



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

USER GUIDE

June 2021

Table Of Contents

Table Of Contents	1
About This Guide	2
Elevate Role	3
Start a New Crop	4
Manage Crop Dashboard	5
View Latest Sensor Data & Sensor Trend Chart	5
Customize Journal Entry	6
Editing of Crop Settings	7
Manage your Account	8
Account Registration	8
Forgot password	9
Change Password	9
History	10

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:

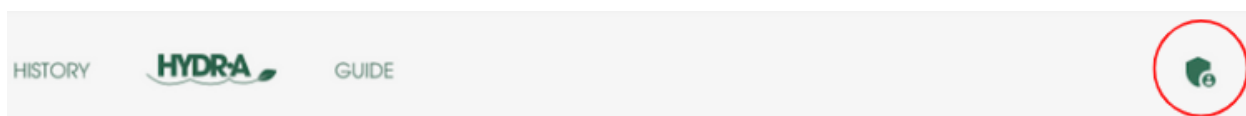
- “Elevate Role” or role elevation means you are required to enter a password to make changes.

Elevate Role

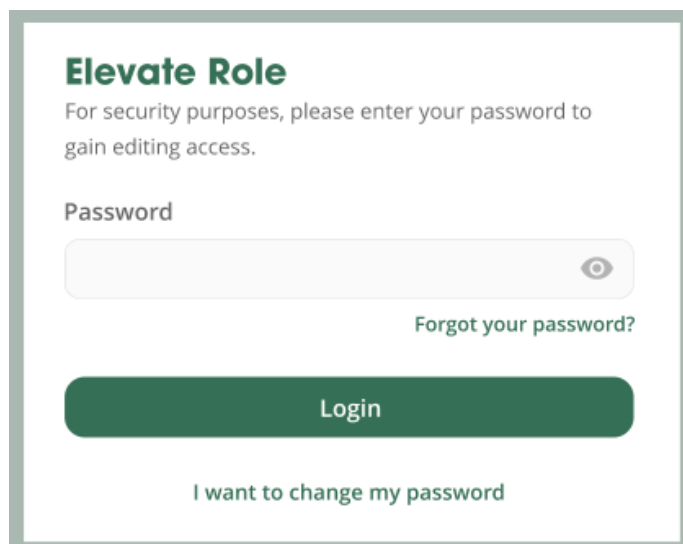
This section will help you how to elevate your role in order to gain editing access within the website.

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.

A screenshot of a modal form titled 'Elevate Role'. The form contains the text 'For security purposes, please enter your password to gain editing access.' Below this is a 'Password' label followed by a password input field with a toggle eye icon. To the right of the input field is a link that says 'Forgot your password?'. At the bottom of the form is a large green 'Login' button and a link that says 'I want to change my password'.

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.







Temperature Threshold (°C)

Humidity Threshold (%)

EC Threshold (mS/cm)

Acidity Threshold (pH)

☐ Initialize Pumps

Back

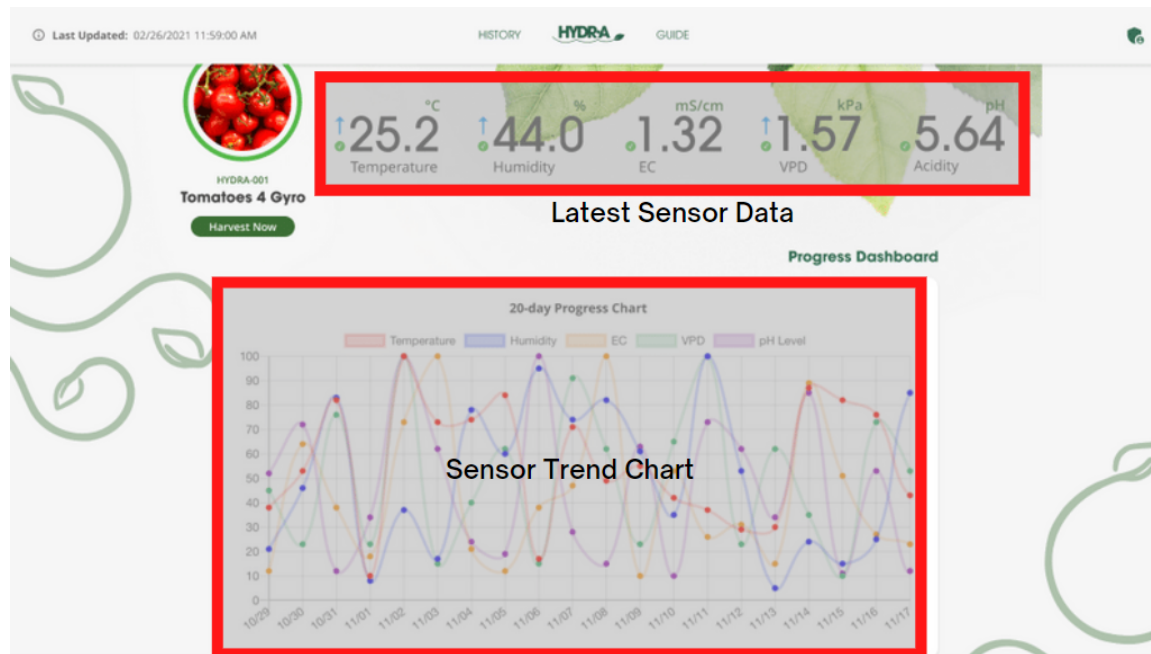
Let's Start!

