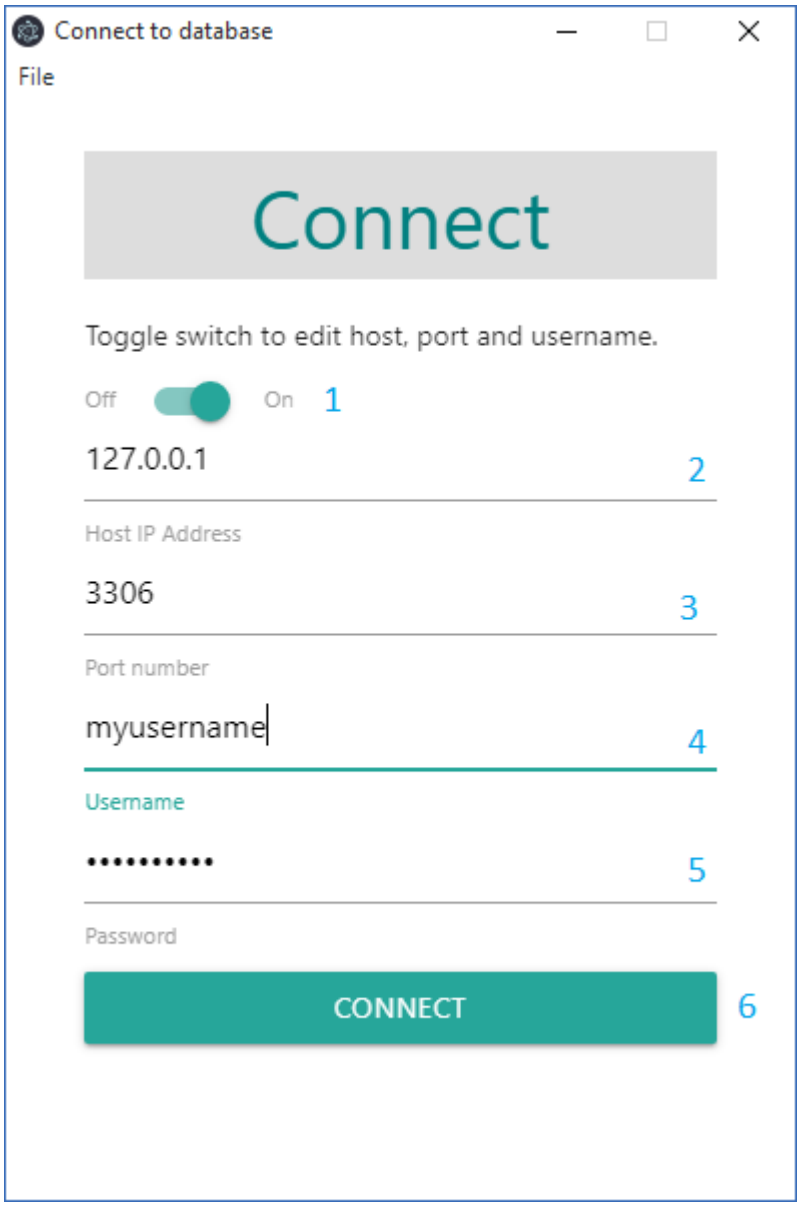
Fertilizer and lime recommendation application manual

Connecting to the database.

Click the “connect” button in the top bar to connect to the database and a “Connect to database” window will show.



