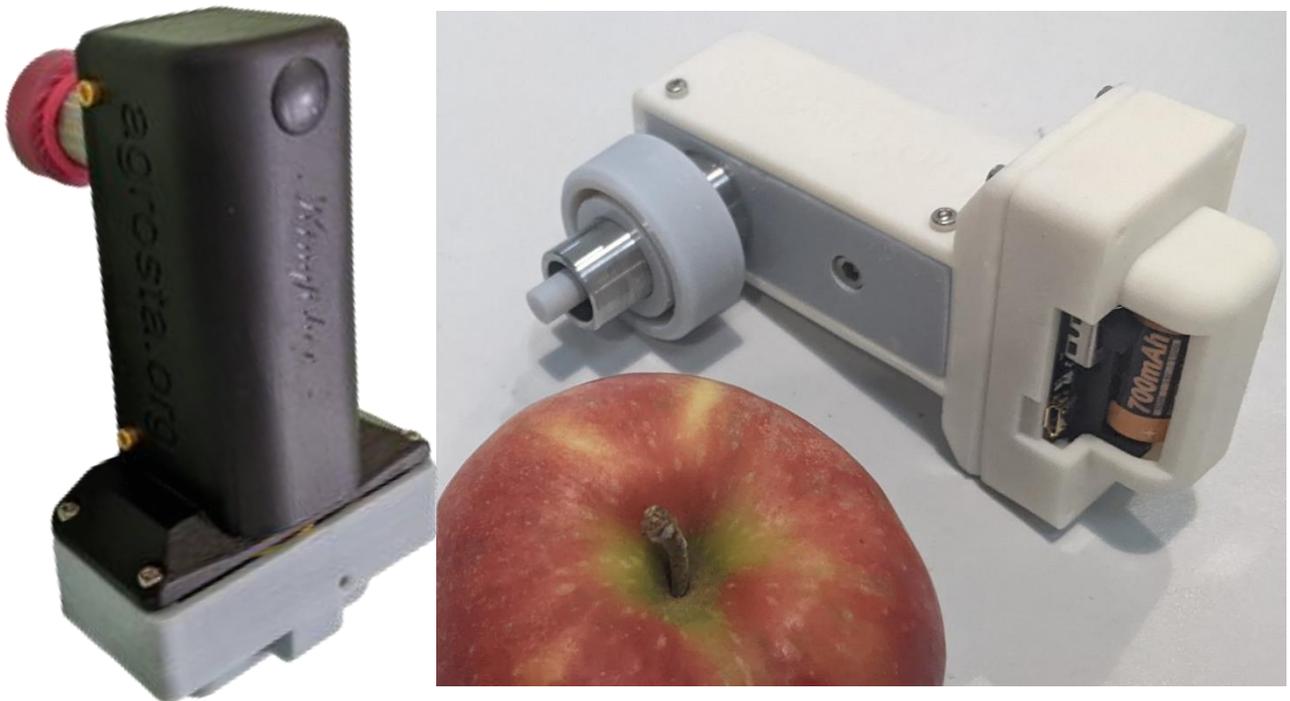


The AGROSTA®ESTHER is a high precision penetrometer designed for Firmness testing of apples, pears, mangos, bananas and other crispy foodstuff or Fruits and Vegetables

The AGROSTA®KINGFISHER is a surface deformation tester for citrus : Lemon, orange, pomelo



Congratulations for having acquired this Agrosta®ESTHER !

Your box contains :

- The device itself (Pre-equipped with a tip of 11)
- The tip of 11 : Diameter 11.11 mm (7/16") – Surface 0.97 cm² used on Apples
- A tip of 8 diameter 7.94 mm (5/16") – Surface 0.49 cm² used on peaches, pears, kiwis, melon flesh..
- Only one tip is provided with Kingfisher already fixed on the instrument + a set of tip protections
- The charger
- The manual
- A certificate of conformity
- The optional tips or systems if ordered

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The AGROSTA®ESTHER has been completely designed and assembled in France. The electronic board (Made in USA) has been manufactured through a highly robotized process.

