

history

denominations

**viticulture**

wine-making

ageing

diversity

enjoy

# Sherry Viticulture



CONSEJO REGULADOR

AULA DE FORMACION

# Southern-most Wine Region in Continental Europe



# Southern-most Wine Region in Continental Europe

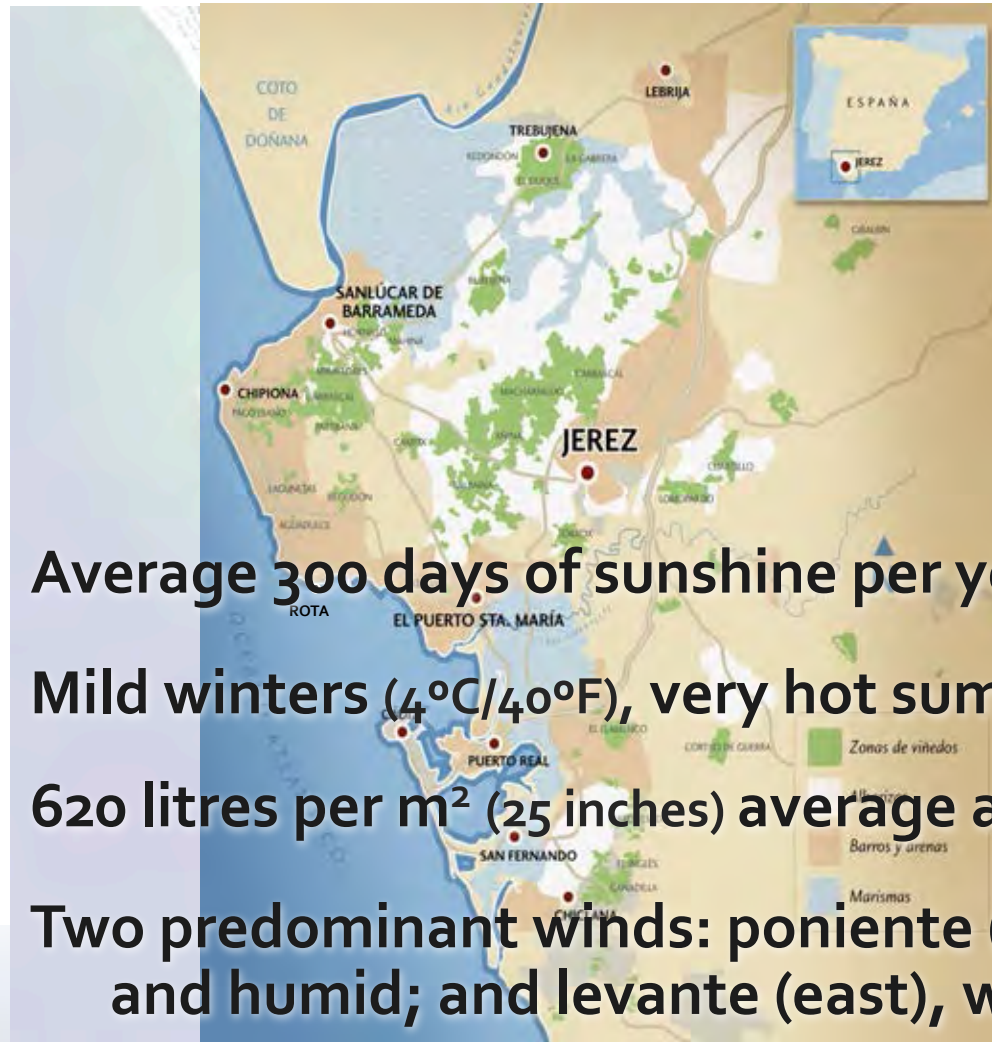




# 7,000 has. of vineyards, in 9 municipalities



# Main climatic factors



**Average 300 days of sunshine per year.**



**Mild winters (4°C/40°F), very hot summers (40°C/104°F).**

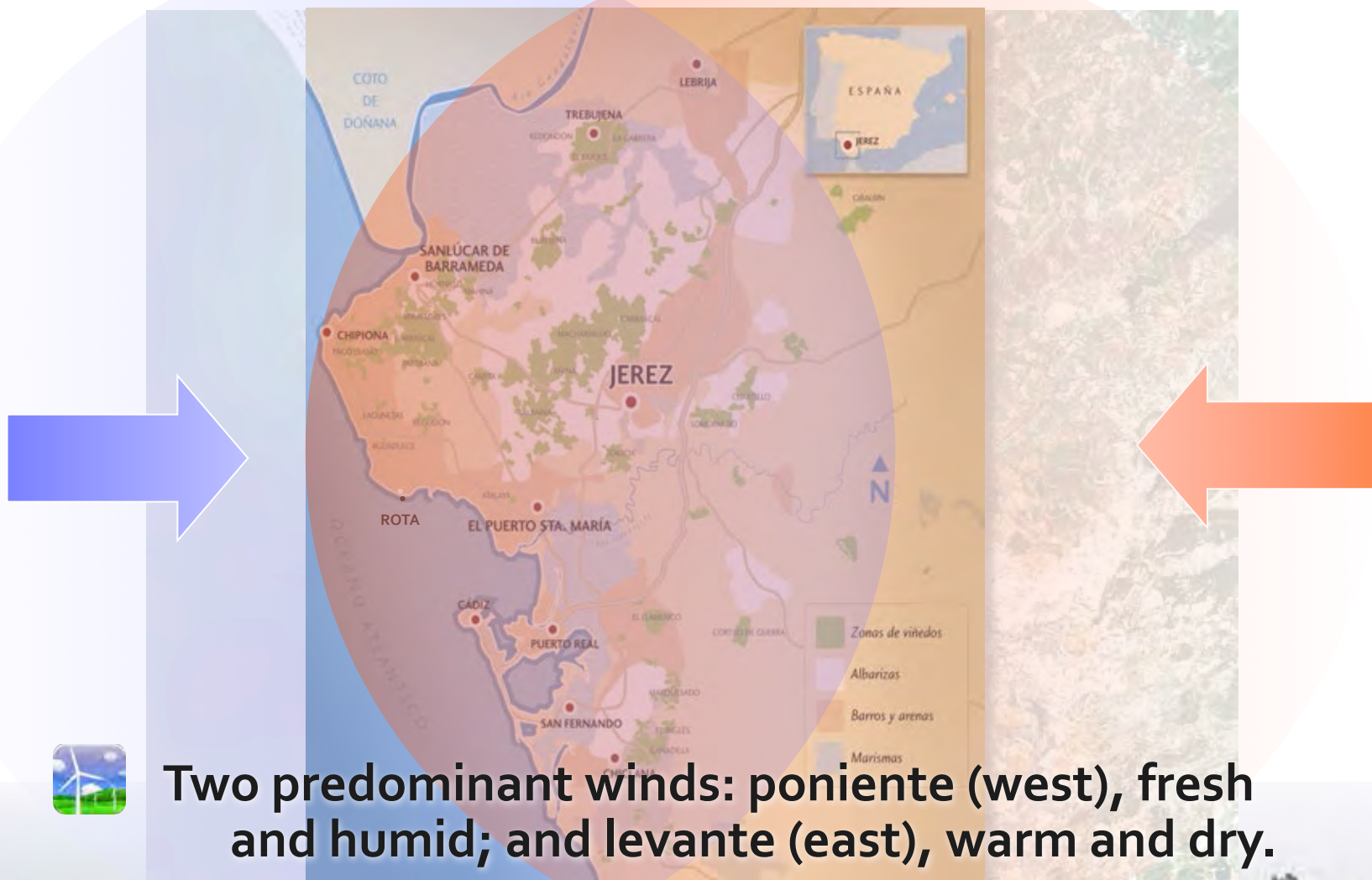


**620 litres per m<sup>2</sup> (25 inches) average annual rainfall.**



**Two predominant winds: poniente (west), fresh and humid; and levante (east), warm and dry.**





# The landscape of the “Marco de Jerez”

Wide horizons with gentle slopes (10-15% gradient), made of a white chalky soil: albariza



# Quality factors of a vineyard

The different “pagos” are classified according to their location and related factors:

- Type of soil.
- Altitude.
- Exposure to sun and
- Proximity to the sea.