For a user to connect to the database

1. Toggle this button to connect to edit host, port and username.

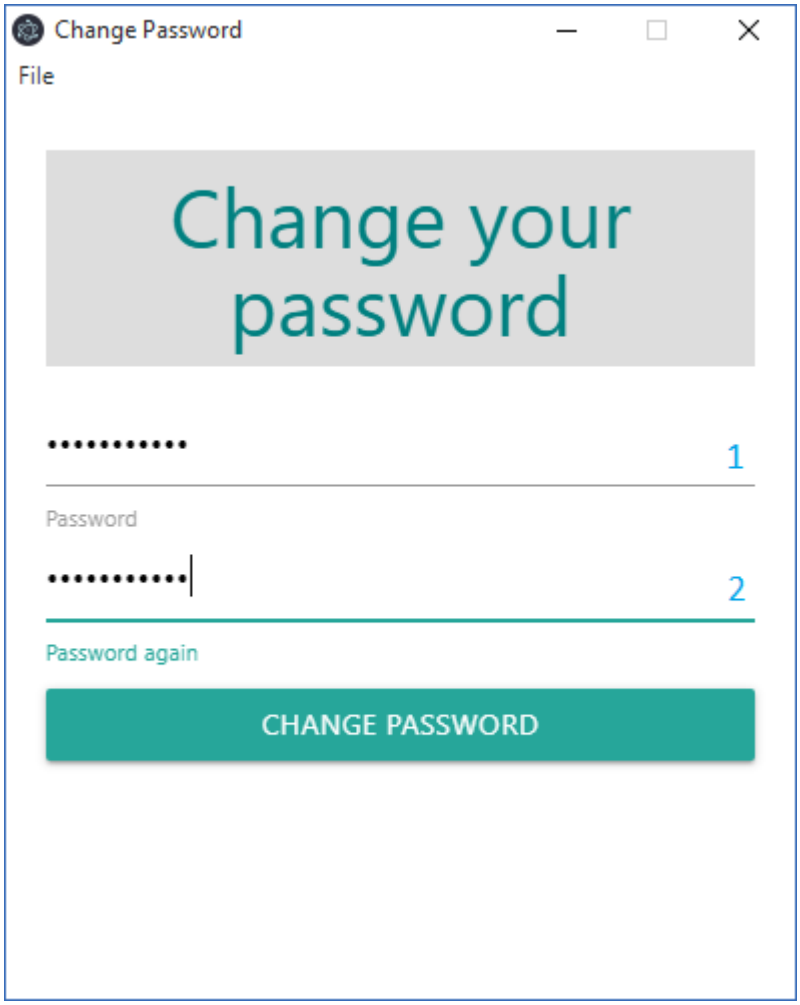
2. It's the Host IP address where the database server is running. *Do not modify this if you are not sure of what you are doing. Instead contact the system administrator.*
3. It's the port number where database server is running on the host provided on number 2. *Do not modify this if you are not sure of what you are doing. Instead contact the system administrator.*
4. It's the username which has been created for you by the database administrator.
5. It's the password for logging in to the application database.

Fill in all the details listed above and click connects on number 6 to connect to the application database.

Note: For you to be able to use this other functions you need to be logged into the application database.

Changing your password.

A prerequisite for changing your password is that you are logged in to the application database.



1. Enter your new password

2. Confirm your new password

Click the “CHANGE PASSWORD” button to change your password. If password has been changed a dialog box will popup telling you that your password has been successfully changed.

Add crops and their nutrient requirements.

Click “Add new crop”. A form will be presented. The first thing you need to do is prepare nutrient requirements for a crop you want to add into the system.

Preparing nutrient requirements.

The CSV files are prepared using Microsoft Excel and the accepted delimiters are, **;** and **,**.

When preparing CSV files for nitrogen and phosphorus requirements they should have the following format.

a. Mapping one ppm value to nutrient requirement ranges.

	A	B	C
1	ppm	min	max
2	7	80	90
3	8	75	85
4	9	70	80
5	10	65	75
6	11	60	70

b. Mapping ppm ranges to nutrient requirement ranges.

	A	B	C	D
1	min_ppm	max_ppm	min	max
2	0	10	100	135
3	10	15	80	100
4	15	20	70	90
5	20	25	60	80
6	25	30	45	70
7	30	100	45	35

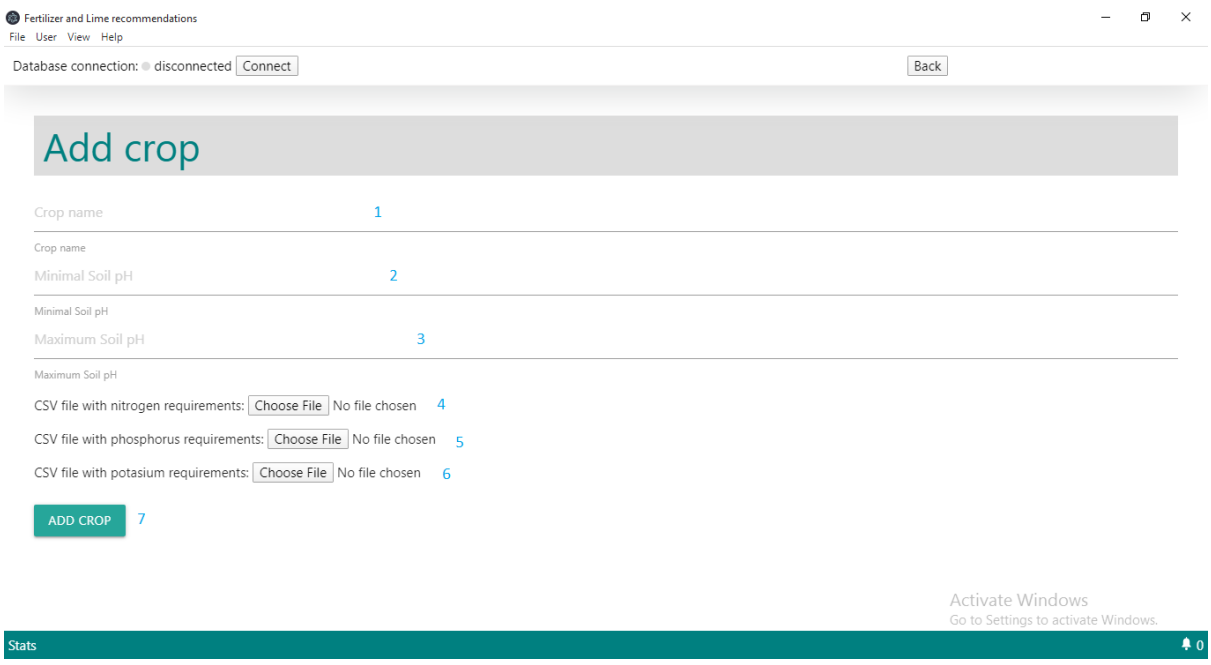
When preparing CSV files for potasium requirements they should have the following format

a. Mapping one single percentage value to a nutrient requirement ranges.