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”.

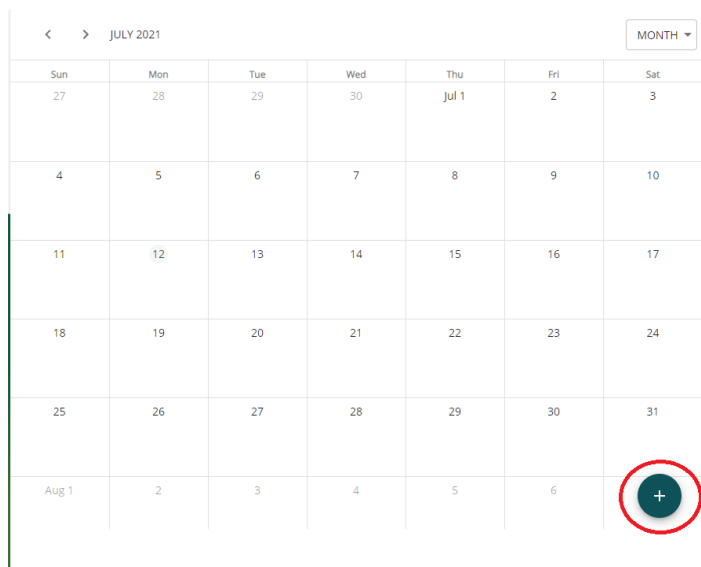


4. Click the colored boxes to view the sensor trends separately.



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”.

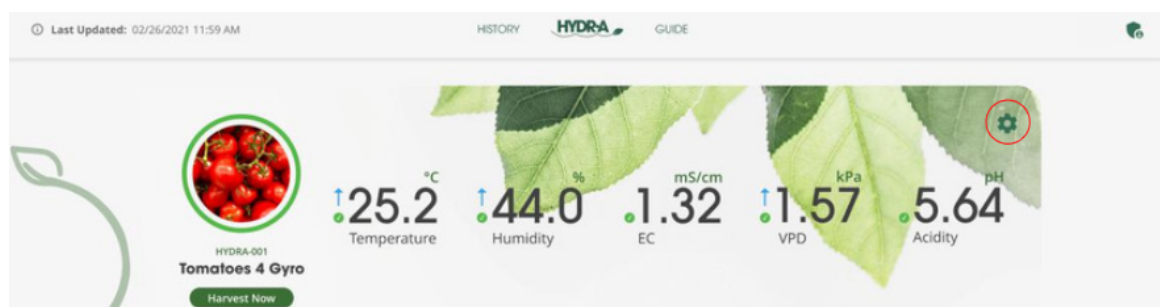
The image shows the 'Add Custom Entry' modal form. It has a close button (X) at the top right. The form contains the following fields:

- Title:** A text input field with a pencil icon on the left.
- Start Date:** A date and time input field showing '11/07/2021 09:00' with a calendar icon on the left.
- End Date:** A date and time input field showing '11/07/2021 10:00' with a calendar icon on the left.
- Notes:** A large text area with a hamburger menu icon on the left.
- CREATE:** A button at the bottom right.

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”.

Crop Settings

Feel free to update the threshold values for this crop! Changes should take effect shortly. This will not change the default preset settings.

