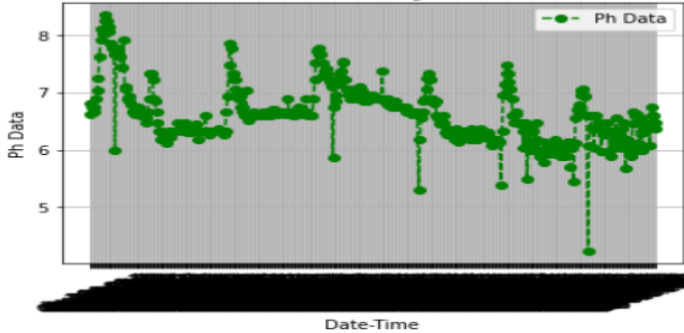
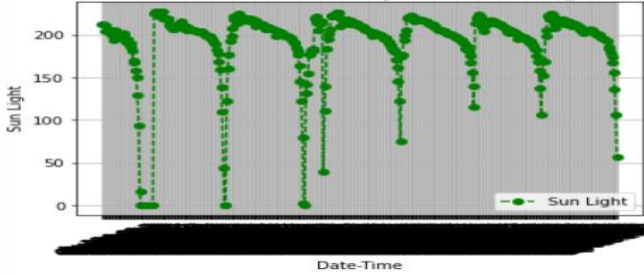
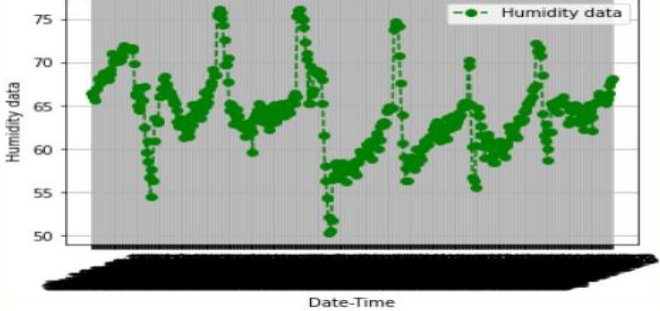
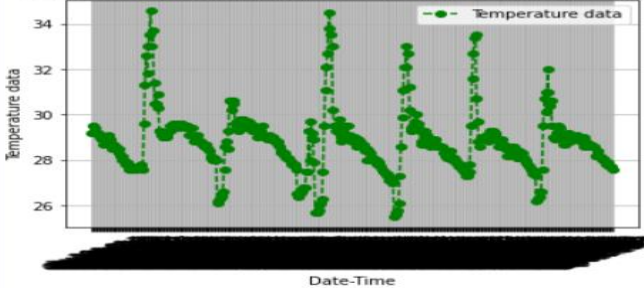
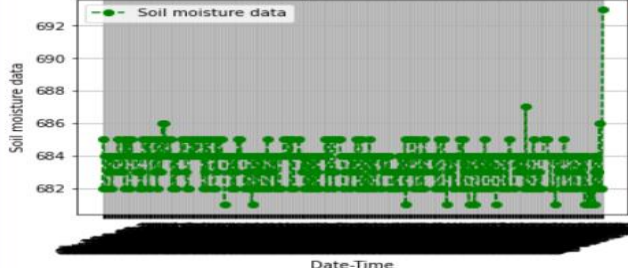
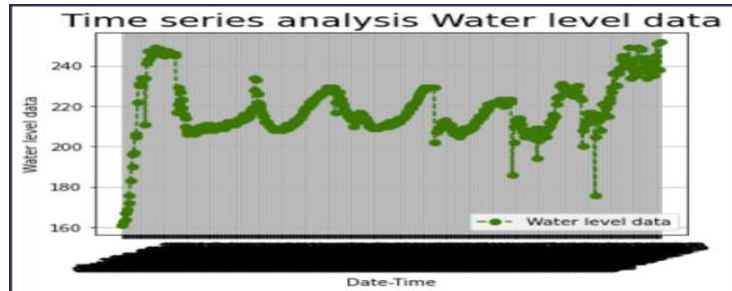


HYDROPHONIC SYSTEM DATA DESCRIPTION

Time series analysis of phase 1 (planting phase)