	A	B	C	D
1	texture	percentage	min	max
2	S	0.04	60	70
3	S	0.05	55	65
4	S	0.06	50	60
5	S	0.07	45	55
6	S	0.08	40	50
7	S	0.09	35	45
8	S	0.1	30	40
9	L	0.08	60	70

b. Mapping percentage ranges to nutrient requirement ranges.

	A	B	C	D	E
1	texture	min_percentage	max_percentage	min	max
2	S	0	0.05	70	90
3	S	0.05	0.1	60	70
4	S	0.1	0.3	45	60
5	S	0.3	1	20	45
6	L	0	0.1	70	90
7	L	0.1	0.2	60	70



1. It's the crop name.
2. The lowest pH which is favourable for the crop.
3. The highest pH which is favourable for the crop.

4. CSV file that contains nitrogen requirements.
5. CSV file that contains phosphorus requirements.
6. CSV file that contains potasium requirements.

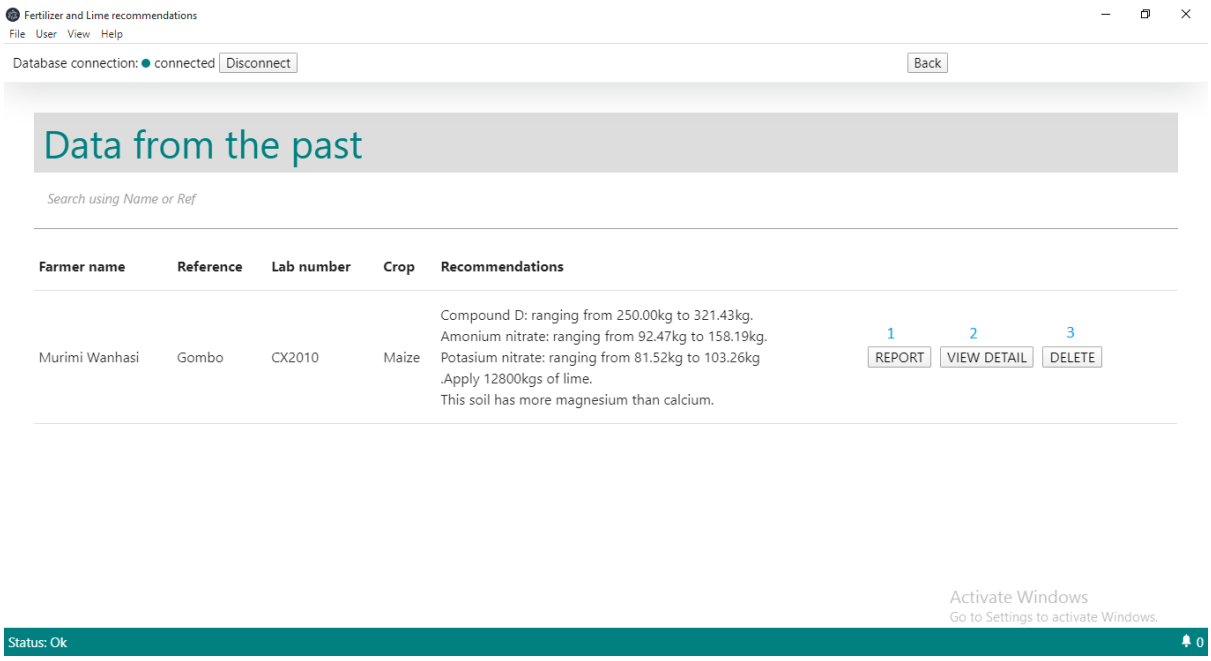
Recommend lab data.

Click “Add new data from the lab” and a form will be presented to you so you can enter the lab data. On the left side there is the form and on the right side is where the recommendation will be presented.

1. Add soil analysis results.
2. Click “GET RECOMMENDATION” button to recommend.
3. Click “GET REPORT” button to get the report.

View historical data

Click “View historical data” and a table will be displayed with all the data in the application database. This data contains lab data and its corresponding recommendation and the crop which was grown on that field.



1. Present a report, clicking this button will open a new window which will present a report.
2. View details, clicking this button will present more information on the data.
3. Delete, it will delete data in the database.