



Version 1.0.0
26 April 2021

Elixir

Smart Irrigation and Agriculture System

User Manuel

*This manual can be used for Elixir Portal version 1.0.0 and newer.



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1. General features

1.1. Access to Interface

Elixir is a web-based application. It can be accessed from <http://elixirapp.live/>

Note: The browser recommended for Elixir is Chrome and Firefox, and the screen resolution is 1920 * 1080.

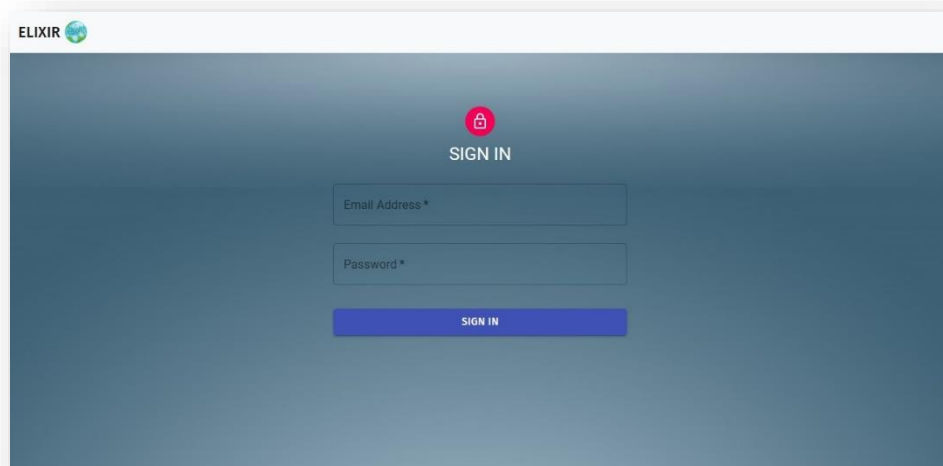


Figure 1: Login Page

1.2. Login

The user must enter their **Email** and **Password** and click the **SIGN IN** button to access Elixir.

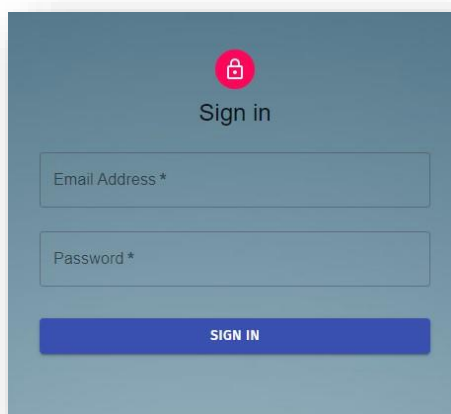


Figure 2: Sign in Panel

Note: If the wrong **Email** or **Password** information are entered an error message will be given.



Note: If these are correct than a simple message will prompt the user that the login is successful and the user will Signed In.

1.3. Navigation Bar

After logging into the application, navigation bar can be displayed on the top side of the page. When a user wants to access a page through the navigation bar, they can click on the name of the module they want to access, then they will be directed to the relevant page.

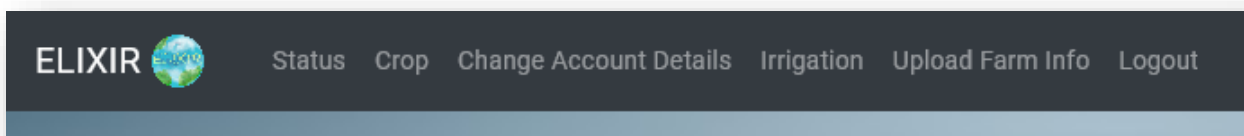


Figure 3: Navigation Bar

Note: The Elixir Logo will take you to the home page.

1.4. Logout

To Logout from Elixir, use the **Logout** button option located in the upper left part of the navigation bar.

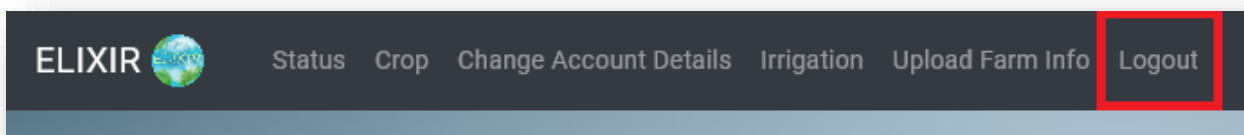


Figure 4: Logout Button

1.5. User Profile

To access the user profile page, use the **Change Account Details** option located in the upper left part of the navigation bar. Then click to access it.