PARAMETERS	CHART
PH	<p>Time series analysis Ph Data</p>  <p>The chart displays pH data over time. The y-axis is labeled 'Ph Data' and ranges from 5 to 8. The x-axis is labeled 'Date-Time'. The data points, represented by green dots, show a fluctuating trend, generally staying between 6 and 8, with some peaks reaching 8 and troughs dropping to 5. A legend in the top right corner identifies the data as 'Ph Data'.</p>
LUMINOUS INTENSITY	<p>Time series analysis Sun Light</p>  <p>The chart displays sun light intensity over time. The y-axis is labeled 'Sun Light' and ranges from 0 to 200. The x-axis is labeled 'Date-Time'. The data points, represented by green dots, show a clear periodic pattern, with peaks reaching approximately 200 and troughs dropping to 0. A legend in the bottom right corner identifies the data as 'Sun Light'.</p>
HUMIDITY	<p>Time series analysis Humidity data</p>  <p>The chart displays humidity data over time. The y-axis is labeled 'Humidity data' and ranges from 50 to 75. The x-axis is labeled 'Date-Time'. The data points, represented by green dots, show a fluctuating trend, generally staying between 55 and 75, with some peaks reaching 75 and troughs dropping to 50. A legend in the top right corner identifies the data as 'Humidity data'.</p>
TEMPERATURE	<p>Time series analysis Temperature data</p>  <p>The chart displays temperature data over time. The y-axis is labeled 'Temperature data' and ranges from 26 to 34. The x-axis is labeled 'Date-Time'. The data points, represented by green dots, show a fluctuating trend, generally staying between 26 and 34, with some peaks reaching 34 and troughs dropping to 26. A legend in the top right corner identifies the data as 'Temperature data'.</p>
SOIL MOISTURE	<p>Time series analysis Soil moisture data</p>  <p>The chart displays soil moisture data over time. The y-axis is labeled 'Soil moisture data' and ranges from 682 to 692. The x-axis is labeled 'Date-Time'. The data points, represented by green dots, show a fluctuating trend, generally staying between 682 and 692, with some peaks reaching 692 and troughs dropping to 682. A legend in the top left corner identifies the data as 'Soil moisture data'.</p>

WATER LEVEL



Range of parameters

PARAMETER	MAX	MIN
PH	8.37	4.23
LUMINOUS INTENSITY	228	0
HUMIDITY	76.2	50.3
TEMPERATURE	34.6	25.5
SOIL MOISTURE	687	676
WATER LEVEL	252	161

Dataset Description

TYPE	DESCRIPTION
Data set Characteristic	Multivariant
Attribute Characteristics	Timestamp, Integer, Real
Associated Tasks	Regression
Number of Instances	469
Number of attributes	841

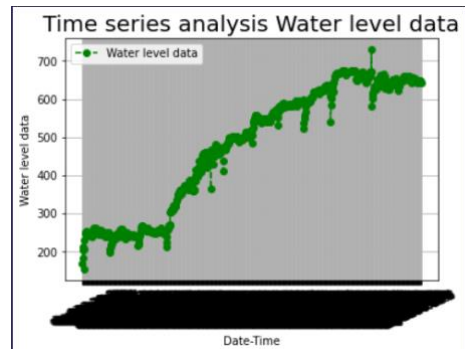
Attribute Information

- 1) Day(1-28)
- 2) Timestamp(HH:MM:SS)
- 3) Ph value
- 4) Luminous intensity
- 5) Humidity
- 6) Temperature
- 7) Water level
- 8) Soil Moisture

Time series analysis of phase 2 (Growing phase)

PARAMETERS	CHART
PH	<p>Time series analysis Ph Data</p>
LUMINOUS INTENSITY	<p>Time series analysis Sun Light</p>
HUMIDITY	<p>Time series analysis Humidity data</p>
TEMPERATURE	<p>Time series analysis Temperature data</p>
SOIL MOISTURE	<p>Time series analysis Soil moisture data</p>

WATER LEVEL



Range of parameters

PARAMETER	MAX	MIN
PH	27.13	6.68
LUMINOUS INTENSITY	226	0
HUMIDITY	82.5	47.8
TEMPERATURE	38.6	25.7
SOIL MOISTURE	687	579
WATER LEVEL	731	153