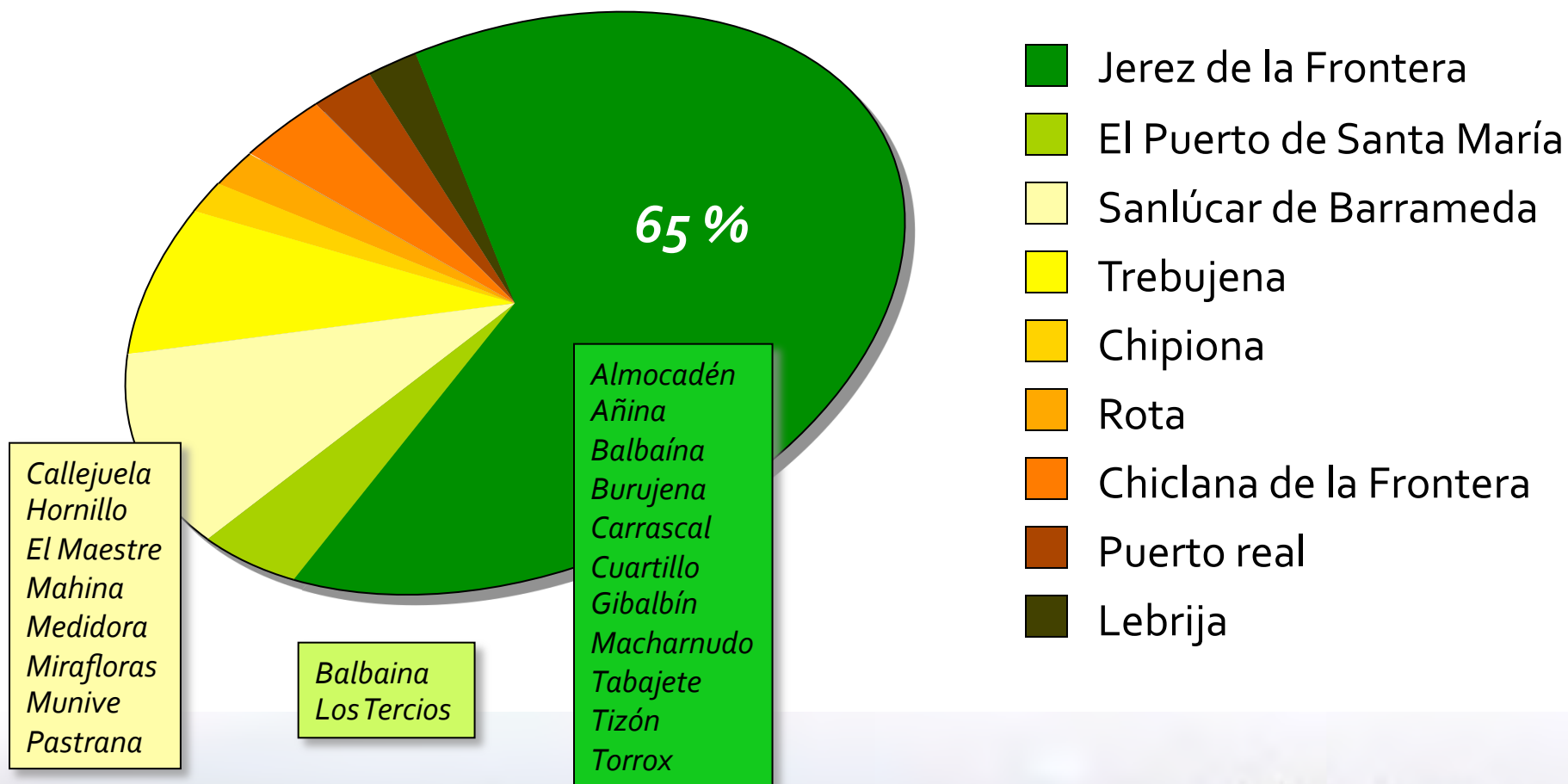


jerez  
superior

jerez  
zona



# The “pagos”



# The “albariza” soil



- White soil (alba=white), made from the sedimentation of marine diatoms.
- Very chalky, with high content of calcium carbonate (25% to 40% limestone) and poor in both organic material (1.3% to 1.5%) and nitrogen.
- Helps retain moisture.





# Other types of soil



## Arenas

- Located in the coastal areas.
