Hydroponics Automated: An Intelligent Monitoring and Automation System for Soilless Urban Agriculture

USER GUIDE

June 2021

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About This Guide

This web guide will help you how to:
1. Elevate your role
2. Start a new crop
3. Manage your Crop Dashboard
4. Manage your Account
5. View the history of your crops

Terms:
- "Elevate Role" or role elevation means you are required to enter a password to make changes.
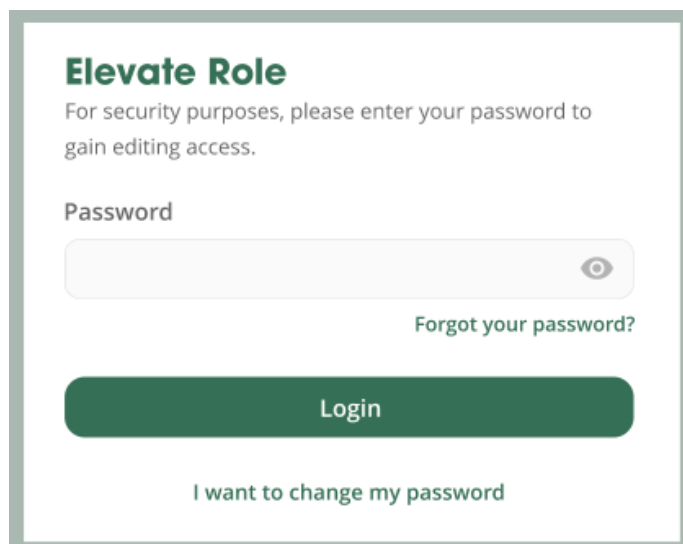
Elevate Role

This section will help you how to elevate your role in order to gain editing access within the website.

Note: Make sure that you are on the Homepage and your email address is already registered. If you are new to the system, go to "**Account Registration**".

1. On the top right corner of the Homepage, click on the shield icon.
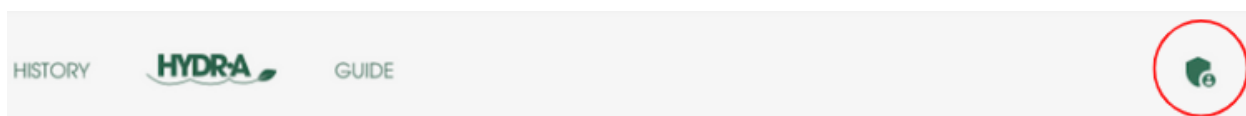
2. Enter your password.
3. Click on the "Login" button.

Start a New Crop

This section will help you how to create a custom preset that will be based on the values and threshold that you enter.

Note: You will be required to do role elevation.

1. Select "+ START NEW CROP" on the Homepage.
2. The "Elevate Role" will appear, fill in your password to proceed.
3. Choose an image for your crop.
4. Fill in a new crop name or click the dropdown arrow to reuse existing presets.
5. Click the dropdown button to select a setup name.
6. Drag the dials to the desired threshold values of each field or click and type in the values.
7. If you want to initialize pumps right away, click the checkbox.
8. Click on "Let's Start!" button.

Start New Crop

To create a crop with a new preset, enter a unique crop name. Otherwise, choose from the suggestions on the dropdown to reuse an existing preset.

Crop Name

Setup Name

Temperature Threshold (°C)

17   22

Humidity Threshold (%)

45   55

EC Threshold (mS/cm)

1.5   3.0

Acidity Threshold (pH)

4.8   6.7

Initialize Pumps   Back   Let's Start!

Manage Crop Dashboard

In this section you will be able to view the sensor trend chart, latest sensor data, customize your journal entry, and edit crop settings.

