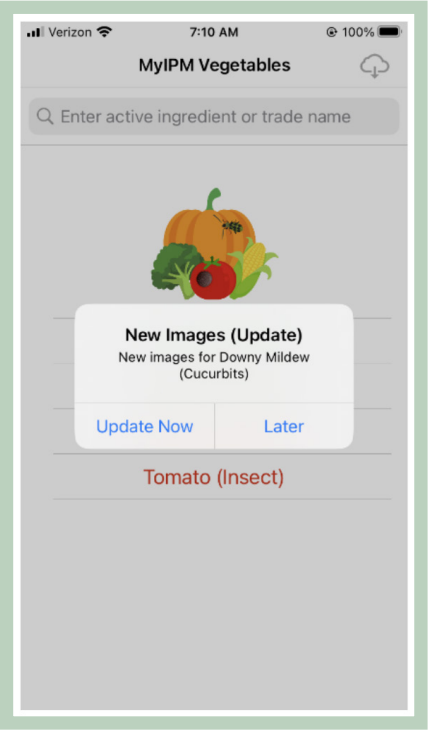






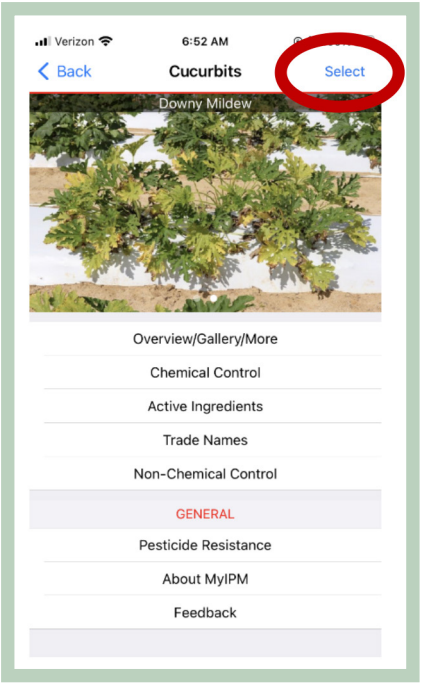
Updates

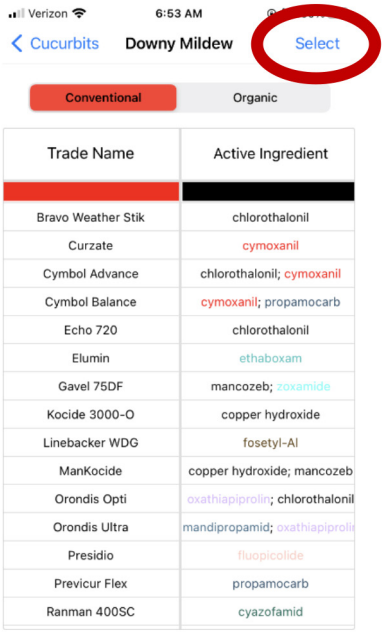
When an update to one of the downloaded modules is available, a notification will appear when the app is opened and an internet connection or cellular signal is established. Users can choose to "Update Now" or "Later." If problems occur, return to the home screen, remove the module (uncheck and tap "Update"), and then add the module (check and tap "Update"). Additional notifications will appear to indicate the size of the new download and, after tapping "Download," to indicate that downloading is in progress and may take a few minutes to complete.

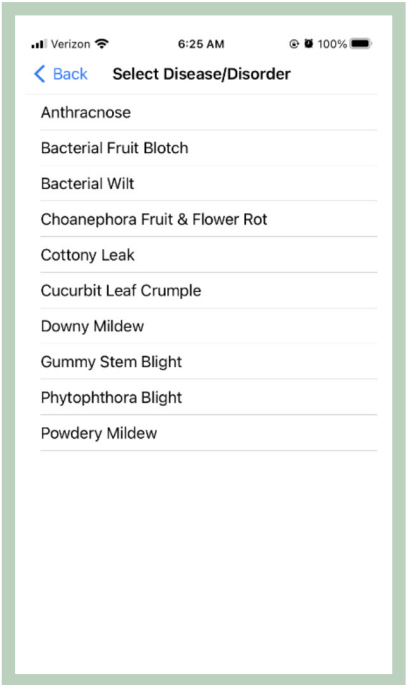


Useful Tips

Tip 1: Use the “Select” button in the top right corner of a module home screen to view a list of diseases or insects in the module. Tap the desired disease or insect name to quickly open a disease or insect profile (rather than swiping left or right through images). The “Select” button can be used from many screens within a module to switch between diseases or insects. For example, if you use the “Select” button from the downy mildew trade name list to select the disease gummy stem blight, the trade name list for gummy stem blight will be displayed.







Tip 2: Use the search bar on the MyIPM for Vegetables home screen to search for an active ingredient or product. Search results list all trade name products in the app, with the active ingredient(s) in parentheses, along with the crop(s) and the disease(s)/insect(s) for which the product is labeled and the corresponding product efficacy rating and application rate. Results include both single- and multi-active ingredient products if the searched active ingredient is one of the active ingredients in the product. Tap on the desired disease or insect name under the desired product to go to the active ingredient table for the chosen disease or insect.