- Composition: sand, clay and less than 20% limestone.

## Barros

- Located mainly in the valleys.
- Clay, sand, limestone and decomposed organic matter.
- Darker colour. More fertile.



# Authorised grape varieties

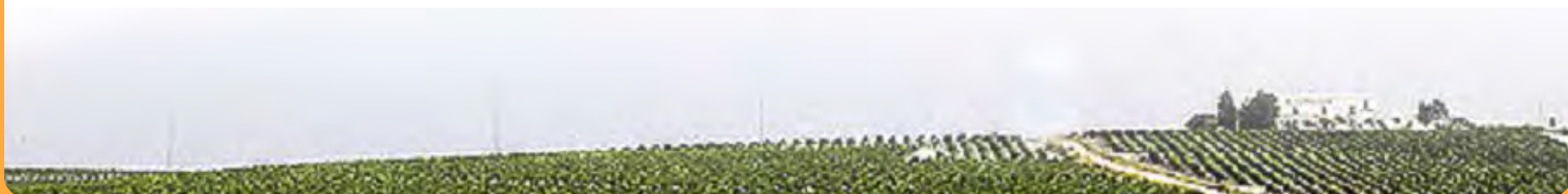
palomino



pedro  
ximénez



moscatel





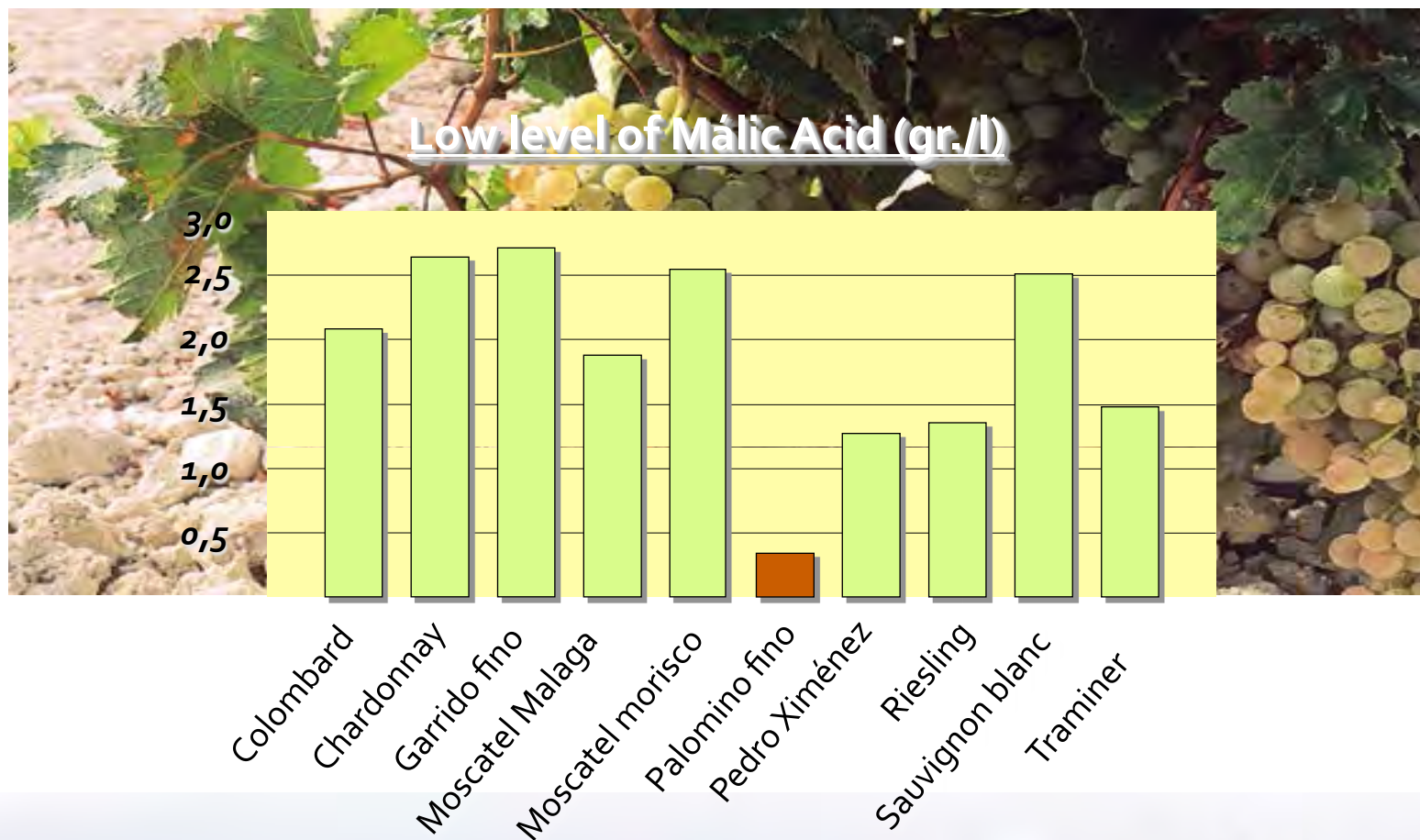
# Palomino Fino – the Sherry grape variety



