



# USER MANUAL FOR FIELD AND LAB OBSERVATIONS AND MEASUREMENTS FOR THE CHARACTERISATION OF PALESTINIAN (*Olea europaea* L.) OLIVE CULTIVARS AND OF PALESTINIAN OLIVE OIL

following the methodology for  
primary characterisation of olive varieties  
(IOOC – International Olive Oil Council)

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▪ Franco Famiani : من قسم العلوم الزراعية والبيئية ، جامعة بروجيا ، بروجيا ، ايطاليا ، لاقتراحه على الملاحظات الميدانية والمواد المقدمة استخدمت لهذا الدليل.

Some of the pictures used for this manual are drawn and modified from Barranco Naver, D., Touzani, A., Cimato A., Fiorino, P., Serafini, F., Rallo Romero, L., Trujillo Navas, I, (2000). World catalogue of olive varieties. *International Olive Oil Council*, Madrid, Spain (2000)

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TREE

1/ Height and Volume

Non destructive measurement

On each tree/cultivar

Tree in good conditions and not pruned

H 1

Height of the tree from the ground to the top of the canopy

H 2

Height of the trunk from the ground up to the start of the canopy (start of the branches)

H 3

Height of the lower part of the canopy from the ground

D 1 / D 2

Diameter of the canopy

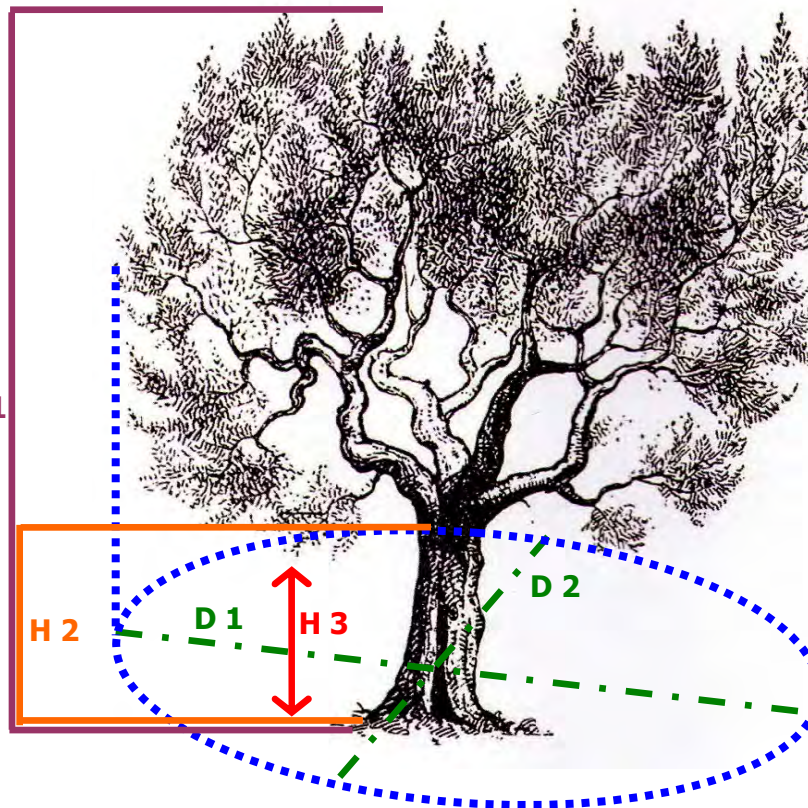
At 12:00 a.m., in summertime, measurement of the projection of the canopy on the ground, measured in 2 perpendicular directions

C1

Circumference below branching

C2

Trunk circumference at 30-40 cm from the ground (if more than 1 trunk, replicate the measurements on all of them)



3-5 meters stick, with marks every 50 cm

Measuring tape

Sprayer and/or Labels + Pins

Pictures (with and without the meter stick)

2/ Vigour

Non destructive measurement

On 1 tree for each cultivar

Tree in good conditions and not pruned

It is the intrinsic capacity of the tree to grow, in all areas, under optimal cultivation conditions

Weak

Moderate growth; at maturity, trunk and canopy dimensions are less than those expected from a normal specimen of the same species

Medium

Average growth as expected from an olive tree

Strong

Strong growth, marked trunk and canopy development (height and volume), and vigorous and long branches

Direct observation

No pictures needed

**3/ Growth habit**

This, is the natural distribution of the scaffold branches before intervention for shaping the tree for a given training system and when vigour exerts little influence

**Non destructive measurement**

On 1 tree for each cultivar

Tree in good conditions and not pruned

**Erect**

Apical dominance of branches that grow vertically; the canopy can be assimilated to a conical shape, sometimes cylindrical at maturity

Even though cultivars with an erect growth habit are often vigorous, as a rule the erect growth doesn't mean strong vigour!!! Don't confound!!



Direct observation  
No pictures needed

**Spreading**

Initial orthotropic branching, then the limb bend down and turn in the direction where there is more light and space. In this way, the canopy becomes hemispherical in shape.



**Dropping**

Plagiotropic branching (shoots and limbs which are small in diameter and bend downwards from the outset).



4/ Canopy density

Non destructive measurement

On 1 tree for each cultivar

Tree in good conditions and not pruned

The canopy density depends on the interaction among the length of the internodes, the number of the shoots and their vigour, the shape and the size of the leaves.

**Sparse**

Typical of fast growing cultivars. From any point of view, the canopy shows spaces allowing the light to penetrate easily inside the vegetation



**Medium**

Typical density of most of the species. Abundant and thick vegetation, but still allowing some light to penetrate inside



**DENSE**



**Dense**

Very thick and compact vegetation, preventing light to penetrate in the internal parts. Generally: shoots with short internodes, abundant branching, heavy foliage.