The AGROSTA®ESTHER is not waterproof ! It is a precision instrument, avoid falls and shocks

The AGROSTA®ESTHER is guaranteed 2 years from the date of shipment

- Minimal Kg measurement : 100 Grams
- Maximal Kg measurement : 13500 Grams
- Resolution : +/- 2 grams

USE THE ANDROID APP FOR SMARTPHONE AND TABLET

First, switch on your device and associate it to your phone or tablet

For this, go in PARAMETERS / BLUETOOTH and click on "Add device"

Once it is associated, switch the Esther off and on again

www.agrosta.org/esther.apk



www.agrosta.org/kingfisher.apk



- Once the file is downloaded, you will find it in the DOWNLOADS folder of your smartphone or tablet
- Click on it in order to install it
- You will have several warnings as this file does not come from GOOGLE PLAYSTORE
- The first warning says "Setup of unknown applications is not authorized on this phone"
- Click on PARAMETERS

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AGROSTA®ESTHER & KINGFISHER

DIGITAL PENETROMETER



- Select "ALLOW THIS SOURCE"
- Click on INSTALL
- Then you have a warning : "BLOCKED BY PLAY PROTECT" : This app can be dangerous
- Then click on INSTALL ANYWAY

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In order to use the **BARCODE SCANNER**, you should first install a QR code app to be downloaded on **GOOGLE STORE**

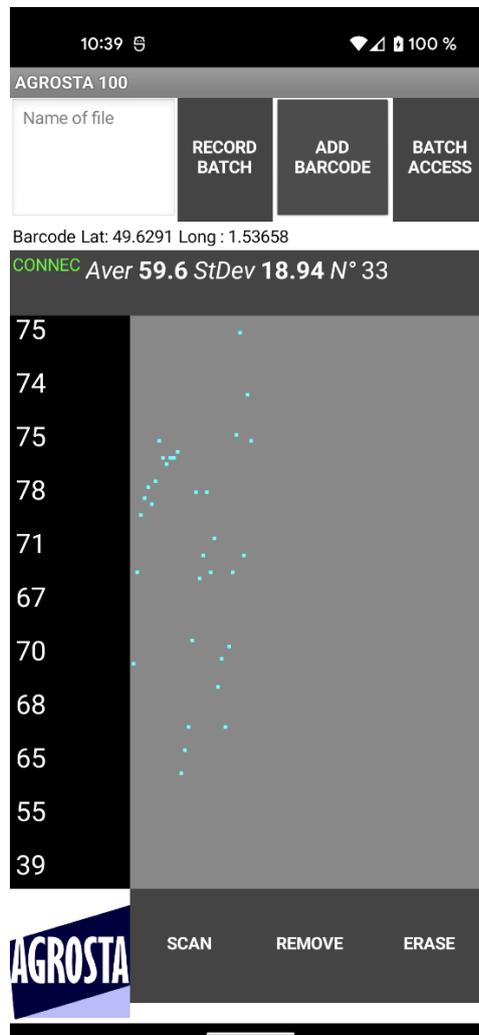
We use QR Scan from Tea Caps (Works for QR and simple BARCODES as well) – Might not work with some other QR code apps



Scanner de codes QR & de codes-b...
Annonce • TeaCapps • Productivité
Scanner QR en français.
📌 Installée

For using the APP :

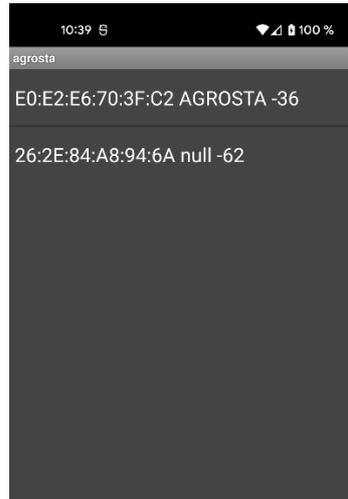
- AGROSTA ESTHER : Simply switch on the device and wait 3 seconds
- Once installed, start the app (only after having switched ON the device) :



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- Click on SCAN on bottom left, close to AGROSTA logo



- If you obtain a black screen with no device detected :
- 1/ Check that the device is appaired (first steps in parameters)
 - 2/ Close the app (Really close, don't let it working in background)
 - 3/ Switch off and then on again the Agrosta ESTHER
 - 4/ Reopen the app

- Click on the line containing the name AGROSTA (here the first one)



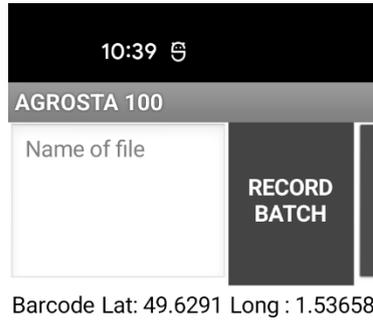
- You see now CONNEC appearing in green, which means the device is connected to your smartphone / tablet
- You can now start the measurements