- Large bunches, with medium-sized fruit.
- Pale green colour, turns golden when ripe.
- Very pale juice.
- Average sugar content 11° Bme.
- Average total acidity 3.7 g/l.



# The palomino grape





# Palomino de Jerez



- Traditional sub-variety, less used nowadays.
- Slightly higher sugar content (average 11.1° Baumé) and acidity (4 g/l.)



# Pedro Ximénez



- Used for sweet wines, due to its higher sugar content – average 12.8° Baumé.
- Acidity – 4.5 g/l.
- Thin skin, which facilitates “soleo” (sun-drying) process.



# Moscatel



- Mainly planted in coastal (arenas) areas of the D.O.
- Traditionally used for sweet wines.
- Average sugar content – 11.7° Baumé.
- Acidity – 4.1 g/l.





# Planting process



Resting period of minimum 3 years.

**August:** preparation of the soil (oxygenation and fertilisation).

**November:** levelling of the soil.

**December:** marking out the vineyard.

**January:** planting the rootstocks.

**September:** grafting on the grape variety.



# Preparation of the soil

**1** “Agostado” – 70 to 80 cm. ploughing, in order to help oxygenate the soil.

**2** Fertilisation (organic).



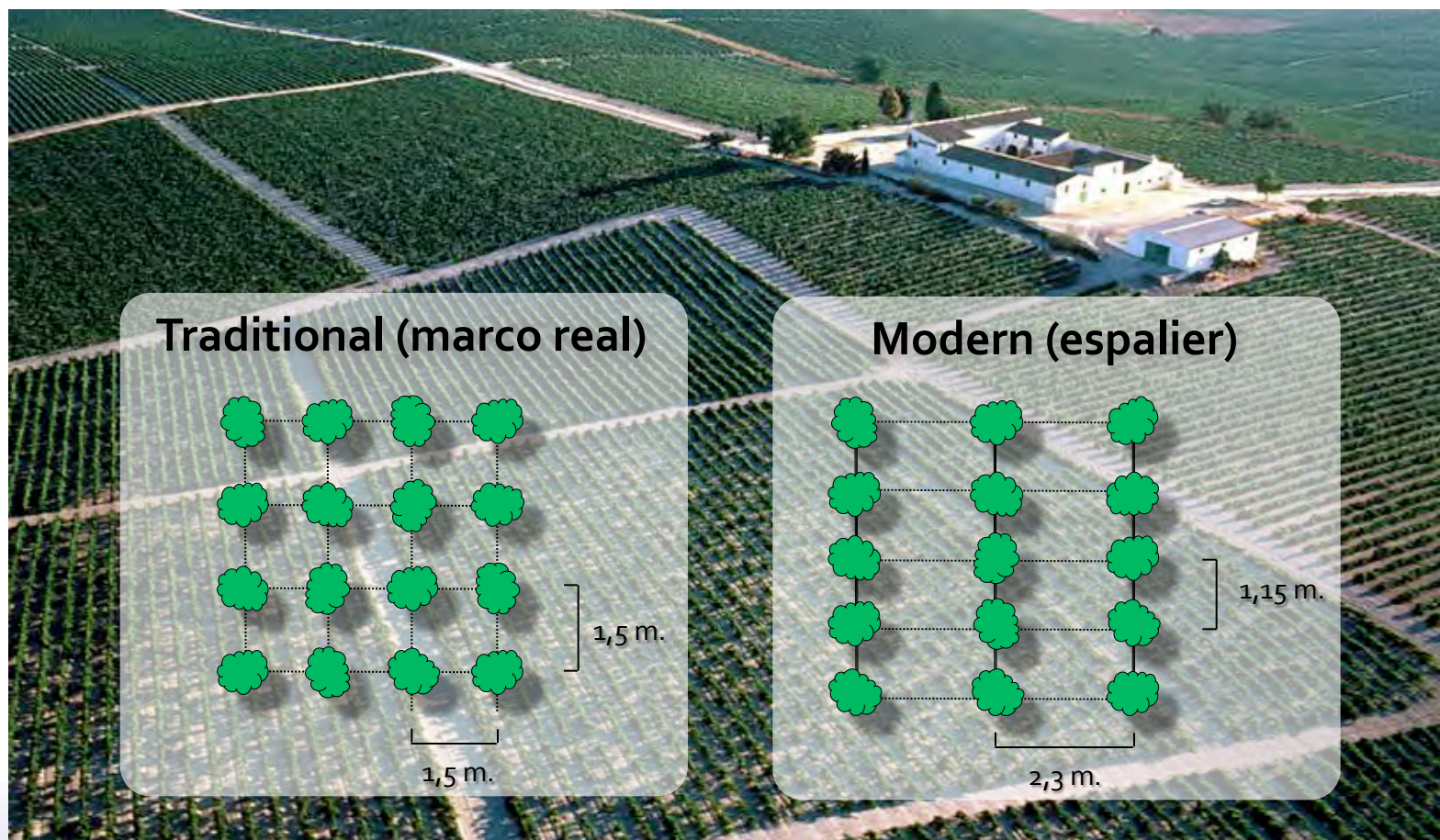
# Layout of a new vineyard

- Rows run horizontal to the slope.
- 3,500 to 4,000 vines per hectare.



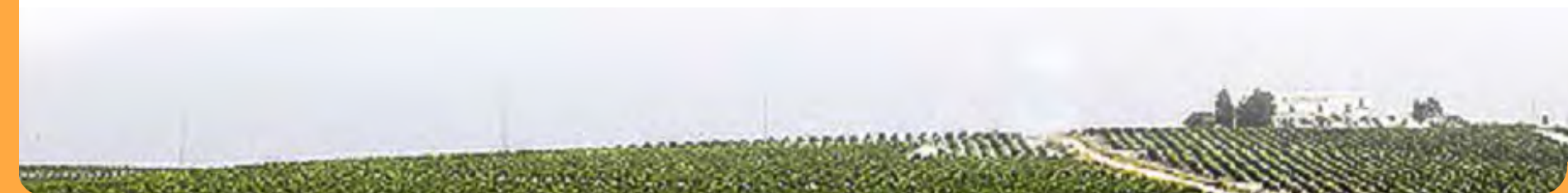


# Layout of a new vineyard



# Planting of the rootstock

- December / January, in order to benefit from rainy season.
- Hand-planting.
- Selection of the most suitable rootstocks, based on:
  - compatibility with local varieties.
  - resistance to phylloxera, nematodes, limestone soil, drought, humidity, salinity...
  - capacity to develop roots.





# The grafting

**January / August**  
development of the rootsock



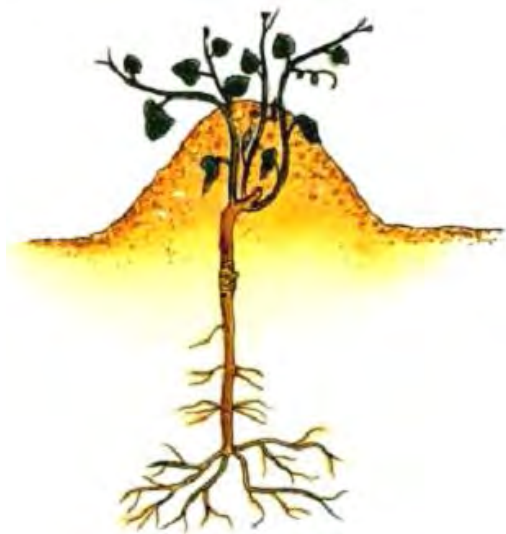
**August / September**  
grafting of the  
palomino buds





# The first year

Grafted area covered until spring to protect it from the cold.