Direct observation

No pictures needed

## FRUITING SHOOTS

### 1/ Length of the shoot and of internodes

#### Non destructive measurement

Take the length of the fruiting shoot from the insertion of the shoot (base) to the node with the fully expanded leaves (terminal portion). Don't consider the apex of the shoot

Count the **number of nodes**

On **1-year-old** shoots

On **20 fruiting shoots** per each cultivar

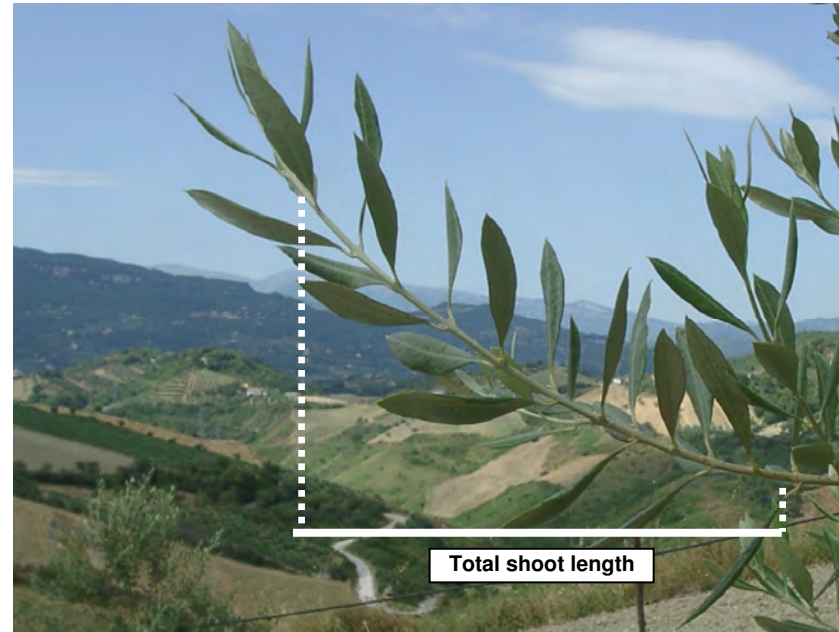
Shoots **chosen randomly on the 4 directions** (North, South, West, East) at shoulder level

**Length of internodes = (Length of the shoot / Number of nodes)**

**Short** if < 1 cm

**Medium** if 1 -3 cm

**Long** if > 3 cm



Rulers

Millimetric paper

Labels

Pictures 1/ in the field and 2/ in the lab: cut 1 or 2 representative shoots and take pictures with the millimetric paper

Always use a label on each photo so that it will be always possible to recognise the variety

## LEAVES

### 1/ Shape of the leaf (=Length/Width ratio)

#### Shape

E if  $L/W < 4$   
E-L if  $L/W 4-6$   
L if  $L/W > 6$

#### Length

Short if  $< 5$  cm  
Medium if 5-7 cm  
Long if  $> 7$  cm

#### Width

Narrow if  $< 1$  cm  
Medium if 1-1,5 cm  
Broad if  $> 1,5$  cm

### Destructive measurement

Sample **adult and healthy leaves**, from the **middle part** of the most representative **1-year-old** shoots on the **South-facing** side of the tree, at shoulder level

**Length:** along the central nervature, from the base (excluding the petiole) to the apex of the leaf

**Width:** maximum transverse diameter

On **100 leaves** sampled in the field, enclosed in **plastic bags (labelled)** for each cultivar and kept in a cool place (not more than 1 day)

Measurements and observations in the **lab**

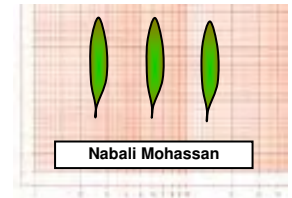
E / Elliptic  
 $L/W < 4$

E-L / Elliptic-Lanceolate  
 $L/W = 4-6$

L / Lanceolate  
 $L/W > 6$

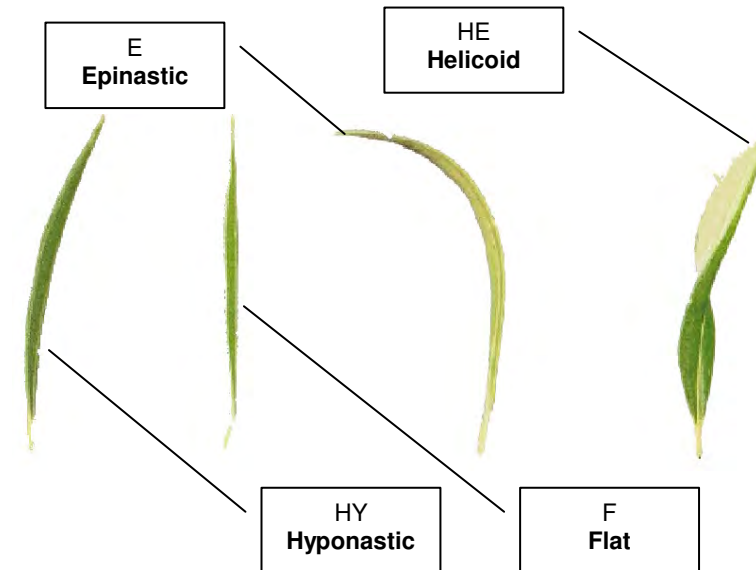


- Plastic bags
- Labels
- Rulers
- Millimetric paper
- Pictures of 3 healthy and representative leaves placed on millimetric paper, using a label with the cv name