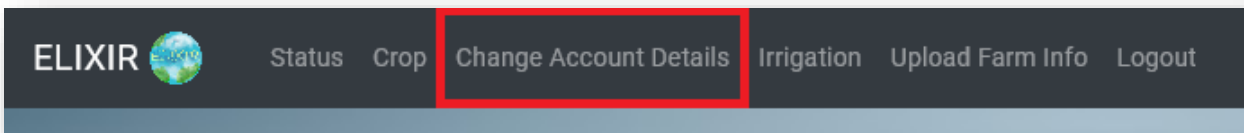
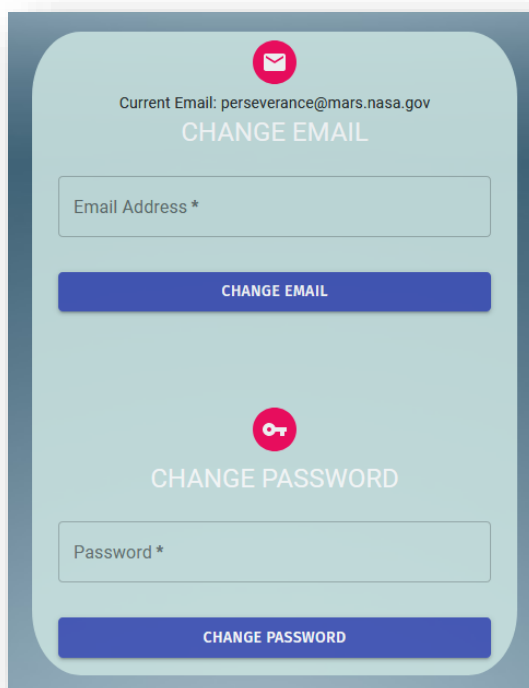


Figure 5: Access to Account Details



The screenshot shows a light blue rounded rectangle containing two sections. The top section is titled 'CHANGE EMAIL' with an envelope icon. It displays 'Current Email: perseverance@mars.nasa.gov' and a text input field labeled 'Email Address *'. Below the field is a blue button labeled 'CHANGE EMAIL'. The bottom section is titled 'CHANGE PASSWORD' with a key icon. It features a text input field labeled 'Password *' and a blue button labeled 'CHANGE PASSWORD'.

Figure 6: Options in Account Details

This section has two options **Change Email** and **Change Password**.

Change Password:

The user can change his/her password within this panel. To do this, enter the new password in the **Password** fields. In order to change the password, the following criteria must be met:

- Password must contain at least 8 characters.
- Password must contain both numerical and alphabetical characters.

If these conditions are met the user will be able to change their passwords by clicking the **Change Password** button.

The password is not updated in the following situations and the user is warned:

- The new password does not meet the requirements.

Note: Your initial password will be sent to your **Email address**, that was given to the Admins of Elixir.

Note: For security purposes the Admins do not know your password and the initial password that was set will be sent automatically.



Change Email:

The user can change his/her **Email** within this panel. To do this, enter the new Email in the **Email** fields. In order to change the Email. In order to change the password, the following criteria must be met:

- Email must be a valid email address.

If these conditions are met the user will be able to change their mail by clicking the **Change Email** button.

The email is not updated in the following situations and the user is warned:

- Entered email is not valid email address.

2. Dashboard

Dashboard is an interface created to give general information to the user after logging to the system.