View Latest Sensor Data & Sensor Trend Chart

1. On the Homepage, scroll down to the Active Crops.
2. Select and click on an active crop.
3. Once the Crop Dashboard displays, you can view the latest sensor data and the sensor trend chart otherwise named in this page as the "20-day Progress Chart".
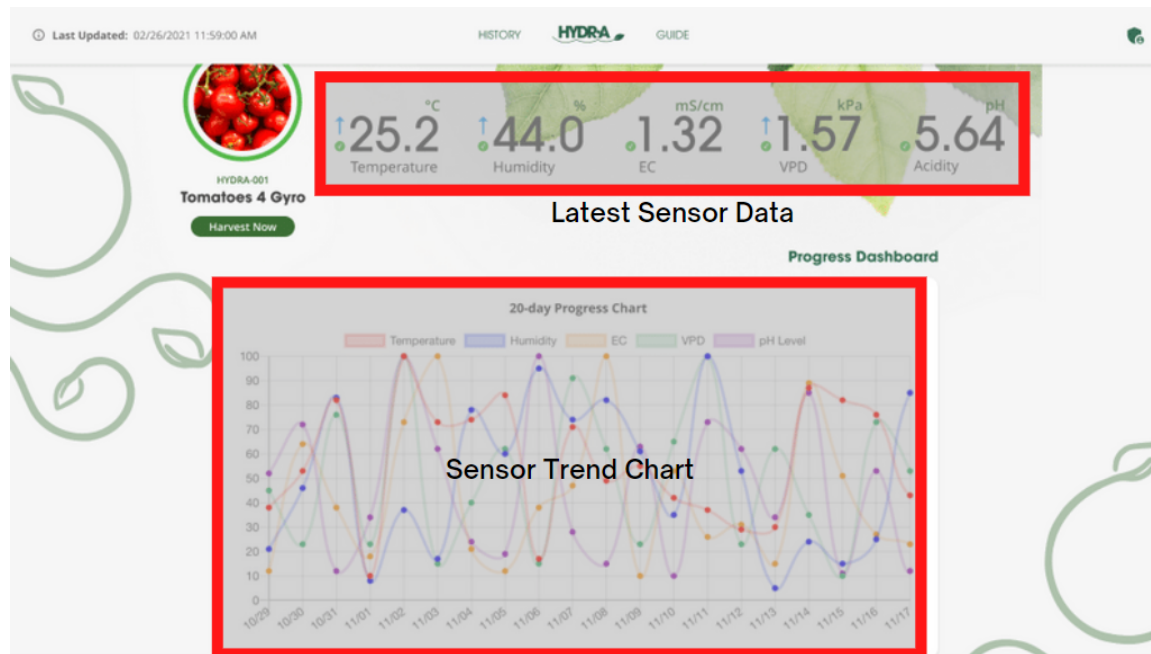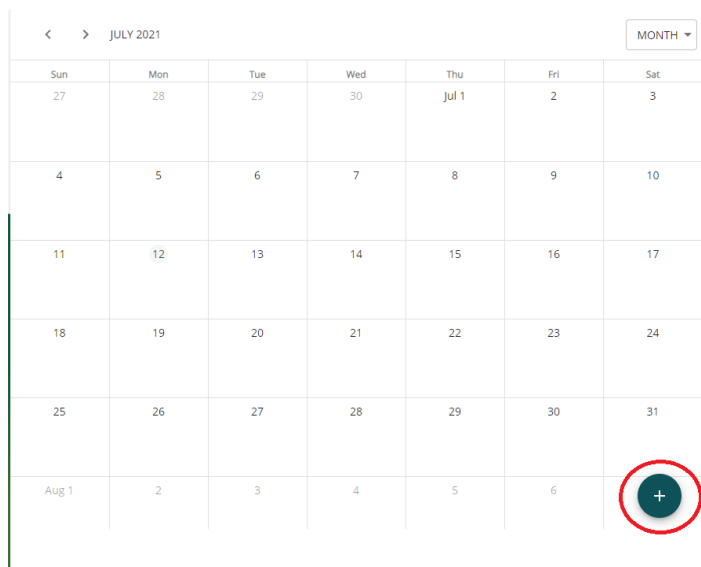

4. Click the colored boxes to view the sensor trends separately.

Customize Journal Entry

1. On the Homepage, scroll down to the Active Crops.
2. Select and click on an active crop.
3. The Crop Dashboard page will display, scroll down until you see a calendar.
4. Click the plus button or double click a date.

