

I. Functions and Characteristic

The fruit sclerometer (also called fruit hardness tester), this series has GY-1, GY-2, GY-3 three kind of models, use to testing apple, pear.

Strawberry, grape's fruit's hardness. It is suitable for the fruit tree scientific research department, the fruits company, the fruit tree farm, unit and so on technical college agriculture colleges and universities, to cultivate the improved variety, the harvest storage, the product transportation and the processing and so on by the fruits hardness. Thus judge fruit's mature degree. This instrument volume small, the weight is light, straight reads the type, carries conveniently, specially is suitable for the scene determination, the result came out direct.

II. Principle

The hardness of fruit can express by the unit area (s) could undertake the pressure of dynamometer (N), their specific value is just as the hardness (P).

$$P = N / S$$

P-the hardness value of fruit 105Pa or (kg / cm²)

N-pressure of dynamometer (N) N or (kg)

S-the area of pressure m² or (cm²)

III. Specification

Model	GY-1	GY-2	GY-3	
Indication scale	2-15kg / cm ² (× 105Pa)	2-15kg / cm ² (× 105Pa)	2-15kg / cm ² (× 105Pa)	2-15kg / cm ² (× 105Pa)
Pressure Head size	Φ3.5mm	Φ3.5mm	Φ8mm	Φ11mm
Precision	± 0.1	± 0.02	± 0.1	
Insertion Depth	10mm			
Size	140 × 60 × 30mm			
Weight	0.3kg			

IV. Instructions

Before measuring: Rotating dial, justify the dial and driven guidelines and the initial alignment of the same scale (GY-1 for the scale of the line 2, GY-2 and GY-3 for the scale of the line .2.

0.5); will raze the be measured fruit about 1 cm² the skin.

Measuring: Hold the sclerometer, make the sclerometer perpendicular to the surface, the pressure head insert into the fruit indicators, when the pressure head to the scale of pressure (10 mm), it stops, instructions Objectives of reading instruction is the fruit of hardness , for three average.