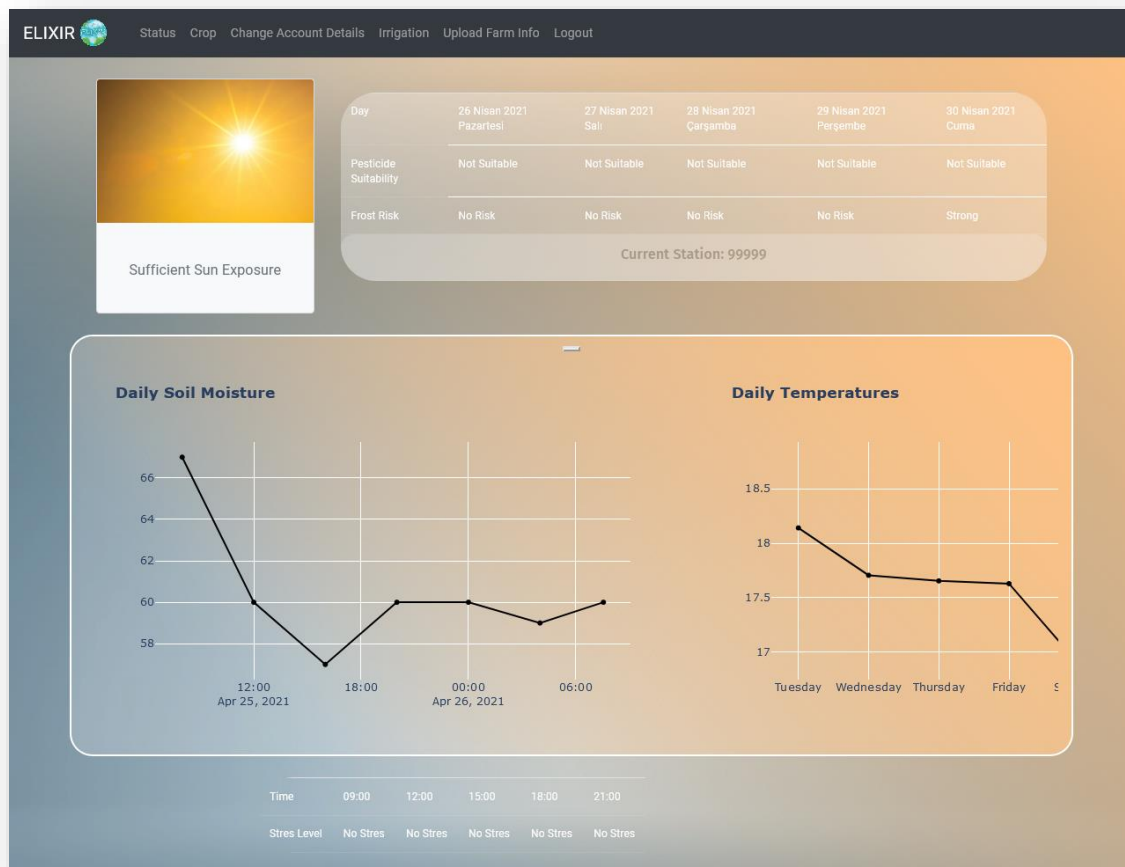


Figure 7: Dashboard



This page shows the last **Current Temperature, Soil Moisture, Daily Temperature, Heat Stress Level, Frost Risk, Pesticide Suitability, Sun Exposure** and **Weather Forecast**. The user can click on the charts to see more detailed information about the shown values.

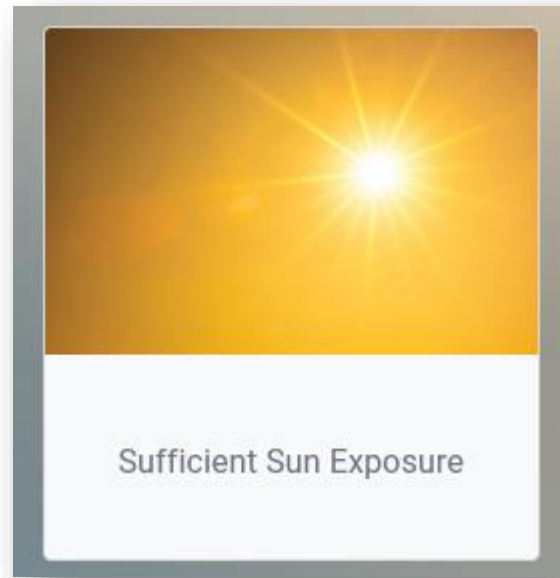


Figure 8: Sun Exposure

Day	26 Nisan 2021 Pazartesi	27 Nisan 2021 Salı	28 Nisan 2021 Çarşamba	29 Nisan 2021 Perşembe	30 Nisan 2021 Cuma
Pesticide Suitability	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Frost Risk	No Risk	No Risk	No Risk	No Risk	Strong
Current Station: 99999					

Figure 9: Table for Pesticide Suitability and Frost Risk



Figure 10: Information Charts

There are more than one Charts here. So, to move between them you can drag or click the buttons to change the chart.

Note: The charts visualize the respected data for the last 5 days.

