

Agrosta®100 BLUE

Digital Firmness Tester

The AGROSTA®100 BLUE has been designed end 2022. It is a firmness/maturity tester dedicated to soft fruits communicating via Bluetooth with an app for android or Windows.



Thanks !

Many thanks for having acquired an Agrosta instrument
Your package contains :

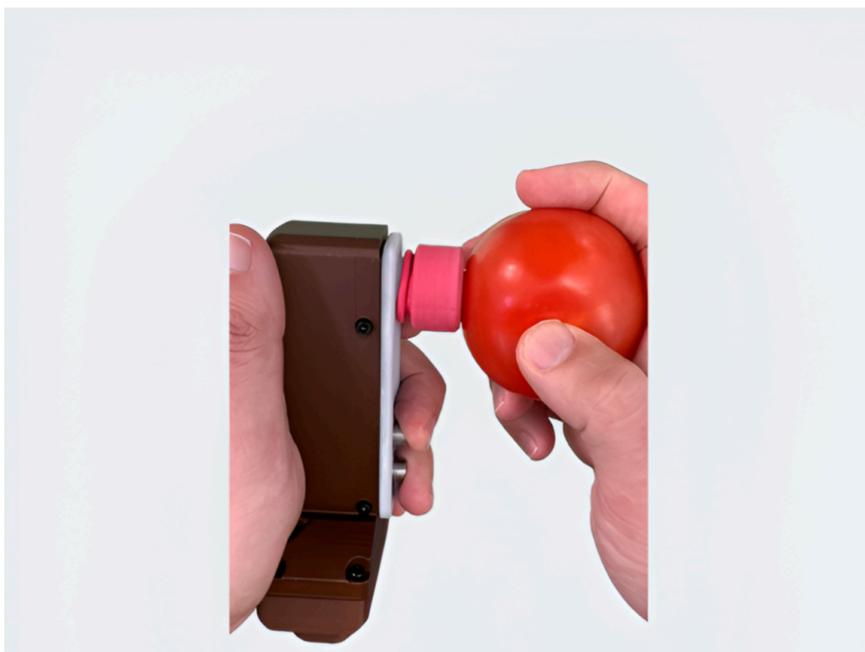
- Box with the instrument itself
- Charger
- Certificate of conformity
- Manual
- Set of tip protections

We highly recommend reading the user manual, as it provides clear and concise instructions to help you maximize the use of the device.

Product Overview

The Agrosta 100 BLUE is provided with one sensor (10, 25 or 50) according to your requirements. You can buy adaptors separately :

- A sensor of 10 for **peaches** (35% to 95%), **apricots** (45% to 95%), **grapes and kiwis** (35% to 95%) , **cranberries**– With the 10 mm tip, a reading of 85% corresponds to 4.5 Kg per 0.5 cm² with a penetrometer.
- 25 for **tomatoes** (values from 45 to 80), **cherries, plums, melon flesh, grapes** (values from 30 to 80), **blueberries** (values from 25 to 70 - destructive), **peppers**
- 50 for **strawberries**.



Origin and Manufacturing: The AGROSTA®100 BLUE is meticulously designed and assembled in France. The motherboard is sourced from Hong Kong, while the shield boards are manufactured in the USA. Additionally, we utilize a high-quality battery from Germany.

Waterproof Disclaimer: Please note that the AGROSTA®100 BLUE is not waterproof. It is an instrument of precision, and we strongly advise you to handle it with care, avoiding any drops or impacts.

Warranty Information: The AGROSTA®100 BLUE is backed by a two-year guarantee starting from the date of shipment. This guarantee covers any manufacturing defects or faults that may arise during the specified period

Accuracy Specifications:

- Minimum Percentage: 10% (Operation Threshold)
- Maximum Percentage: 100% (When Fully Depressed, Equivalent to 806 grams of Pressure)
- Resolution: +/- 1%
- Maximum Memory Capacity: Extensive - Limited Only by Smartphone or Tablet
- Battery Life: 9 Hours of Continuous Work with 2 Hours of Charging

Additional specifications:

- **Automatic Sleep Mode** : The device enters sleep mode if no measurements are taken for a period of 15 minutes.
- **Usable While Charging** : The device can be used even while it is being charged.
- **Battery Level Indication** : The device provides an indication of the battery level, allowing you to monitor the remaining charge.
- **Ultra-Low Power Consumption in Sleep Mode** : The device has a very low power consumption in sleep mode, providing up to 3 years of battery life without usage.
- **TouchPad Wake-Up** : You can wake up the device from sleep mode by using the touchpad.
- **Auto-Connect to the App** : The device automatically reconnects to the mobile application for subsequent use.