Crop Name
Tomatoes 4 Gyro

Setup Name
hyd-1

Temperature Threshold (°C)

17

22

Humidity Threshold (%)

45

55

EC Threshold (mS/cm)

1.5

3.0

Acidity Threshold (pH)

4.8

6.7

Back

Save

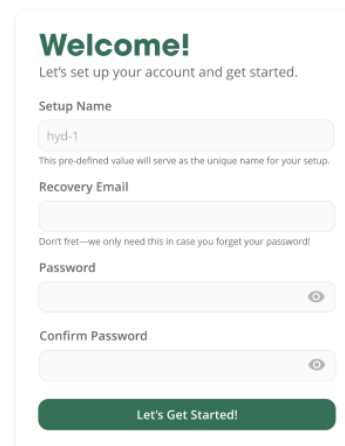
Manage your Account

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!”.



Welcome!
Let's set up your account and get started.

Setup Name

This pre-defined value will serve as the unique name for your setup.

Recovery Email

Dont't fret—we only need this in case you forget your password!

Password

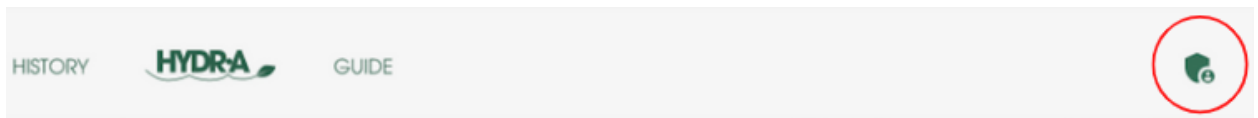
Confirm Password

Let's Get Started!

A green line-art graphic of a plant with leaves and a circular base is positioned to the right of the registration form.

Forgot password

1. On the top right corner of the Homepage, click on the shield icon.

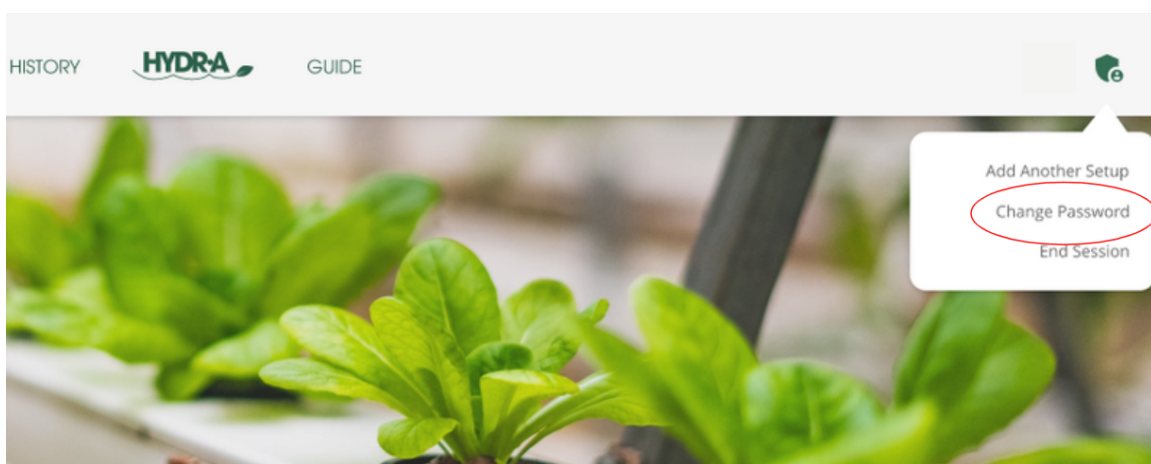


2. Select “Forgot your password”.

A screenshot of a login modal titled 'Elevate Role'. The text inside says 'For security purposes, please enter your password to gain editing access.' Below this is a 'Password' label and a text input field. To the right of the input field is a toggle icon (an eye). Below the input field is a link that says 'Forgot your password?', which is circled in red. At the bottom of the modal is a green 'Login' button and a link that says 'I want to change my 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.

History
Crops harvested within the past 2 months should be visible here. Click on "View" to open a PDF containing the corresponding information and journal entries.

View Rows Ascending or Descending

Click to View Crop Information

Crop Name	Setup Name	Date Planted	Date Harvested	
Pechay Trial	HYD-1	May 31, 2021	June 11, 2021	View
Basil 1	HYD-1	April 21, 2021	April 30, 2021	View
Lettuce for Mom	HYD-1	May 01, 2021	May 12, 2021	View
Lettuce	HYD-1	April 02, 2021	April 14, 2021	View

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.

To view other lists of crops

Select number of rows to view

Basil 4	HYD-2	June 14, 2021	June 28, 2021	View
Tomatoes 2	HYD-3	May 27, 2021	June 14, 2021	View

Rows per page: 10 1-10 of 13 < >