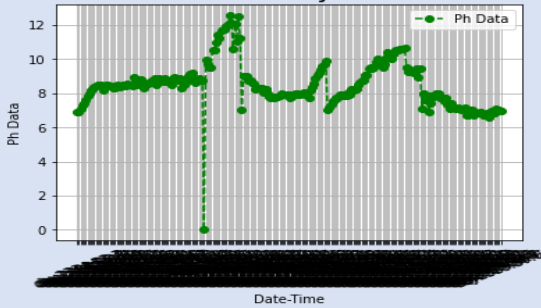
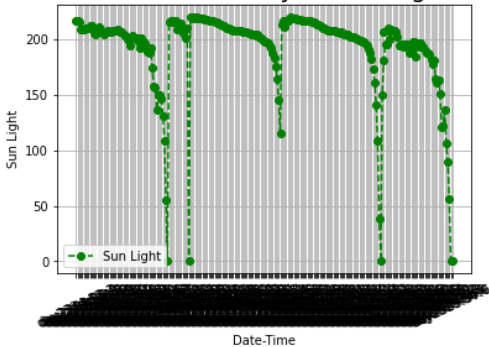
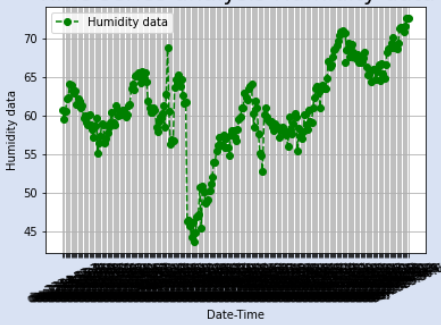
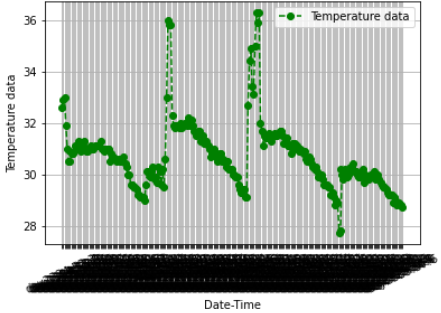
Dataset Description

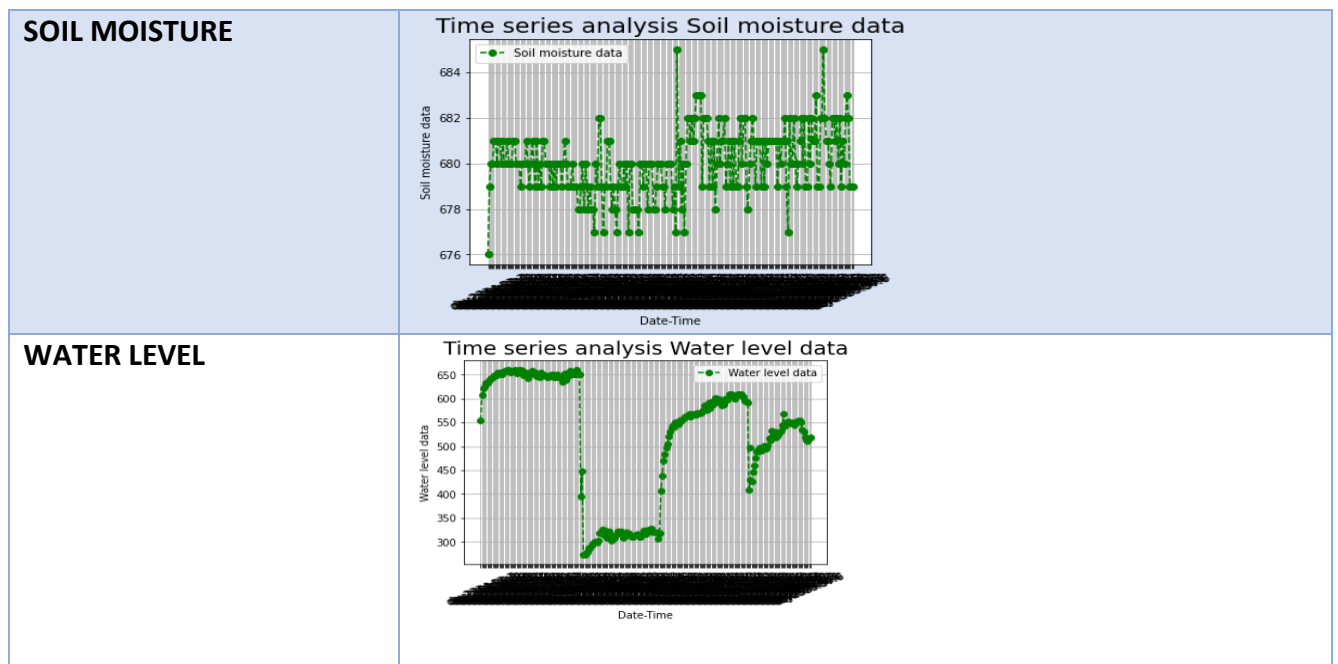
TYPE	DESCRIPTION
Data set Characteristic	Multivariant
Attribute Characteristics	Timestamp, Integer, Real
Associated Tasks	Regression
Number of Instances	841
Number of attributes	8