Android Mobile application

Requirements : If your device does not have a built-in QR code reader, please install a separate QR code scanner app if you intend to use the barcode functions.

Step 1: Installation

Option 1: Scanning the QR Code

1. Open a QR code scanner app on your device.
2. Scan the provided QR code using the scanner app. You can choose between two versions: a new version or an old version, depending on whether your phone is recent or not.

New Version



Old Version



Option 2: Visiting the Website

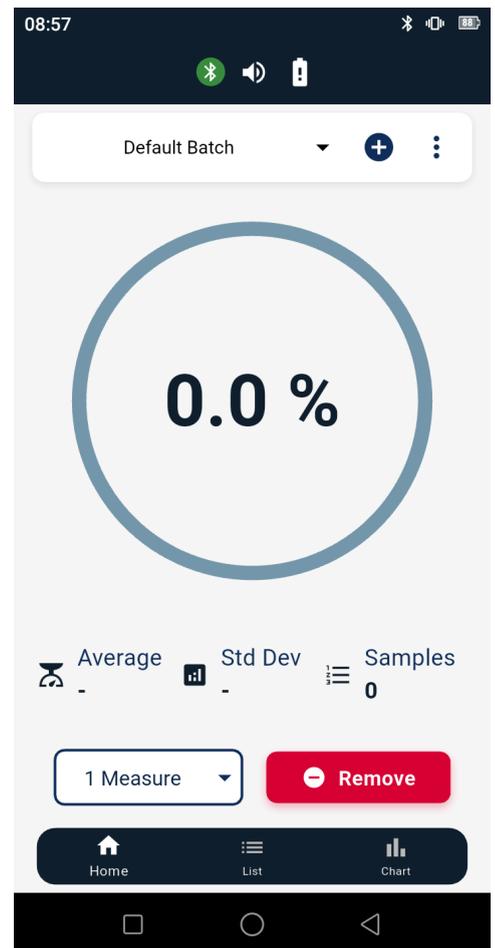
1. Click on this URL : [DOWNLOAD APPS - AGROSTA](#)
2. Once on the website, locate the download section or button.

Please follow these steps to install the application:

1. Click on the download link to initiate the installation.
2. You may encounter several warnings since the file is not from the Google Play Store.
3. The first warning will state, "Setup of unknown applications is not authorized on this phone."
4. Click on "Settings" or "Parameters."
5. Select "Allow this source" to authorize the installation.
6. Click on "Install" to proceed.
7. You may encounter another warning stating, "Blocked by Play Protect: This app can be dangerous."
8. Click on "Install anyway" to proceed with the installation.

Step 2: Opening the Application

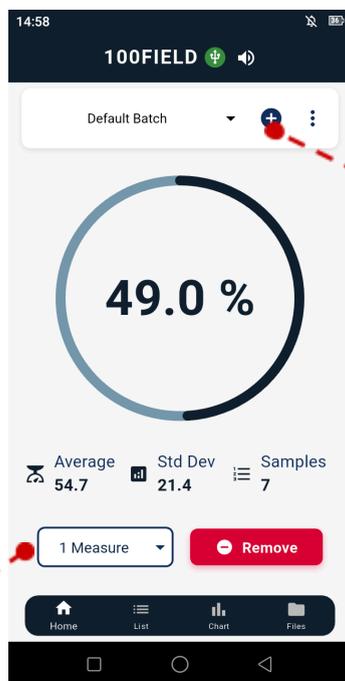
1. **Open the application** on your device.
2. **Press the touchpad** of the device. Within **5 seconds**, the device should **automatically connect**.
3. **First-time connection:** If this is your **first time** connecting the device, an **Android notification** will appear requesting **access to location and contacts**.
 You must accept this request, as Android requires **location access for Bluetooth connectivity**.
4. **Successful connection:**
5. Once connected, the **connection icon turns green**.
6. The **battery icon appears**, indicating the device's battery status.



Step 3: Selecting or Creating a Measurement Batch

Upon connection, a **default batch** is created to store new measurements.

1. Tap the **"+" button** on the screen to create a new batch.
2. Enter a **batch name** (e.g., "Tomatoes Test").
3. Select **the measurement mode** (single or multiple readings per fruit).