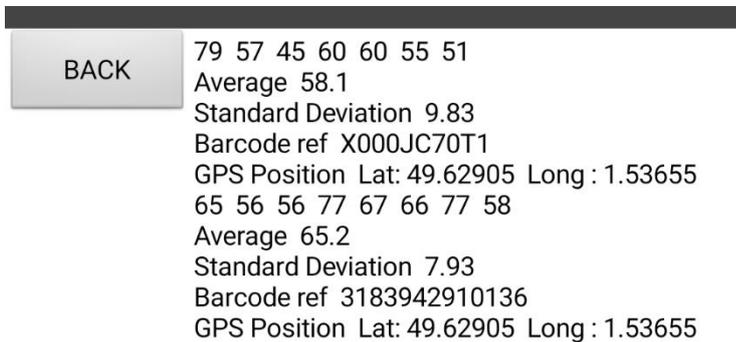
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- Once you have finished to measure your batch, enter a name of file and then click on RECORD BATCH

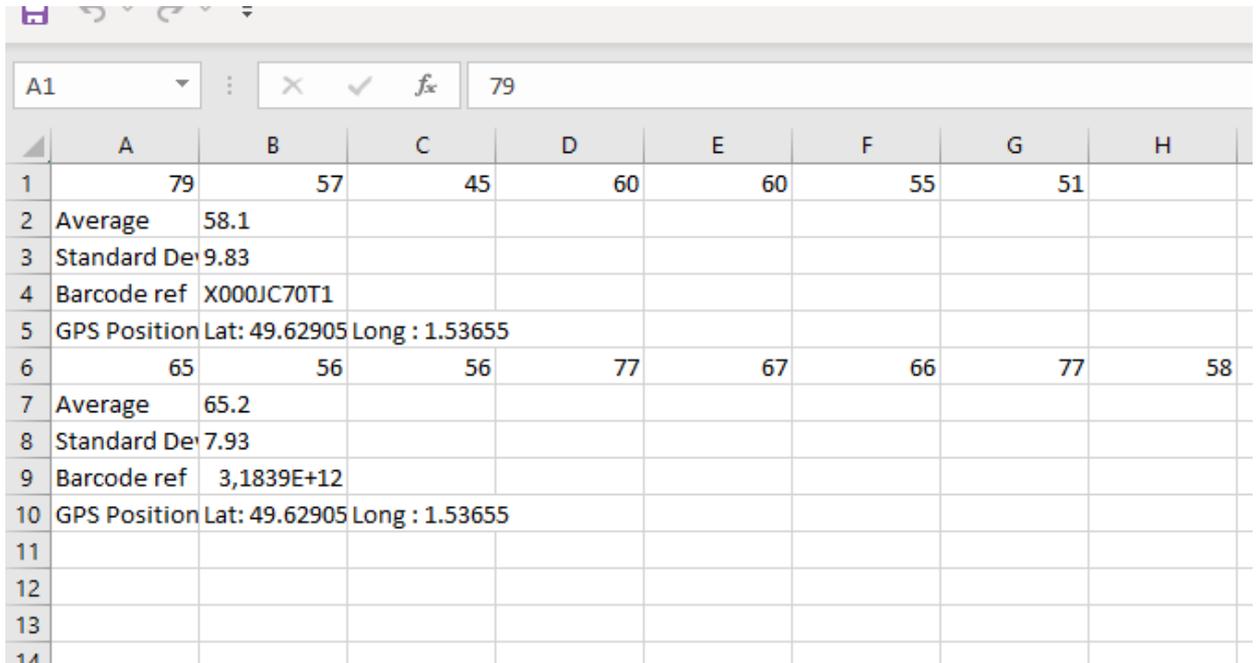


- If you use the name of an existing file, the data will be added at the end of the file (append)
- You can consult the previous batches by clicking on "BATCH ACCESS"



- Click on the button "BACK" in order to return to the measurement screen
- The files are available under ".csv" format (Excel compatible) with separator ";"
- There are located here on your phone or tablet :
Android/data/appinventor.ai_apollinaire_agro.esther/files

- Here is how a file look like after having stored 2 batches under same file name :



	A	B	C	D	E	F	G	H
1	79	57	45	60	60	55	51	
2	Average	58.1						
3	Standard Dev	9.83						
4	Barcode ref	X000JC70T1						
5	GPS Position	Lat: 49.62905 Long : 1.53655						
6	65	56	56	77	67	66	77	58
7	Average	65.2						
8	Standard Dev	7.93						
9	Barcode ref	3,1839E+12						
10	GPS Position	Lat: 49.62905 Long : 1.53655						
11								
12								
13								
14								

- **Voice function :** Click on UNMUTE and choose between more than 40 languages
The results will be said by a voice
It's a very good help for the user, that does not need to watch the phone or tablet when measuring