5. The Add Custom Entry modal will display.
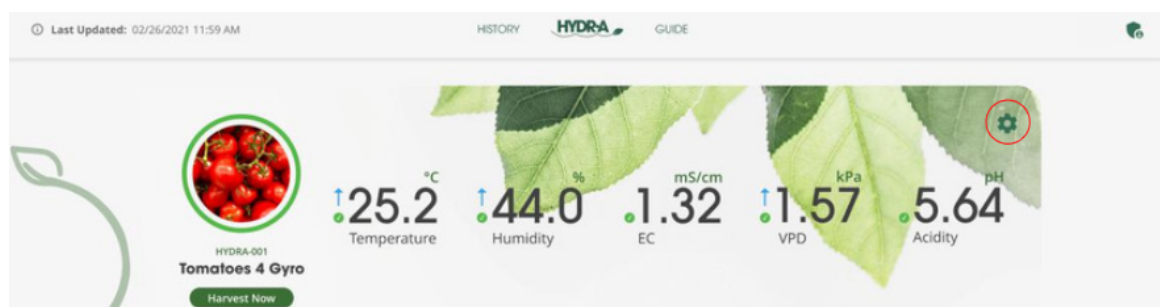6. Enter the required details.
7. Click on "Create".

Editing of Crop Settings

Note: You will be required to do role elevation.

1. On the Homepage, scroll down to the Active Crops.
2. Select and click on an active crop.
3. Once the Crop Dashboard page will display, click the gear icon.

4. When your role has been elevated, the Crop settings modal will display.
5. Enter all of the required fields.
6. Click on "Add Entry".

Manage your Account

In this section it will show you how to register and show the steps if you have forgotten your password.

Note: When booting up the system for the first time, the register page should appear first.

Account Registration

1. Fill in the setup name (ex. hyd-1), your recovery email, password, and confirm your password.
2. Click on "Let's Get Started!".

Forgot password

1. On the top right corner of the Homepage, click on the shield icon.
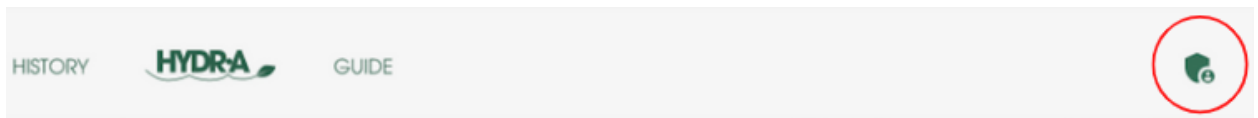
2. Select "Forgot your password".

Change Password

1. On the top right corner of the Homepage, click on the shield icon.
2. Click on "Change Password".
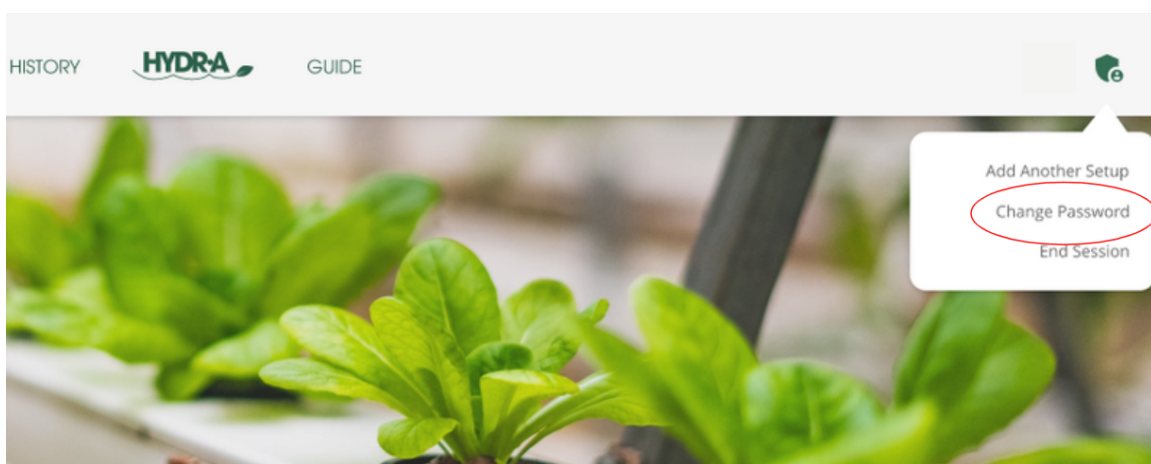
History

This section will help you to review the previous crops that you've created with their information and past journal entries.

1. Click on "Guide" at the top of the Homepage
2. At the History page, click the "View" button on the row of the crop name you want to review.
3. Click on the arrow button beside Setup Name to view previous crops ascended or descended.

4. Click on the drop down arrow to adjust the number of rows you want to view.
5. Click on the left or right arrow to view another list of crops.