Create a new batch

Select the measurement mode

Step 4: Performing a Measurement

1. **Select the correct probe tip** (e.g., Tip 25 for tomatoes and cherries).
2. Position the tester's probe **perpendicular to the fruit's surface**.
3. Press the probe **gently but firmly** into the fruit until fully depressed.
4. The **measurement will automatically be recorded** on the screen.

For multiple measurements per fruit:

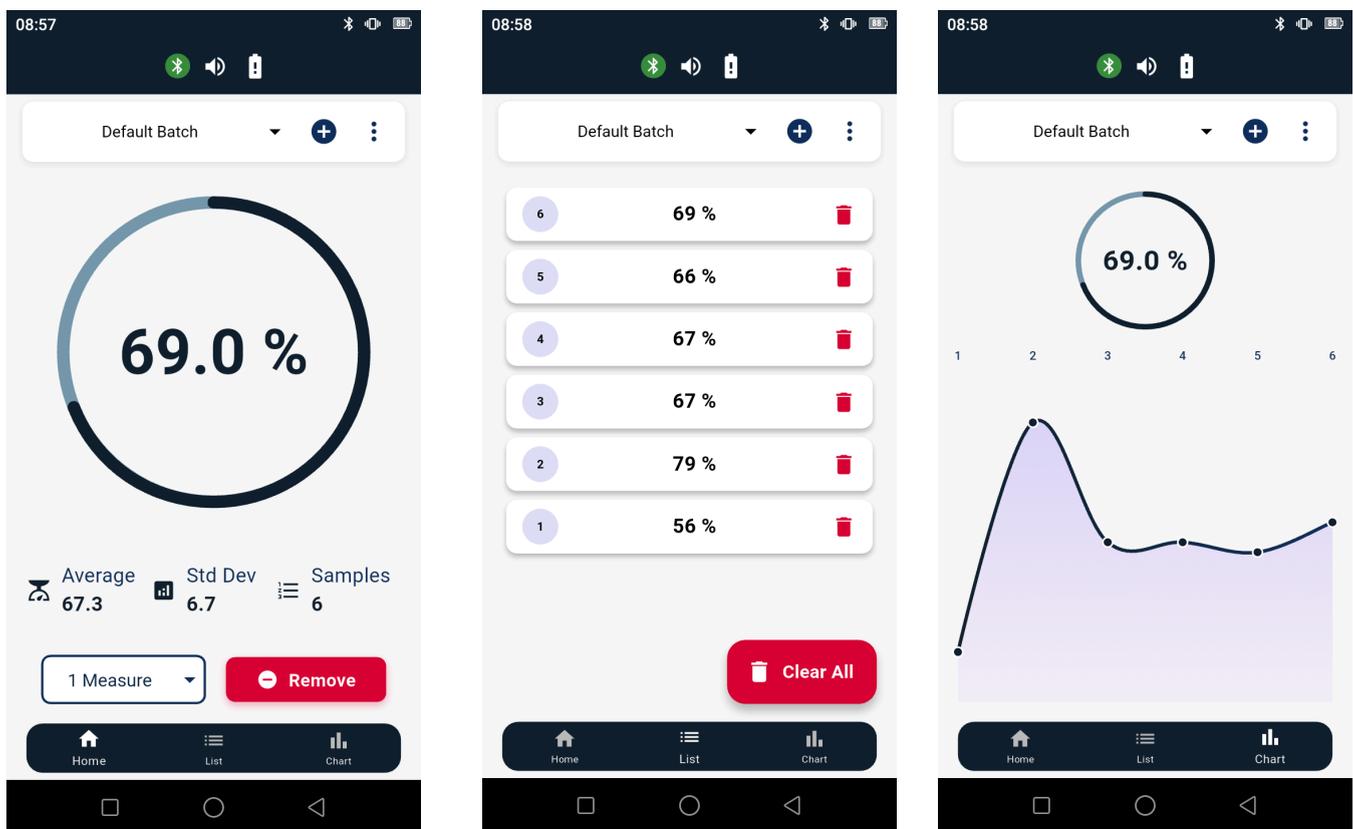
- If using **multi-point measurement mode (2 to 4 readings per fruit)**, an **orange indicator** will appear until all required readings are taken.
- Once all readings are complete, the **average firmness value** will be calculated automatically.

Step 5: Reviewing & Managing Measurements

- Consult **statistics in real-time**, including:
 - **Average firmness**
 - **Standard deviation**
 - **Total number of samples**
- View all recorded **measurements in the batch list**.
- Use the **graph view** to monitor firmness trends.