Communication with a PC under WINDOWS

The software is on the USB stick provided

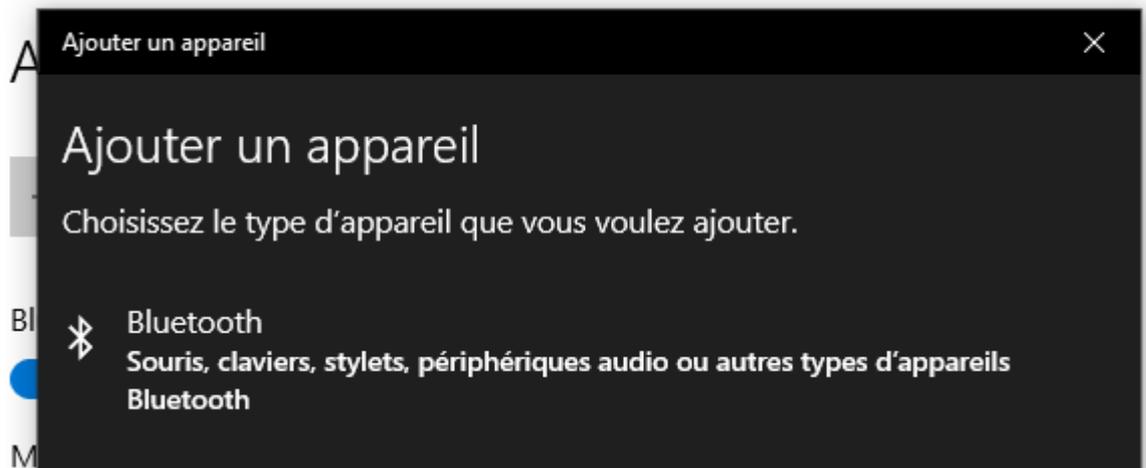
First, you need to add the Bluetooth device to your PC :

Setting up the Bluetooth communication :

- Switch on the ESTHER / KINGFISHER
- On your computer, go the parameters, and then Bluetooth devices:



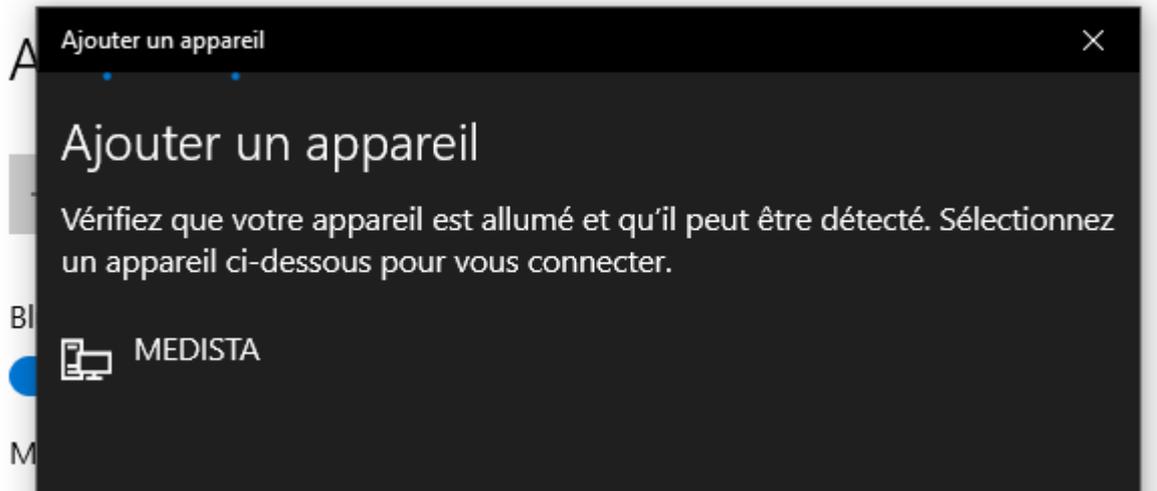
- Click on “Add a Bluetooth device”, and check that the Bluetooth is activated
- Then click on the first category : Bluetooth keyboards, mouse, audio and others :