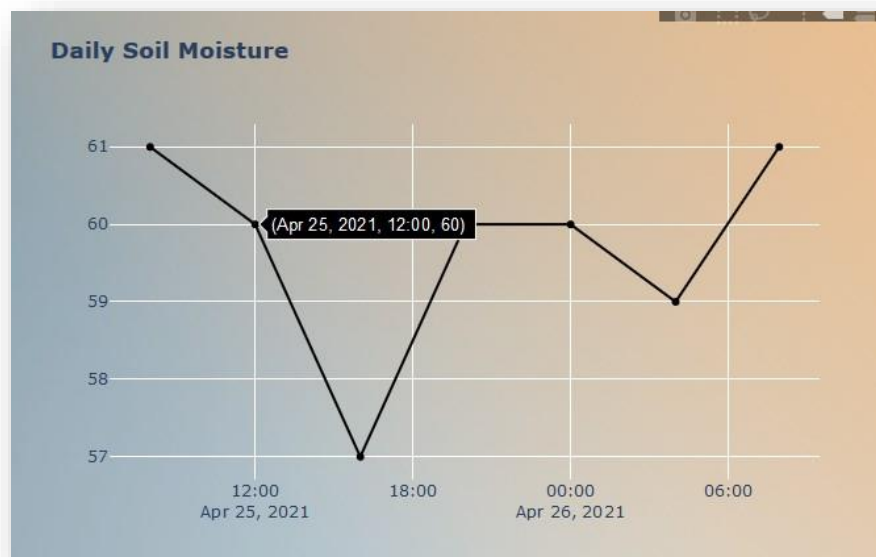


Figure 11: Chart Hover

The user can hover above them for more info.



Time	09:00	12:00	15:00	18:00	21:00
Stres Level	No Stres	No Stres	No Stres	No Stres	No Stres

Figure 13: Stress Table



Figure 12: Dark Mode for Status Page

This page also changes to dark mode, indicating that the Sun Exposure level is lower than expected.

3. Irrigation

To access the Irrigation page, use the **Irrigation** option located in the upper left part of the navigation bar. Then click to access it.