To delete a measurement:

- Tap the **trash icon** or swipe left on the entry.

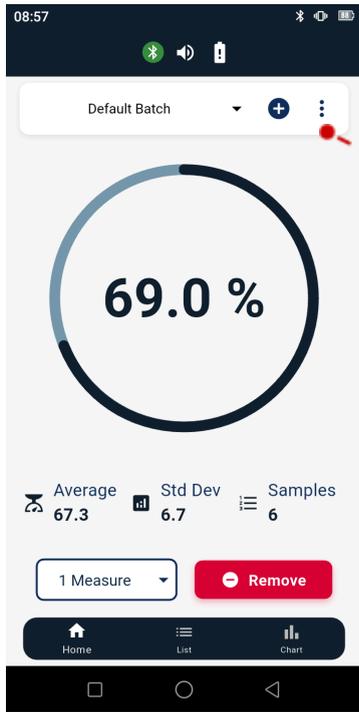


Step 6: Reviewing & Managing Measurements

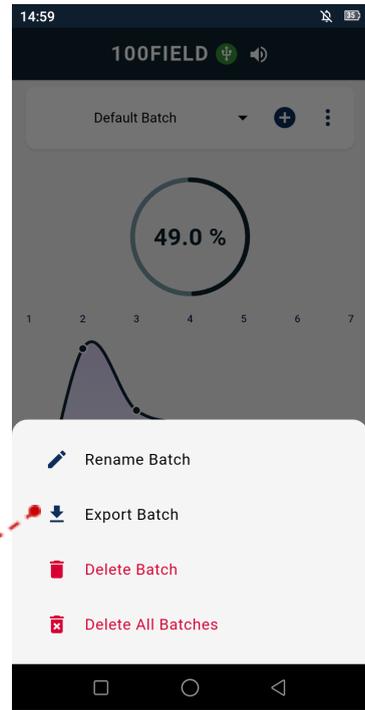
Measurements can be exported as **PDF or CSV files**.

1. Tap "**Export**" and choose **PDF or CSV** format.
2. **Select a destination path** on your phone for the exported file.
3. The file will be saved in the **chosen location**.

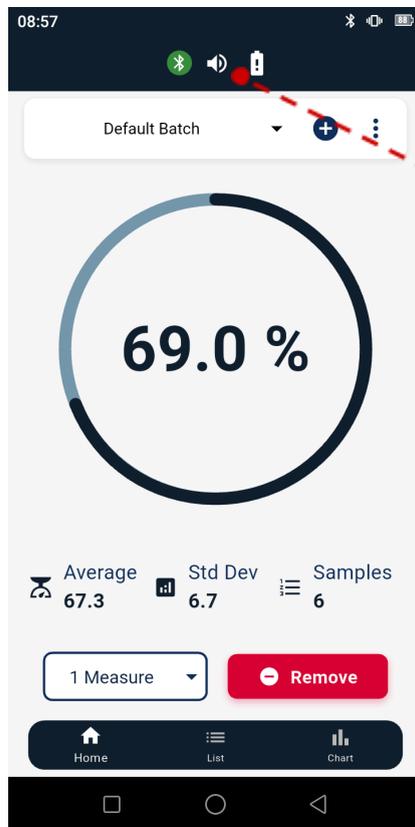
Exported batches can be accessed and reviewed directly in the "**Files**" tab on the console.



Tap to export batch



Tap to export batch



mute the voice

Sleep Mode and Auto-Reconnection

- If there is **no activity for 15 minutes** after the last measurement, the device will **enter sleep mode** and automatically **disconnect from the application**.
- To **wake up the device**, simply **press the touchpad**—it will **automatically reconnect** to the application.
- **All measurements** recorded before sleep mode will **remain available** in the list.
- You can **continue taking measurements** even when your **phone is locked**.
- If you **close the application**, the device will **automatically enter sleep mode**.
- You can **navigate on your phone** while keeping the application open—
✔ The **AGROSTA 100 BLUE** will stay **connected** as long as the application remains open.

File Transfer to a Computer

1. **Connect your Android phone** to your computer using a **USB cable**.
2. On your Android phone, **open the Settings menu**.
3. Navigate to **"Bluetooth & device connection"** or **"Connected devices"**.
4. Locate the **USB connection settings** and select **"USB"** or **"USB for file transfer"**.
5. Choose the **"MTP" (Media Transfer Protocol)** option.
6. On your computer, open **File Explorer (Windows)** or **Finder (Mac)**.
7. Locate your Android phone, usually listed under **"Devices"** or **"Removable Storage"**.
8. **Access the files** related to the application in the **folder where they were stored** on your phone.