### 2/ Longitudinal curvature of the blade

On the same 100 hundred leaves used for L and W measurement



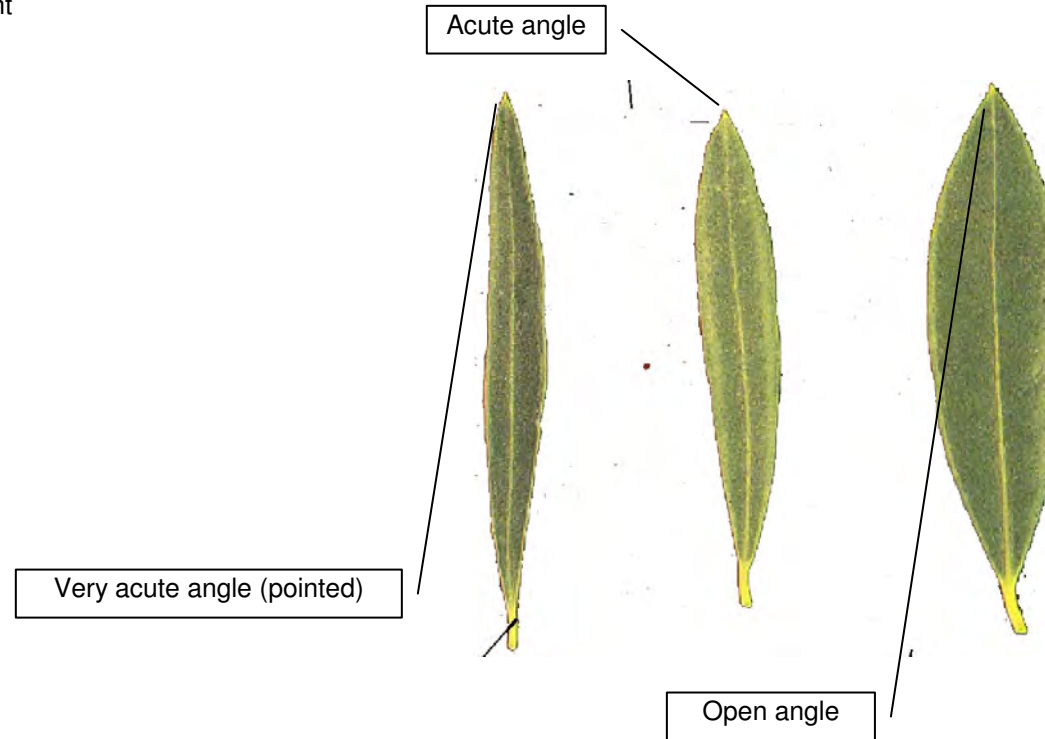
- Direct observation
- Pictures (millimetric paper)

3/ Apex shape/Apex angle

On the same 100 hundred leaves used for L and W measurement

Direct observation

No pictures needed



4/ Base shape/Base angle

On the same 100 hundred leaves used for L and W measurement

Direct observation

No pictures needed



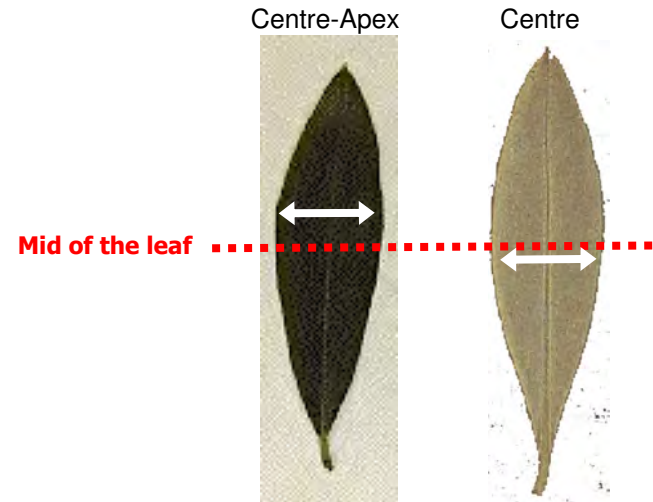


**5/ Maximum width localisation**

On the same 100 hundred leaves used for L and W measurement

- Centre
- Centre-Apex
- Centre-Basal

Direct observation  
No pictures needed

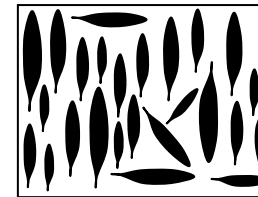


**6/ Leaf surface**

Lay 25 healthy and representative leaves on the glass of the photocopy machine (superior surface of the leaves facing the glass)

- Small (<3 cm<sup>2</sup>)
- Medium (3-6 cm<sup>2</sup>)
- Large (>6 cm<sup>2</sup>)

Insert a label with the name of the cultivar



Label  
Photocopy machine / Scanner  
Autocad software

**7/ Leaf SUPERIOR face brightness**

On the same 100 hundred leaves used for L and W measurement

No pictures needed



Bright



Opaque

**8/ Leaf SUPERIOR face colour**

On the same 100 hundred leaves used for L and W measurement

No pictures needed



Pale green



Dark green

**9/ Leaf INFERIOR face colour**

On the same 100 hundred leaves used for L and W measurement

No pictures needed







Green-grey

Grey-green

## INFLORESCENCE


1/ Length	<b>Destructive measurement</b>		Rulers
2/ Peduncle length	On healthy inflorescences during the <b>white bud stage</b>		Plastic bags
3/ Maximum width	On <b>100 inflorescences</b> /cultivar sampled from the <b>middle portion</b> of <b>1-year-old</b> representative shoots on the <b>South-facing</b> part of the canopy, at <b>shoulder height</b>		Millimetric paper
	Cut in the field, store in <b>plastic bags</b> and in a <b>cool place</b> , measurements in <b>lab</b> (as soon as possible!!)		Pictures of 3 homogeneous inflorescences

4/ Structure

Long and sparse	Long and compact	Short and sparse	Short and compact	Direct observation
				No pictures are needed

5/ Number of flowers per inflorescence

Count the number of flowers (buds) / inflorescence

High (>25)	Medium (18-25)	Low (<18)	Direct observation
			No pictures are needed

## INFLORESCENCE

### 1/ Time of flowering

#### Non destructive measurement

### 2/ Last (duration) of flowering

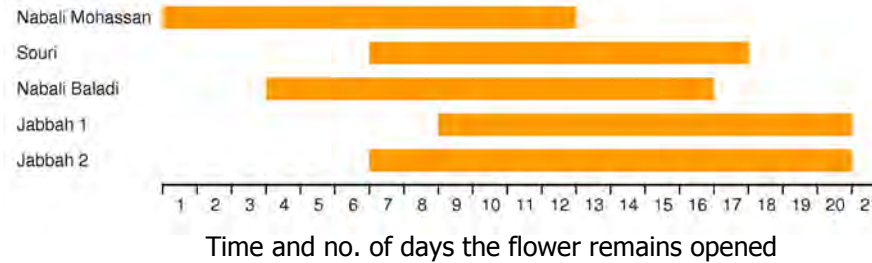
On **20 inflorescences/cultivar**, randomly chosen from the **middle part of 1-year old** and representative shoots, from the 4 directions (**North, South, West, East**) at shoulder height.