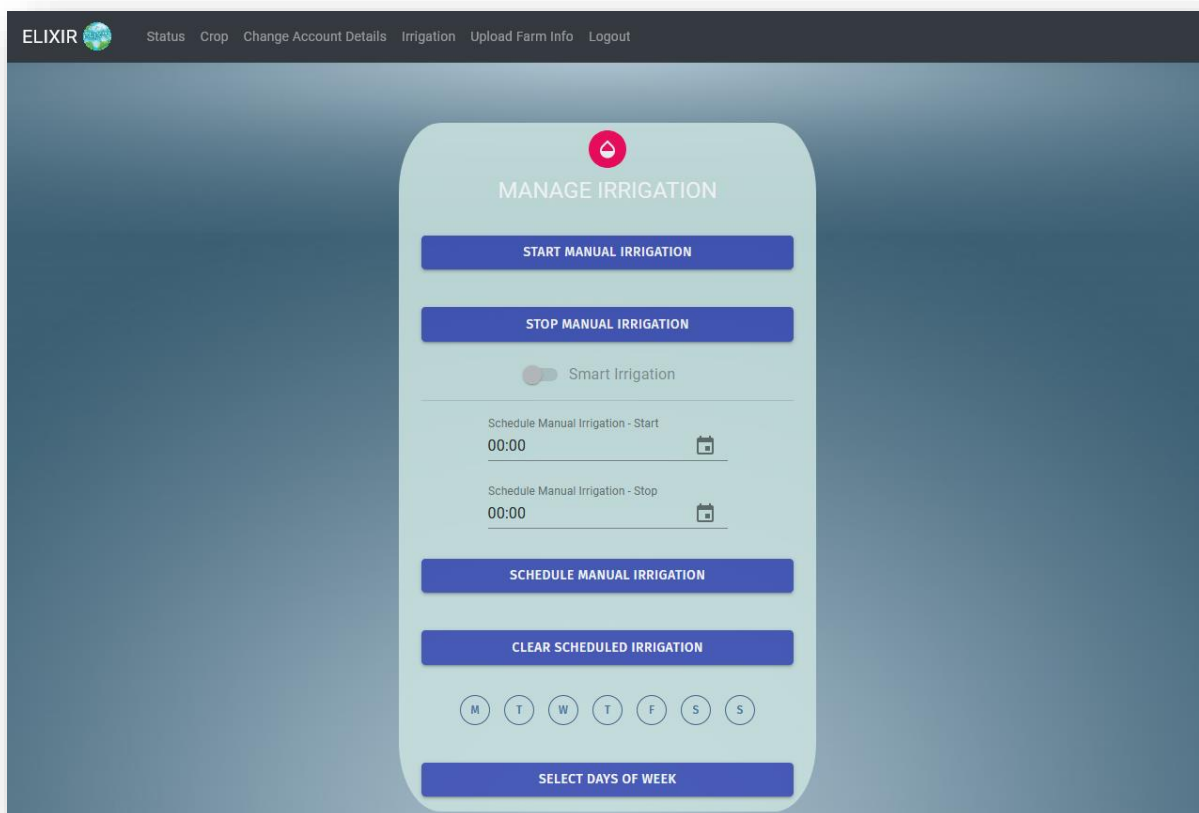


Figure 14: Manage Irrigation Panel

To **Start** your irrigation system, click on the **START MANUAL IRRIGATION** button.

To **Stop** your irrigation system, click on the **STOP MANUAL IRRIGATION** button.

1.6. Smart Irrigation

The Smart Irrigation functionality can only be activated once a crop information has been uploaded for your farm.

The smart irrigation functionality is Elixir's unique ability to automate irrigation of your farm. Once activated Elixir checks the following:

- Temperature of the surroundings.
- Humidity level of your crops.
- Rain forecast and current rain checks.



Figure 15: After Crop Info is Uploaded

Detailed information about Uploading Crop Information will be given in Section 4.

Once **Crop Information** is uploaded and **Smart Irrigation is activated**. The user will be prompted with the Uploaded Information and give information of what is about to happen.

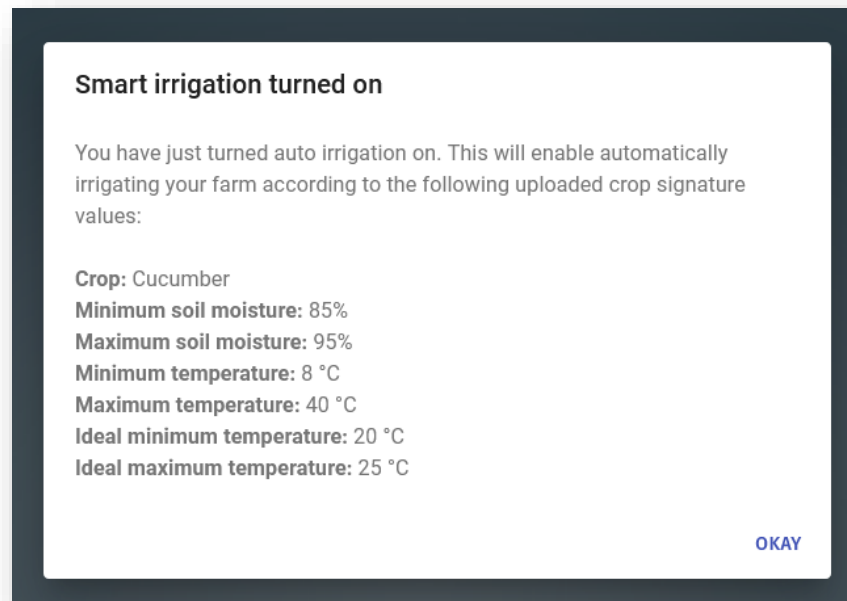


Figure 16: Smart Irrigation Prompt



Important Note: Once Smart Irrigation is enabled, Scheduled Manuel Irrigation functionally will NOT work.

1.7. Schedule Manuel Irrigation

INFORMATION

IMAGE NORMAL PANEL

IMAGE TIME SELECTION

EXPLAIN WEEK

NOTE PROMTS

EXPLAN CHECKS/REQ like PASSWORD

4. Upload Farm Info

IMAGE PANEL

EXPLAIN WHAT IT DOES

NOTE PROMTS

5. Crop Panel

IMAGE GENERAL PANEL

EXPLAIN TOP 3 BOXES

EXPLAIN TEMP COMP

EXPLAIN SOIL COMP

EXPLAIN IDEAL TEMP COMP

EXPLAIN INFORMATION TABEL