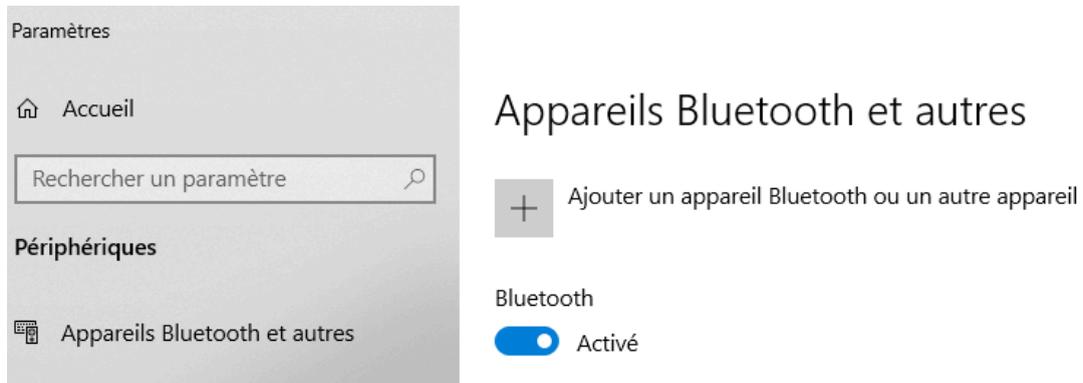
Communication with a Windows Computer

Step 1: Installation

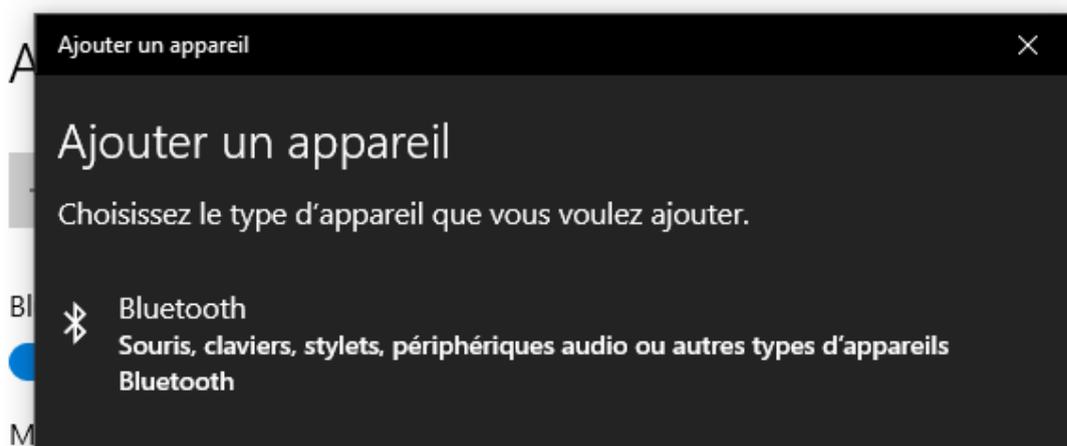
1. Downloading the App for Windows To communicate with your AGROSTA 100 BLUE device on a Windows computer, you can download the application by following this link: <https://agrosta.org/AGROSTA102.zip>

Step 2: Setting up Bluetooth Communication

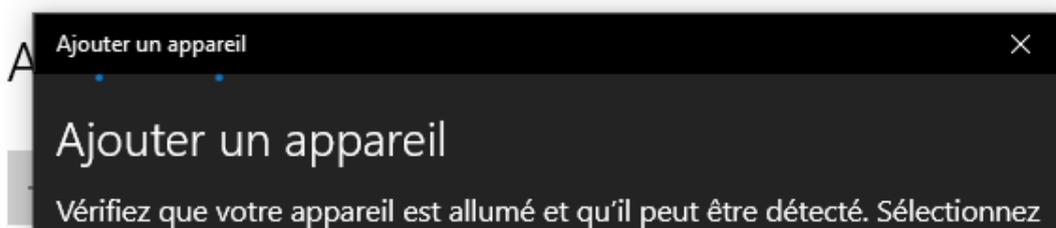
1. On your Windows computer, navigate to the Settings menu and select "Bluetooth & other devices" or a similar option.