Observation need to start **before the first flower** opens and need to be repeated **every 2-3 days**

Take note of the **date the first flower opens**

Check 20 inflorescences (randomly chosen at each time) until the **last flower of the inflorescence will loose the petals**

[Hypotetical] Flowering phenogram of different varieties (the real one, will be drawn at the end of the observations)



Direct observation

Pictures



Direct observation

### 3/ Ovary abortion

#### Destructive measurement

On **50 inflorescences/cultivar** at **full bloom** stage

Attention!! You can find the followings, according to the cultivar:

- 100% flowers are open
- 50% flowers are open, 25% already loose petals, 25% still have to open

**OA** Percentage of **O**vary **A**bortion of each inflorescence:

$$= \frac{\text{(number of flowers with aborted ovaries on each inflorescence / total number of flowers on each inflorescence)} \times 100$$

!! Keep separated data for each inflorescence



Male flower

Aborted ovary

Perfect flower



Vital ovary

## EVALUATION OF FERTILITY

## 4/ Fertility

- self-pollination
- free pollination

## Non destructive measurement

## Self-pollination

**A/ Before the start of flowering:** select **4 small branches/tree**, in order to have **200-300 inflorescences/branch**, from the **4 directions** (North, South, West, East) of the canopy in **MAX 3 different trees/cultivar**

Count the **number of inflorescences**

Wrap each branch in **paper bags** (passage of pollen need to be avoided)

**B/ When flowering is terminated** (see observation on 1/ time and 2/ last of flowering), take away the bags, **label** the small branches with tape of different colours, **count the number of fruits** (fruit set) on all branches

## Free pollination

**A/ Before the start of flowering**, select and **label 4 small branches/tree**, in order to have **200-300 inflorescences/branch**, from the **4 directions** (N, S, W, E) of the canopy in **MAX 3 different trees/cultivar**

Count the **number of inflorescences**

**B/ When flowering is terminated**, count the **number of fruits** on all branches

**C/** (common for self and free pollination)  
At **fruit ripening**, count again the **number of fruits**



Direct observation

Paper bags or tissue-mom-tissue bags

Rope

Markers

Labels

Take different pictures during the work, especially of the plants with the bags

**FRUIT**

**1/ Fruit growth**

**Destructive measurement**

Plastic bags

**A/** Period of sampling: **2 weeks after full bloom until pit hardening**

Digital scale

Every **15 days**, sample **50 fruits/tree**

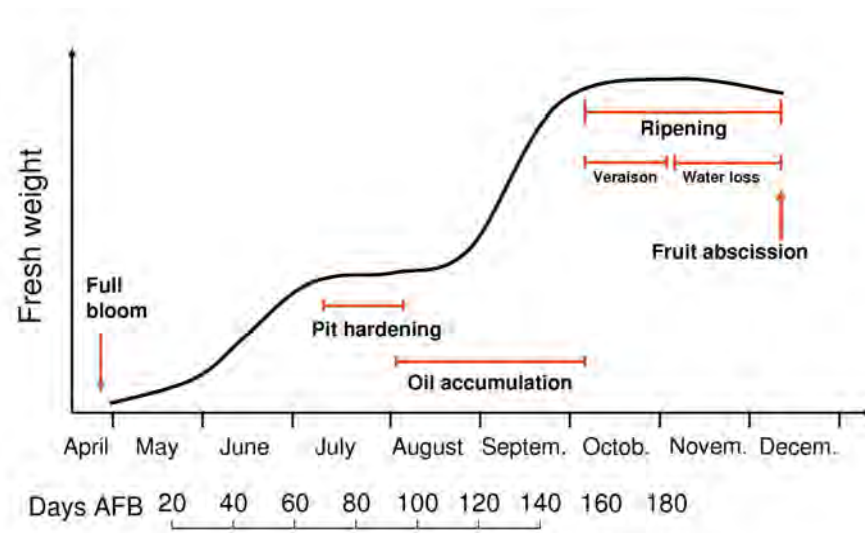
Oven (for dry weight): at least 2 days @ 70-80°C

Fruits should be **not injured, healthy**, randomly taken from the **external portion of the canopy**, between **1,5 and 1,8 m** height (higher, if needed), in the 4 directions (**North, South, West, East**).

Store fruits in **plastic bags** and keep them in a **cool place**

Paper bags (for fruits in the oven)

Measure the **Fresh and Dry weight** of the 50 fruits, together



**B/** Period of sampling: **from pit hardening until November**

Every **15 days**, sample **10 fruits/tree**

Fruits should be **not injured, healthy**, randomly taken from the **external portion of the canopy**, between **1,5 and 1,8 m** height (higher, if needed), in the 4 directions (**North, South, West, East**).