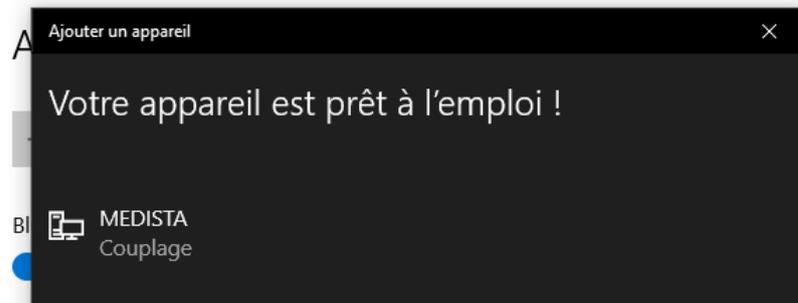
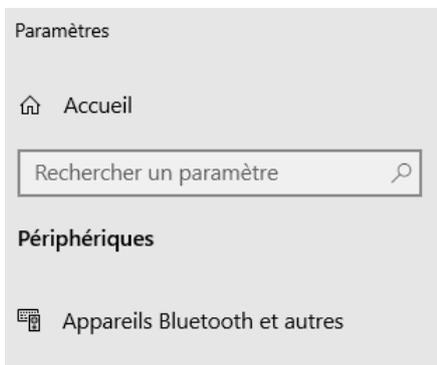
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- Then click on “ESTHER”

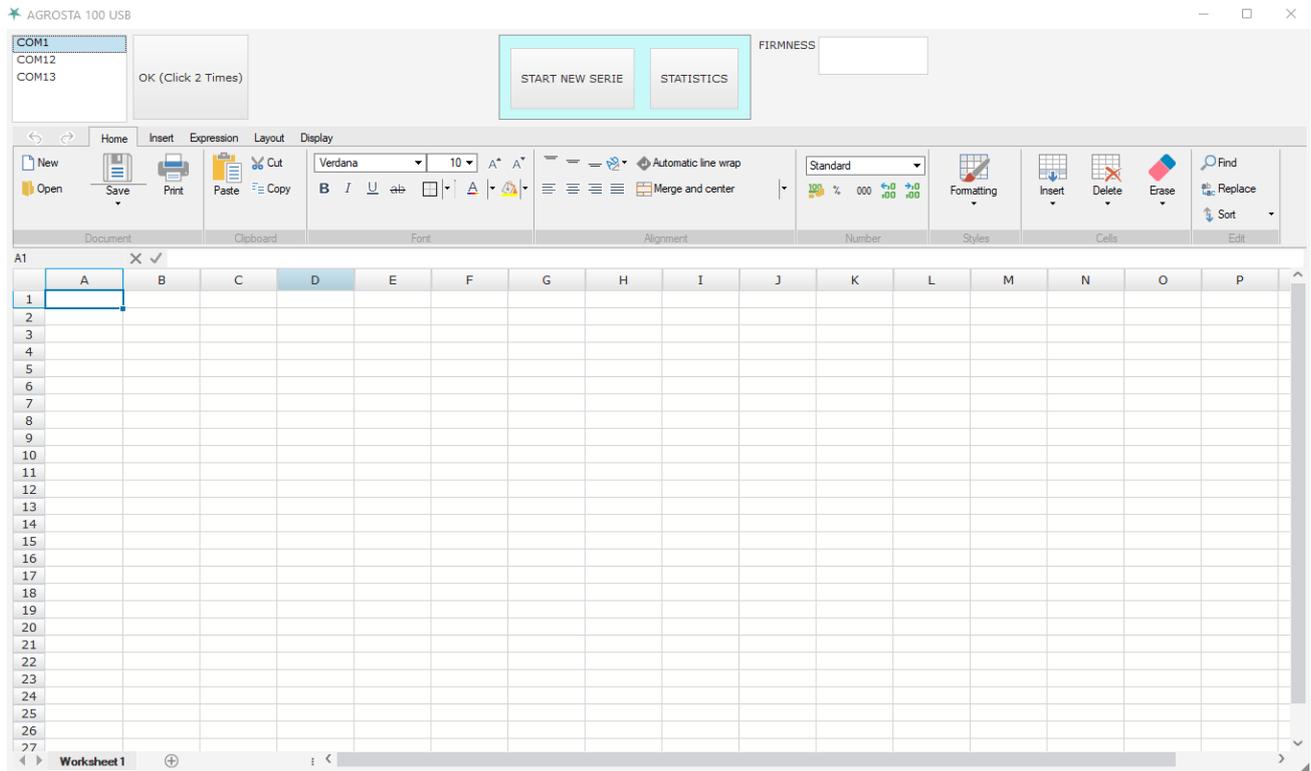


- Once you have clicked on “ESTHER”
- Your computer indicates : “the device is ready to use”



AGROSTA Overseas

Start the software – One of the COM indicated on top left corresponds to your device
Click on it, and then 2 times on OK
Usually, the right COM is the last one



To start a new batch, click on any cell in the chart, where you want the data to be displayed
Then click on “START NEW SERIE”
Make the measurements
When finished, click on “STATISTICS”
You will obtain the average and standard deviation