Spring of year 1:  
development of the bud



# Establishing an adult vine

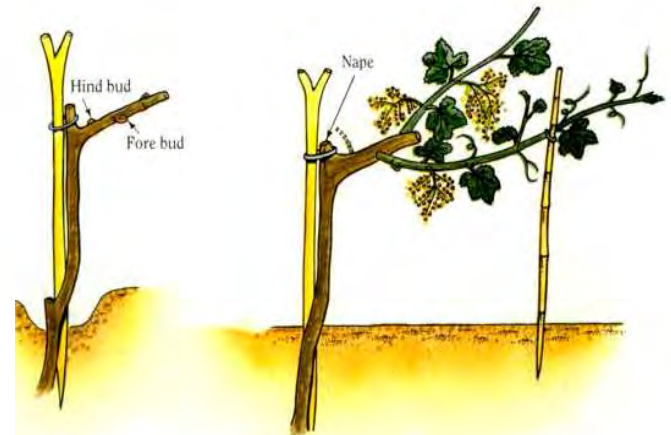
2<sup>nd</sup> year



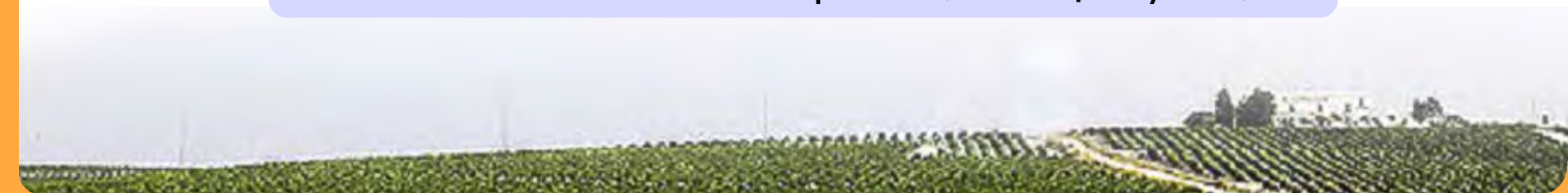
3<sup>rd</sup> year



4<sup>th</sup> year



Limited grape production during the establishment of the plant (until 4<sup>th</sup> year)



# Stock grafting (“en espiga”)



Alternative grafting method for vines with unsuccessful bud-grafting (end of winter – year 1).





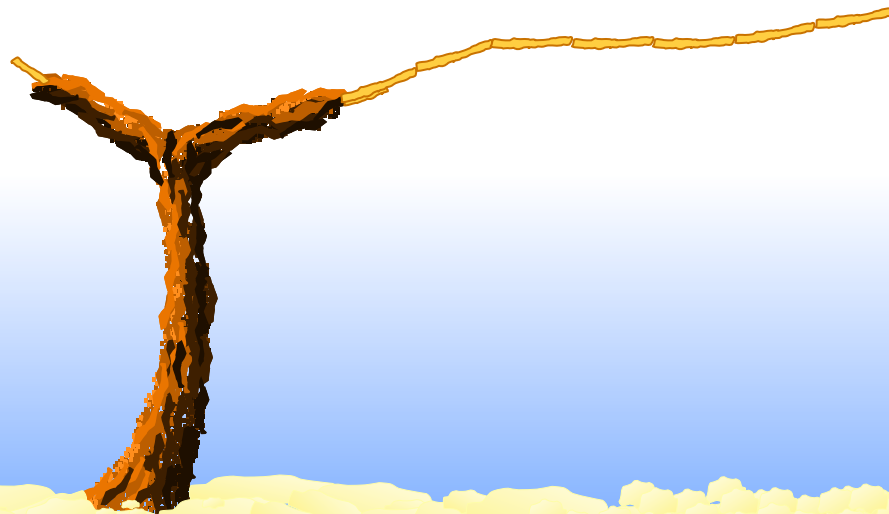
# Modern plantations

- Use of pre-grafted rootstocks from greenhouses.
- Use of selected local vine buds.
- Plantation in January.
- Save one full year.