2. Wake up your device by pressing the touchpad for **two seconds**. You'll have **one minute** to establish a connection with your smartphone before the device goes back to sleep mode.
3. Add the AGROSTA 100 BLUE device by clicking on the "Add Bluetooth or other device" button.



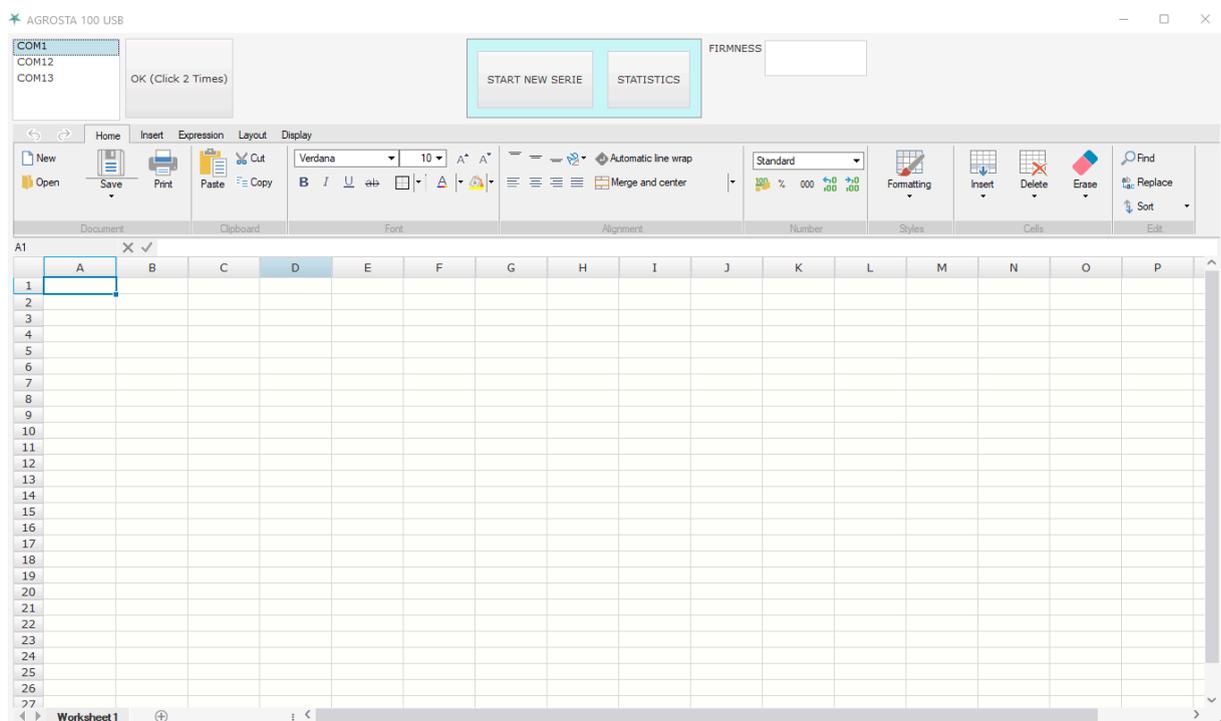
4. Follow the on-screen instructions to complete the pairing process between your computer and the AGROSTA 100 BLUE device.



5. After clicking on "AGROSTA100" in the Bluetooth devices list on your computer, you may see a notification stating that the device is ready to use.

Step 3: Opening the Application

1. Launch the AGROSTA 100 BLUE software on your Windows computer.
2. Look for the COM port indication on the top left corner of the software interface. Each COM port represents a device connection.
3. Identify the COM port that corresponds to your AGROSTA 100 BLUE device.
4. Click on the COM port in the software interface, and then click "OK" twice to confirm your selection.
5. The software is now configured to communicate with your AGROSTA 100 BLUE device via the selected COM port. You are ready to use the software to perform measurements and access other features.



To start a new batch, follow these steps:

1. Click on any cell in the chart where you want the data to be displayed.
2. Next, click on the "START NEW SERIES" button.
3. Proceed to take your measurements using the AGROSTA 100 BLUE device.
4. Once you have completed your measurements, click on the "STATISTICS" button.
5. The software will calculate and display the average and standard deviation for the recorded data.

Congratulations! You are now ready to fully utilize the AGROSTA®100 BLUE. Feel free to refer to the user manual if needed and explore all the features offered by this device.