Store fruits in **plastic bags** and keep them in a **cool place**

Measure the **Fresh and Dry weight** of the 10 fruits, together

**2/ Presence of lenticels**

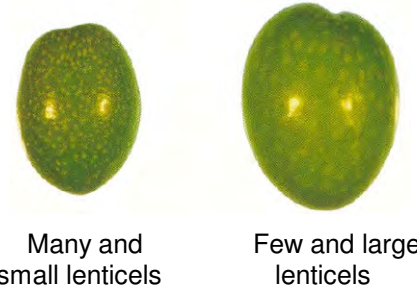
On the fruits used during one of the sampling for fruit growth, **before veraison**, when the fruits is **still green**

Direct observation

**3/ Size of lenticels**

when the fruits is **still green**

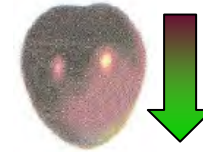






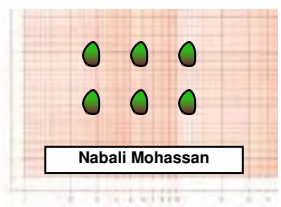

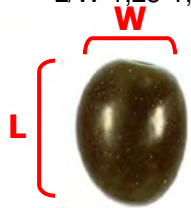

Pictures



Many and small lenticels

Few and large lenticels



<p><b>4/ Location of start of colour change</b></p>	<p>On the fruits used during one sampling for fruit growth, <b>when veraison is starting</b></p>	<p>From the base</p>	<p>Uniformly across the whole epidermis</p>	<p>From the apex</p>	<p>Direct observation Pictures</p>	
						
<p><b>5/ Weight</b></p>	<p><b>Destructive measurement</b></p> <p>Measurement executed when the fruit has completely changed its colour (after <b>complete veraison</b>)</p> <p>On <b>100 fruits/cultivar</b> taken from the <b>middle part</b> of the most representative fruiting shoots from <b>South-facing</b> part of the canopy.</p> <p><b>N.B.</b> very small or very large fruits should be discarded from the sampling</p> <p>After the weight and the following measurements and observations have been taken, <b>keep the fruits</b> (they will be used later for these morphological <b>characters of the stone</b>)</p>	<p>Low &lt; 2g</p> 	<p>Medium 2-4g</p> 	<p>High 4-6g</p> 	<p>Very high &gt; 6g</p> 	<p>Digital scale Millimetric paper Label for each cv Pictures of 6 representative fruits</p> 
<p><b>6/ Shape of the fruit (=Length/Width ratio)</b></p> <p><b>L</b> = longitudinal diameter <b>W</b> = equatorial transverse width</p>	<p>On 100 fruits (same fruits sampled for the fresh weight)</p>	<p>Spherical-globose L/W &lt; 1,25</p> 	<p>Ovoid L/W 1,25-1,45</p> 	<p>Elongated L/W &gt; 1,45</p> 	<p>Rulers No pictures are needed</p>	

7/ Symmetry

On 100 fruits (same fruits sampled for the fresh weight)

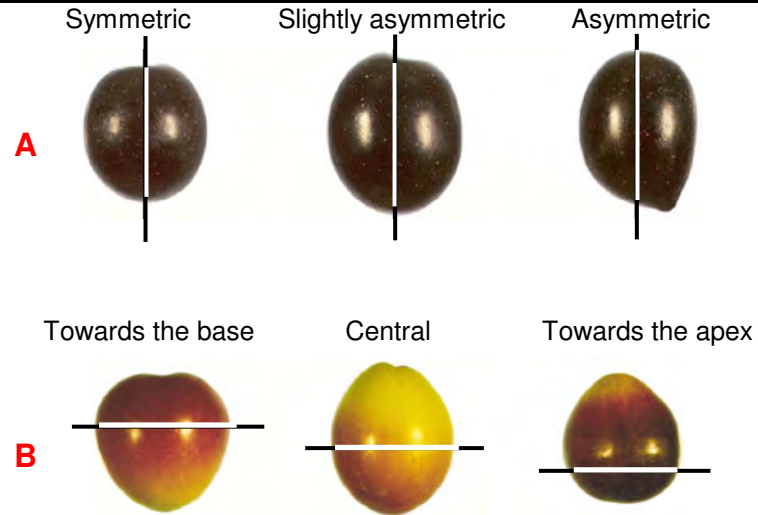
**Position A – Longitudinal symmetry**

Position in which the fruit shows the greatest asymmetry: hold the fruit between the index finger and the thumb and choose the face showing more asymmetry if compared to the others



**Position B – Position of max transverse diameter**

Turn 90° from position A, in such a way as to present the most developed part to the observer



Direct observation

No pictures are needed

8/ Apex

On 100 fruits (same fruits sampled for the fresh weight)

**Apex (position A)**  
Pointed      Rounded



Direct observation

No pictures are needed

9/ Base


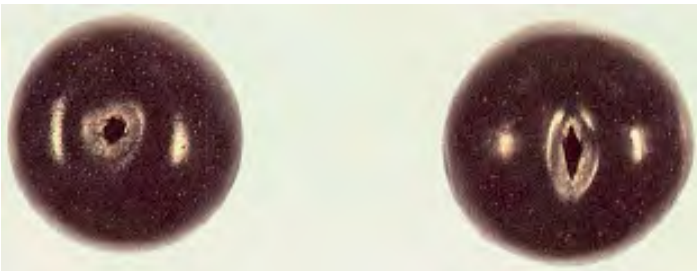

On 100 fruits (same fruits sampled for the fresh weight)

**Base (position A)**  
Truncate      Rounded


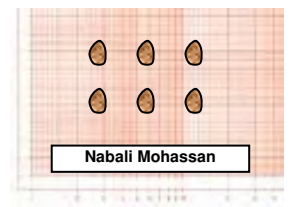
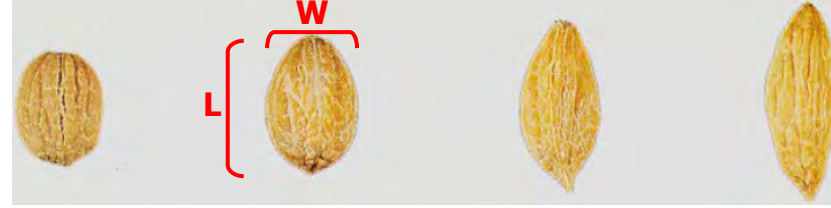