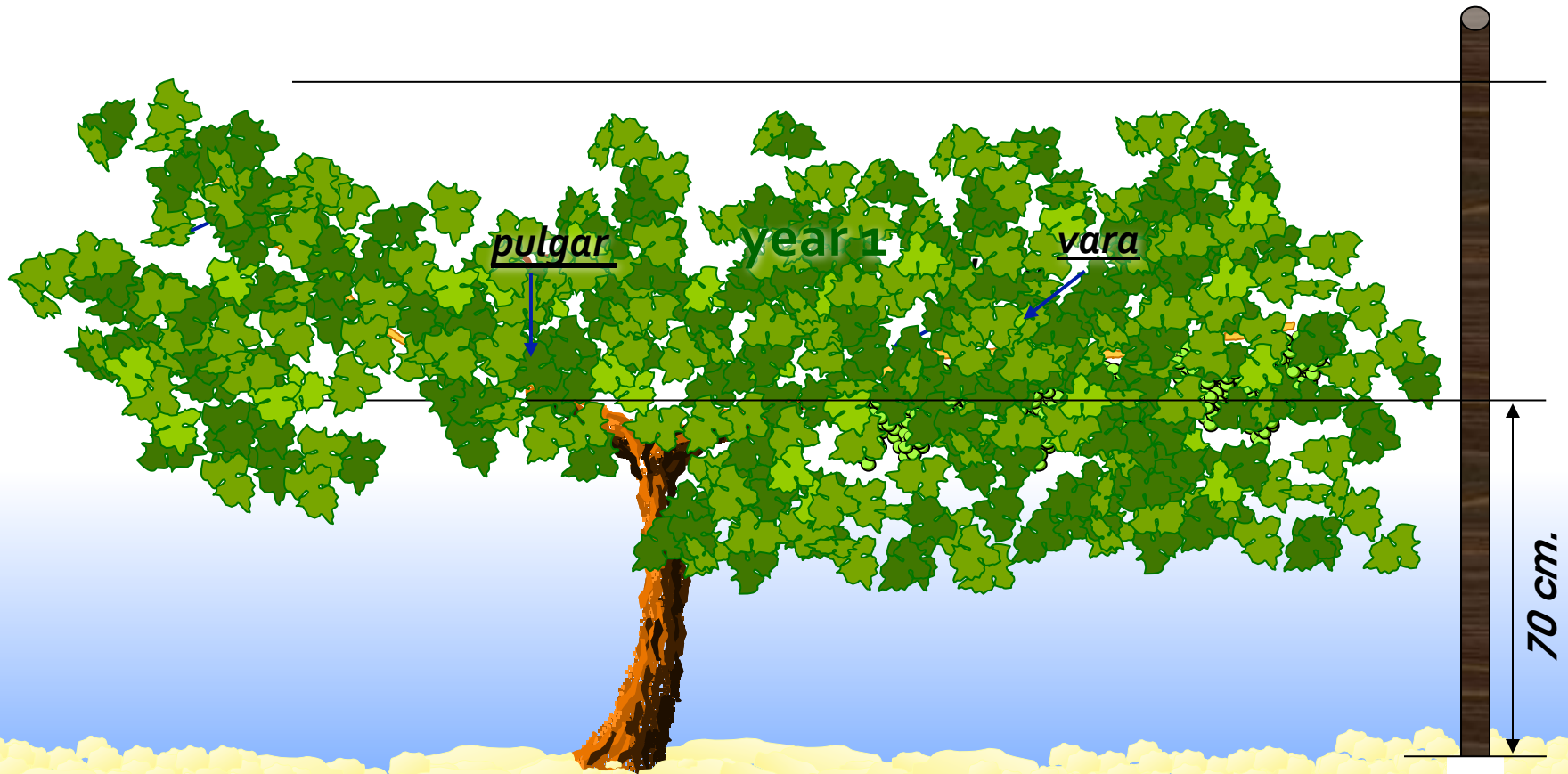


# Traditional pruning method: “vara y pulgar”

- After the 4th year, the vine is formed with two arms, concentrating the production of grapes –7 to 8 buds– in just one of them (“vara”).
- The resting arm (“pulgar”) will be used as a the “vara” on the following year.



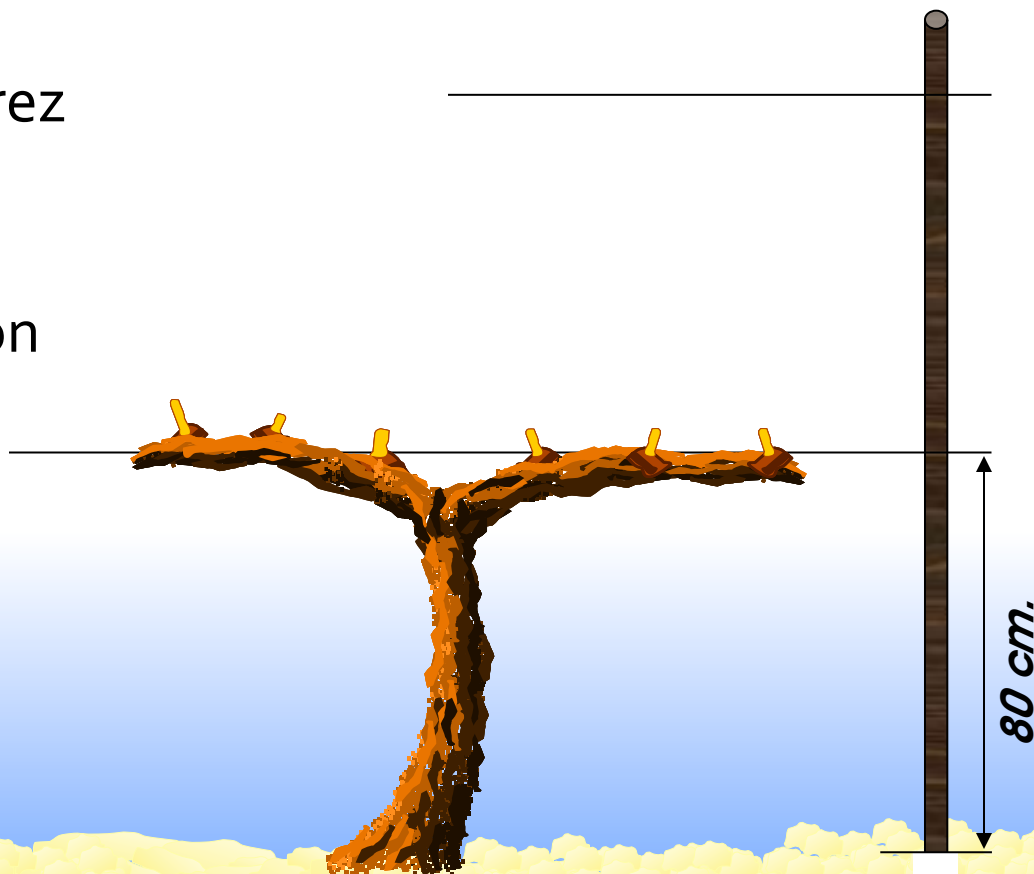
# Traditional pruning method: “vara y pulgar”



