

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, peers, 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

## **AGROSTA Overseas**



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

## **AGROSTA Overseas**



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

## **AGROSTA Overseas**



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



## **AGROSTA Overseas**



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



Barcode Lat: 49.6291 Long : 1.53658

- 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"

BACK	79 57 45 60 60 55 51 Average 58.1
	Standard Deviation 9.83
	Barcode ref X000JC70T1
	GPS Position Lat: 49.62905 Long : 1.53655
	65 56 56 77 67 66 77 58
	Average 65.2
	Standard Deviation 7.93
	Barcode ref 3183942910136
	GPS Position Lat: 49.62905 Long: 1.53655

- 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

## **AGROSTA Overseas**



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

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	А	В	С	D	E	F	G	н
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 : 1.5365	5				
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 : 1.5365	5				
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

### **AGROSTA Overseas**

**AGROSTA®ESTHER & KINGFISHER** 



Communication with a PC under WINDOWS

The software is on the USB stick provided

DIGITAL PENETROMETER

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:

Paramètres	
命 Accueil	Appareils Bluetooth et autres
Rechercher un paramètre	Ajouter un appareil Bluetooth ou un autre appareil
Périphériques	
	Bluetooth
Appareils Bluetooth et autres	Activé

- 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 :

А	Ajouter un appareil		×
í	Ajouter u	n appareil vpe d'appareil que vous voulez ajouter	
BI	Bluetooth Souris, clav Bluetooth	iers, stylets, périphériques audio ou autres types d'appareils	

## **AGROSTA Overseas**



 $\times$ 

Then click on "ESTHER"

Ajouter un appareil

# Ajouter un appareil

Vérifiez que votre appareil est allumé et qu'il peut être détecté. Sélectionnez un appareil ci-dessous pour vous connecter.



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

Paramètres		
டை Accueil	Ajouter un appareil	×
Rechercher un paramètre	Votre appareil est prêt à l'emploi !	
Périphériques		
🗑 Appareils Bluetooth et autres	BI Couplage	

## **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

OM1	]									FIRMNES	1						
OM1	2									TINHINES							
OM1	13	OK (Click 2	Times)				START NEW	SERIE	STATISTICS								
6	⊘ Home	Insert E	pression Layo	out Display													
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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

## **AGROSTA Overseas**