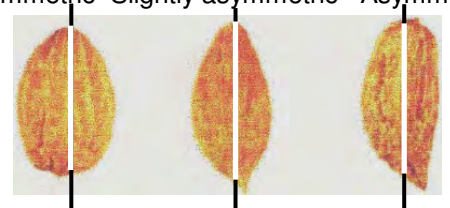
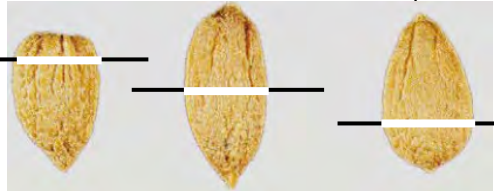


Direct observation

No pictures are needed

10/ Nipple	On 100 fruits (same fruits sampled for the fresh weight)	 <p>Absent      Tenuous      Obvious</p>	Direct observation No pictures are needed
11/ Stalk cavity	On 100 fruits (same fruits sampled for the fresh weight)	<p>Circular shape      Elliptic shape</p> 	Direct observation Pictures
12/ Colour at full maturity	On 100 fruits (same fruits sampled for the fresh weight)	<p>Black      Violet      Red</p>  <p>If other colours: specify</p>	Direct observation Pictures

**STONE / ENDOCARP**

<p><b>1/ Weight</b></p> <p>Low (&lt;0,30g)                  Medium (0,30-0,45g)                  High (0,45-0,7g)                  Very high (&gt;0,7g)</p>	<p>On <b>100 stones</b>, from the fruits sampled for the weight (see <b>Morphological characters / 3 measure no.5 / Weight</b>)</p> <p>Note that pulp from the stone can be removed by hand (mechanically) or chemically (e.g., dipping in a solution of NaOH and heating them during few minutes –<i>Said's method</i>)</p>	<p>High Medium Low</p> 	<p>Scale</p> <p>Millimetric paper</p> <p>Pictures of 6 representative stones</p> 
<p><b>2/ Shape of the stone (=Length/Width ratio)</b></p> <p><b>L</b> = longitudinal diameter</p> <p><b>W</b> = equatorial transverse width</p>	<p>On the same 100 stones used for Weight</p>	<p>Spherical L/W &lt; 1,4      Ovoid L/W 1,4-1,8      Elliptic L/W 1,8-2,2      Elongated L/W &gt; 2,2</p> 	<p>Rulers</p> <p>No pictures are needed</p>
<p><b>3/ Simmetry</b></p> <p><b>Position A – Longitudinal simmetry</b>                  Position in which the stone shows the greatest asymmetry: hold the stone between the index finger and the thumb and choose the face showing more asymmetry if compared to the others and with the carpe suture facing the observer</p>  <p><b>Position B – Position of max transverse diameter</b>                  Turn 90° from position A, in such a way as to present the most developed part to the observer</p>	<p>On the same 100 stones used for L/W</p>	<p>Symmetric Slightly asymmetric Asymmetric</p> <p><b>A</b></p>  <p>Towards the base      Central      Towards the apex</p> <p><b>B</b></p> 	<p>Direct observation</p> <p>No pictures are needed</p>

4/ Apex

Apex (position A)

Pointed      Rounded



Direct observation

No pictures are needed

5/ Base

Base (position A)

Pointed      Truncate      Rounded



Direct observation

No pictures are needed

6/ Surface

Surface (position B)

Smooth      Rugose      Scabrous



Direct observation

No pictures are needed

7/ Number of grooves

Low (< 7)      Medium (7-10)      High (> 10)



Direct observation

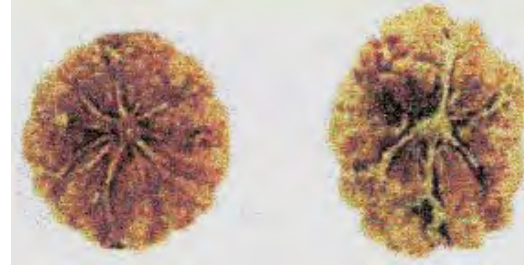
No pictures are needed

Groove

8/ Distribution of grooves

Regular

Grouped around the suture



Direct observation

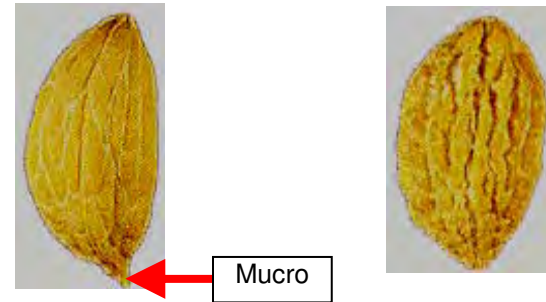
No pictures are needed

9/ Termination of the apex

Mucro (Position A)

With mucro

Without mucro



Direct observation

No pictures are needed

## FRUIT RIPENING

### 1/ Fruit drop

#### Non destructive measurement

##### Method 1/

Position a **net under 2 trees of each cultivar**  
Starting from **mid September**, collect and **weight** (fresh weight) the dropped fruits every **2 weeks**

##### Method 2/

Select **2 trees/cultivar** and **4 small branches per tree**, in the four directions: North, West, South, East (=total 8 branches per cultivar)  
Wrap the branches in a **net bag**  
Starting from **mid September**, collect and **count** the dropped fruits every **2 weeks**  
During the last observation, before removing the net, **count the number of olives still on the branch.**

Scale

Net or Net bag

No pictures are needed

### 2/ F R F – Fruit Retention Force or Fruit Detachment Resistance

#### Destructive measurement

Starting from **mid September** and every **2 weeks**, on **50 fruits/cultivar** randomly chosen

Low < 4N

Medium 4-6 N

High > 6N

(1 N = 1g / 100)



Hand dynamometer

**3/ Fruit pigmentation – M.I.**

**Destructive measurement**

Starting from **mid September** and every **2 weeks**

On same **50 fruits/cultivar** used for FRF determination (see measure number 2)

$$M. I. = [(A \times 0) + (B \times 1) + (C \times 2) + (D \times 3) + (E \times 4) + (F \times 5) + (G \times 6) + (H \times 7)] / 50$$

**A** – number of fruits within the class 0

**B** – number of fruits within the class 1

.....