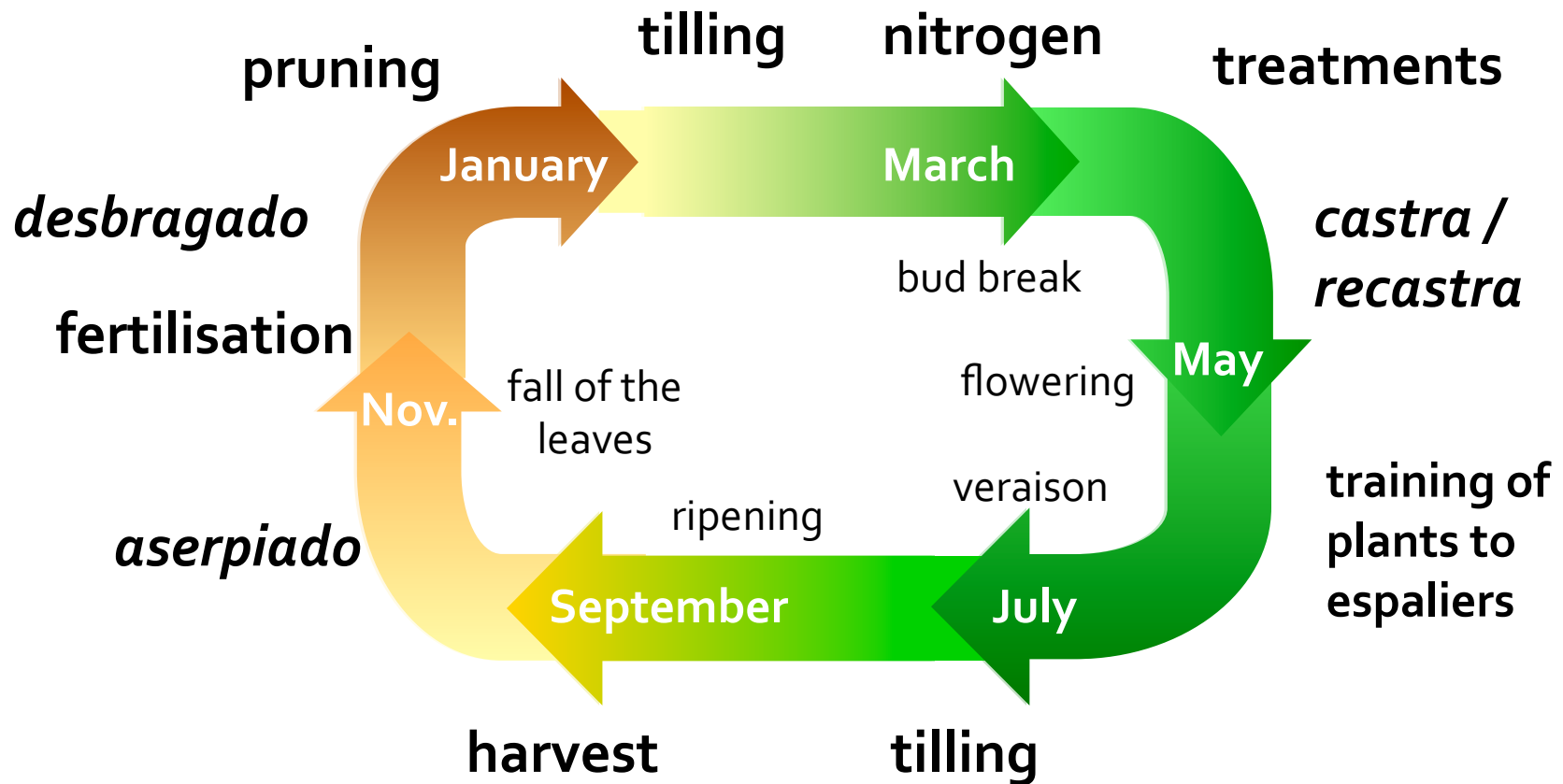


# Alternative – double cordon

- A growing trend in Jerez
- 6 to 8 buds per vine
- Favours mechanization



# Annual cycle

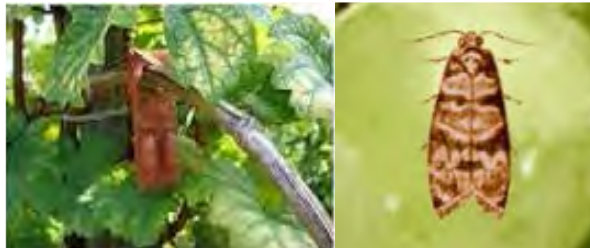






# Cultivation – tradition and modernity

- A traditional method to maximise use of the rainfall – the “**aserpiado**”.
- Progressive reduction of the use of pesticides – integrated production techniques.



# Some basic numbers

## A matured vine...



- ... is normally in use for 30 to 35 years at full production.
- ... develops 7 to 9 bunches in the "vara".
- ... produces approximately 3 kilograms of grapes in normal conditions.



# Some basic numbers (2)

## A vineyard in full production...



- ... has 3,500 to 4,000 vines per hectare.
- ... shall limit its production to maximum 11,428 kgs. (80 hectolitres) per hectare.
- ... requires more than 40 tasks per year, with a limited level of mechanisation.





# The ripeness of the grape

The ripeness of grapes, as key factor in order to determine the optimal time for harvest, is characterized by:

- A change in the colour (golden) and texture (soften) of the grapes.
- Alterations in acidity, astringency and sweetness.

## Analytical parameters to be considered:

- ✓ content in sugar (minimum of 10,5°)
- ✓ total acidity (need to correct pH)
- ✓ sanitary aspects of the grape (gluconic)



# The Harvest

- Early ripening of grapes – august/september.
- Average sugar levels 11 to 12.5° Baumé.
- 50% hand-picked and frequent night harvest.



Rapid harvesting is necessary



# Viticulture – some key basic ideas

- ☑ Specific viticultural conditions: soil & climate.
- ☑ Three authorised white grape varieties.
- ☑ Palomino: the main Sherry grape.
- ☑ Viticultural technics combining traditional and modern methods.

*If you want to learn more... read this:*



**La Viticultura del Jerez**, by Alberto García de Luján (Spanish)