Attribute Information

- 1) Day(1-28)
- 2) Timestamp(HH:MM:SS)
- 3) Ph value
- 4) Luminous intensity
- 5) Humidity
- 6) Temperature
- 7) Water level
- 8) Soil Moisture

Time series analysis of phase 3 (Harvesting Phase)

PARAMETERS	CHART
PH	<p>Time series analysis Ph Data</p> 
LUMINOUS INTENSITY	<p>Time series analysis Sun Light</p> 
HUMIDITY	<p>Time series analysis Humidity data</p> 
TEMPERATURE	<p>Time series analysis Temperature data</p> 



Range of parameters

PARAMETER	MAX	MIN
PH	12.59	0
LUMINOUS INTENSITY	220	0
HUMIDITY	72.7	43.6
TEMPERATURE	36.3	27.7
SOIL MOISTURE	685	676
WATER LEVEL	661	272

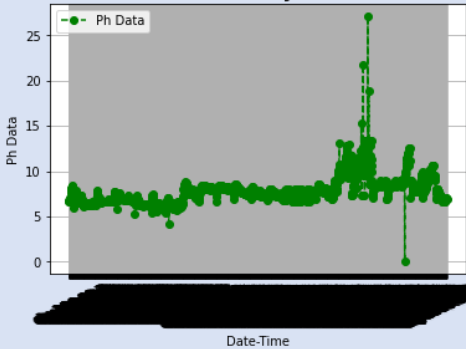
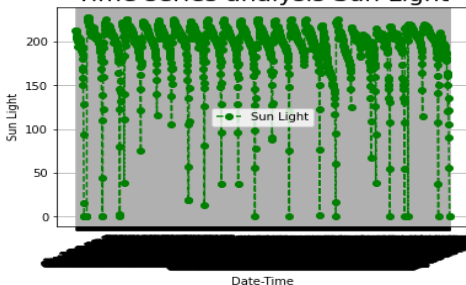
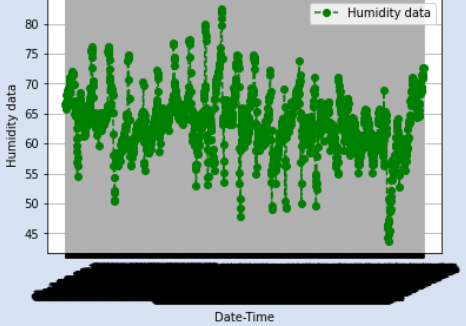
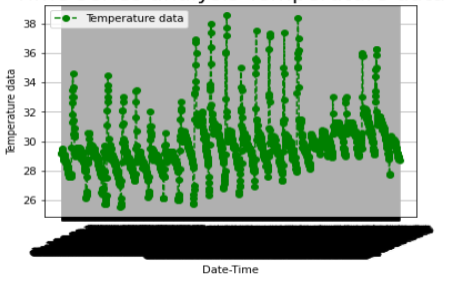
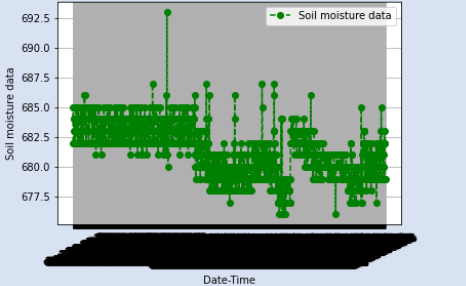
Dataset Description