**H** – number of fruits within the class 7

**0** – green epicarp

**1** – yellowish epicarp

**2** – pigmentation on less than 50% of the epicarp

**3** – pigmentation more 50% epicarp

**4** – pigmentation 100% epicarp

**5** – pigmentation 100% epicarp + less than 50% of the pulp thickness

**6** – pigmentation 100% epicarp + more 50% pulp thickness

**7** – pigmentation 100% epicarp + 100% pulp thickness



**0**

**1**

**2**

**3**

**4**



**5**

**6**

**7**

Direct observation

Pictures

**4/ Fresh Weight of the fruits**

**Destructive measurement**

Starting from **mid September** and every **2 weeks**

Sample **100 fruits/cultivar** (50 fruits out of 100 are the same fruits used for the measure number 3, so you only need to collect 50 more fruits)

**Weight** all the 100 fruits **one by one (Fresh Weight)**

Scale

No pictures are needed

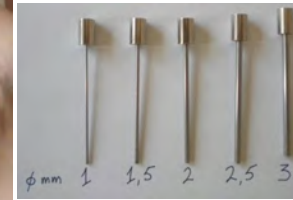
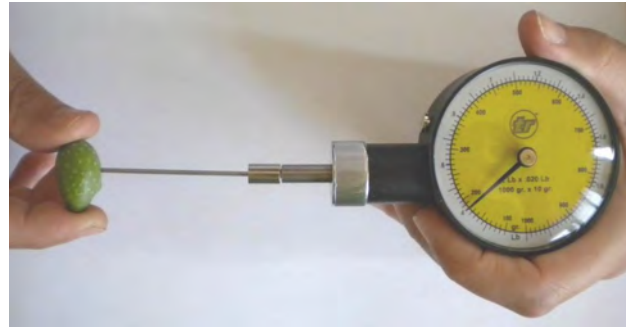


**5/ Pulp/skin firmness**

Starting from **mid September** and every **2 weeks**

On **50 fruits** selected from the 100 used for the fresh weight (see measure number 4) by using a hand penetrometer with a **1.5 mm plunger** placed in **two positions opposite each other** around the equator of each fruit

Low <500 g  
Medium 500-550 g  
High > 550 g



Penetrometer with plunger 1,5 mm diameter

**6/ Flesh / pit ratio (on Fresh and Dry Weight basis)**

Starting from **mid September** and every **2 weeks**

On **25 fruits** chosen out of the 50 not used for the Pulp firmness (see measure number 5)

**Fresh Weight**

1- **Weight** the 25 fruits **one by one** (flesh + stone)

2- **Remove the flesh** with a **cutter** and **weight the 25 stones one by one** (\*do not throw the fleshes and the stones away but store them in separated paper bags for dry weights)

**Flesh / pit** = (whole fruit weight – stone weight) / (stone weight)

**Dry Weight**

Weight the stones and the flesh, after drying (drying until constant weight or at least 2 days at 70-80 °C)

**Important!!** after measurement, do not throw away the fleshes but store them in the same paper bags used for the drying. They will be used for measure number 7

Low < 4 // Medium 4-6 // High > 6

Cutter

Scale

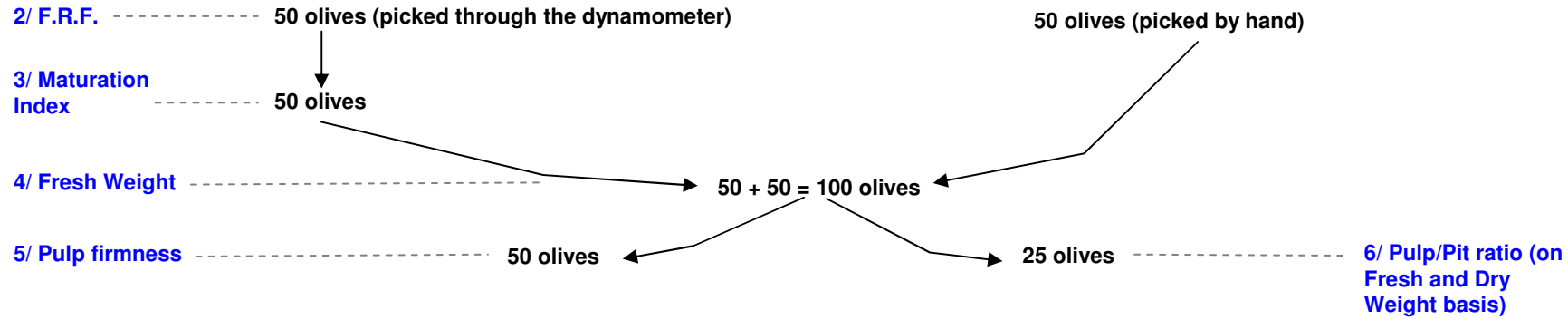
Paper bags

Oven (for dry weight)

No pictures are needed

<b>7/ Olive oil content</b>	Low (16-18% Fresh Weight; <40% Dry Weight) Medium (16/18-20/22% FW; 40-45% DW) High (>20-22% FW; >45% DW)
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\* Important note on the procedure to follow - when you have the 100 fruits, take fruit number 1 and weight it, remove the flesh and weight the pit, take fruit number 2 and so on until fruit number 25 (store all 25 fleshes and stones into 2 separated paper bags for dry weights), take the fresh weight of the last 75 fruits one by one, than select 50 fruits for the pulp firmness.



# OIL CHARACTERISTICS

1/ Oil

## Destructive measurement

Lab mill

At each harvest time collect around **20-25 kg of not-injured fruits**. Crush them with a lab mill, then malax the paste for about 20-30 minutes and centrifuge in order to separate the oil.

After the filtration, the following characteristics can be determined:

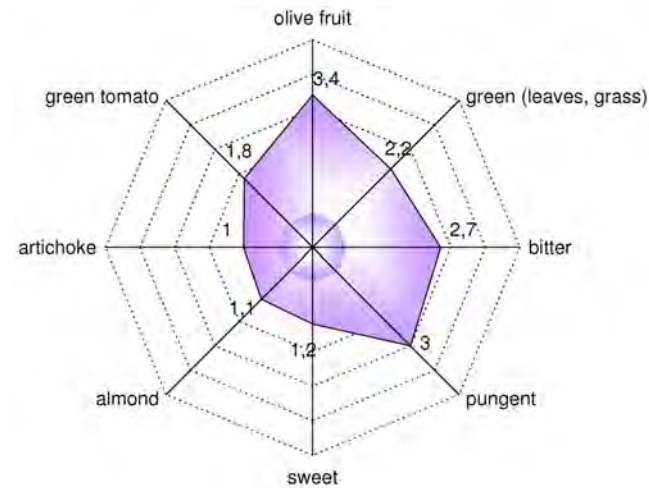
- **Acidity**, expressed as % of free oleic acid (EEC Reg. n. 2568/91)
- **Peroxide number**, expressed as meq of O<sub>2</sub> / kg of oil (EEC Reg. n. 2568/91)
- **Spectrophotometric absorbency in ultra-violet** (K232, K270 and ΔK) (EEC Reg. n. 2568/91)
- **Total polyphenols content**, expressed as mg of gallic acid / kg of oil (Montedoro G., and Cantarelli C. modified by Solinas et al. methodology)
- **Fatty acid composition**, expressed as % (CEE Reg. n. 796/2002)

Fatty acid composition (%)	محتوى وتركيب الأحماض الدهنية
Palmitic	بالميتيك
Palmitoleic	البالميتوليك
Heptadecanoic	هبتاديكانويك
Heptadecenoic	هبتاديسينويك
Stearic	الستياريك
Oleic	الاولييك
Linoleic	اللينولييك
Linolenic	اللينولينيك
Eicosanoic	ايكوسانويك
Eicosenoic	ايكوسينويك

- **Sterol content and composition**, expressed as mg / kg of oil and as % respectively (EEC Reg. n. 2568/91)

Sterol composition (%)	محتوى وتركيب الستيروولات (%)
Cholesterol	كوليسترول
Brassicasterol	براسيكاستيرول
Campesterol	كامبستيرول
Stigmasterol	ستيغماستيرول
$\beta$ -sitosterol	بيتا - سيتوسترول
$\Delta$ -7-Stigmastenol	$\Delta$ -7-ستيغماستانول
Total $\beta$ -sitosterol	بتا - سيتوسترول الكلي
Erythrodiol + Uvaol	الارتديول + اليوفول
Total Sterol (mg/kg oil)	الستيروولات الكلية (mg/kg oil)

- **Organoleptic profile** expressed with a radar graph showing the intensity of the main positive attributes (EEC Reg. n. 2568/91 – EC Reg. n. 640/2008)



The field manual here proposed comes out from the experience gained during two years of experimentation, carried out as a component of the project *Increasing income of impoverished small olive oil producers in the North West Bank*, co-funded by European Union (Food Security Thematic Program 2007) and jointly implemented by GVC-Gruppo di Volontariato Civile and UAWC-Union of Agricultural Work Committees, an Italian and a Palestinian NGOs, respectively.

The booklet *Characterisation of the main Palestinian olive cultivars (Olea europaea L.) and of Palestinian olive oil*, combined with this manual, presents the results of the experimentation, that involved other national and international institutions and organisations, namely AFD-Agence Française pour le Développement, Paltrade-Palestine Trade Center and NARC-National Agricultural Research Center of the Ministry of Agriculture.

Both publications are intended to serve as a basis for further investigations, aiming at advancing and deepening technical knowledge on Palestinian olive cultivars. Further steps involve the application of these information, in order to disseminate proper know-how for a better choice of cultivars for new plantations and improve an efficient and sustainable management of olive orchards at the farm level.

Sector strategies can also benefit from an enhanced knowledge on cultivars by, among others, promoting a Palestinian olive oil identity, by identifying the best harvesting dates for each cultivar according to olive oil quality and yield and by setting up standards and regulations for certified nurseries (offering certified seedlings combined to bio-agronomical indications).

هذا الدليل الميداني يقدم مقترحات جاءت نتيجة لخبرة سنتين من التجارب الفنية والتي كانت جزء من المشروع " تحسين دخل صغار مزارعين زيت الزيتون في شمال الضفة الغربية " والممول من الاتحاد الأوروبي ضمن برنامج الأمن الغذائي 2007 والمنفذ بالشراكة بين المجموعة الطوعية الايطالية (GVC) و اتحاد لجان العمل الزراعي (UAWC).

محتوى هذا الكتيب والذي هو مواصفات أصناف الزيتون وزيت الزيتون الفلسطيني والمشمتم عليهم هذا الدليل إنما عرض تقديمي لنتائج التجارب التي اشترك فيها على حد سواء مؤسسات محليه ودولية مثل الوكالة الفرنسية للتنمية (AFD)، وبال توريد - مركز التجارة الفلسطينية ، والمركز الوطني للأبحاث الزراعية التابع لوزارة الزراعة (NARC).

الهدف من كلتا النشرتين هو أن يكونا أساسا لأبحاث وتحقيقات مستقبلية إلى تقدم وتعميق المعرفة الفنية لأصناف زيت الزيتون الفلسطيني. واتخاذ خطوات تطبيقية لهذه المعلومات من اجل نشر المعرفة اللازمة لخيارات أفضل للأصناف في المزارع الجديدة وتحسين الكفاءة والاداره المستدامة على مستوى البساتين ومزارع الزيتون.

وأيا لرفد استراتيجيات قطاع الزيتون وتعزيز المعرفة بالأصناف والترويج لأصول وهوية زيت الزيتون الفلسطيني، من خلال تحديد تاريخ بدا الحصاد لكل صنف بناء على الجودة والإنتاجية وأيضا وضع محددات وأحكام لتراخيص المشاتل ( ترخيص الاشتال ضمن المعايير الهندسية).