TYPE	DESCRIPTION
Data set Characteristic	Multivariant
Attribute Characteristics	Timestamp, Integer, Real
Associated Tasks	Regression
Number of Instances	250
Number of attributes	8

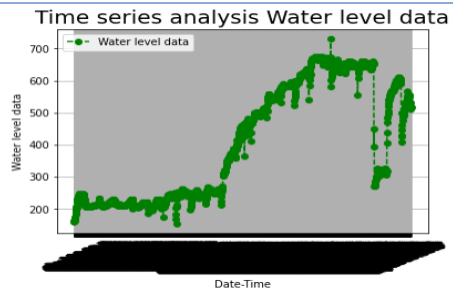
Attribute Information

- 1) Day(1-28)
- 2) Timestamp(HH:MM:SS)
- 3) Ph value
- 4) Luminous intensity
- 5) Humidity
- 6) Temperature
- 7) Water level
- 8) Soil Moisture

Time series analysis of all phases combined

PARAMETERS	CHART
PH	<p>Time series analysis Ph Data</p>  <p>The chart displays 'Ph Data' as green dots connected by a dashed line. The y-axis is labeled 'Ph Data' and ranges from 0 to 25. The x-axis is labeled 'Date-Time'. The data shows a relatively stable trend around 7-8 until approximately mid-way, where it spikes sharply to nearly 25 before returning to the baseline.</p>
LUMINOUS INTENSITY	<p>Time series analysis Sun Light</p>  <p>The chart displays 'Sun Light' as green dots connected by a dashed line. The y-axis is labeled 'Sun Light' and ranges from 0 to 200. The x-axis is labeled 'Date-Time'. The data shows a highly oscillatory pattern, with values frequently peaking near 200 and dropping to near 0, indicating a strong periodic or cyclical nature.</p>
HUMIDITY	<p>Time series analysis Humidity data</p>  <p>The chart displays 'Humidity data' as green dots connected by a dashed line. The y-axis is labeled 'Humidity data' and ranges from 45 to 80. The x-axis is labeled 'Date-Time'. The data shows a fluctuating pattern, generally staying between 50 and 75, with several peaks reaching above 75.</p>
TEMPERATURE	<p>Time series analysis Temperature data</p>  <p>The chart displays 'Temperature data' as green dots connected by a dashed line. The y-axis is labeled 'Temperature data' and ranges from 26 to 38. The x-axis is labeled 'Date-Time'. The data shows a fluctuating pattern, generally staying between 28 and 32, with several peaks reaching above 32.</p>
SOIL MOISTURE	<p>Time series analysis Soil moisture data</p>  <p>The chart displays 'Soil moisture data' as green dots connected by a dashed line. The y-axis is labeled 'Soil moisture data' and ranges from 677.5 to 692.5. The x-axis is labeled 'Date-Time'. The data shows a fluctuating pattern, generally staying between 680.0 and 685.0, with several peaks reaching above 685.0.</p>

WATER LEVEL



Range of parameters

PARAMETER	MAX	MIN
PH	27.13	0
LUMINOUS INTENSITY	228	0
HUMIDITY	82.5	43.6
TEMPERATURE	38.6	25.5
SOIL MOISTURE	693	676
WATER LEVEL	731	153

Dataset Description

TYPE	DESCRIPTION
Data set Characteristic	Multivariant
Attribute Characteristics	Timestamp, Integer, Real
Associated Tasks	Regression
Number of Instances	1559
Number of attributes	8

Attribute Information

- 1) Day(1-28)
- 2) Timestamp(HH:MM:SS)
- 3) Ph value
- 4) Luminous intensity
- 5) Humidity
- 6) Temperature
- 7) Water level
- 8) Soil Moisture