OLIVE CONFERENCE
DIXON. CALIFORNIA
January 2012

SHD ORCHARDS
in the world

Xavier Rius – Agricultural engineer.
AGROMILLORA
Barcelona (Spain)

AGROMILLORA GROUP

About us

Multinational Company

Location of the Holding in Sadurní d´Anoia (Barcelona)

International Presence: 12 subsidiary companies in 10 countries

Greenhouses Area 2011: 350.000 m^2

In vitro laboratories: 3 + 3 in progress

Human Resources 2011: 400 employers, 50 *staff*

Sales 2010: 47 Million US *dollars*

Production 2010: 35 Million plants

Our Products

MICROgraft® PLANTS

Olint® OLIVE TREES

ROOTPAC®

Our Products

VCR
VIVAI COOPERATIVI RAUSCEDO
L'INNOVAZIONE IN VITICOLTURA

Spain: First country in planting SHD.

Top producer 38 % total olive oil. 2,5 milion Ha. 78 % drylands (alternance)
70 % sales bulk. 80 % in cooperatives. 50 % < 3 ha

nº Ha SHD 40.000

250 ha in Badajoz

SPAIN

Nekeas, 200 Ha.
Navarra

Valonga, 50 Ha.
Binefar- HUESCA

SPAIN

Hacienda Iber, 300 Ha.

SPAIN

La Boella, 85 Ha.
Reus- TARRAGONA

Italy: A big need

- First importer of Arbequina and Koroneiki olive oli.
- Difficulty to obtain adequate areas for the machine.
- Varieties used treath for the style of the italian olive oil.
- Oportunity to acess an oliviculture of low cost and quality.
- CNR (Consiglio Nazionale delle Ricerche) de Peruggia; Fs–17, Don Carlo o la Giulia

Moreno Bernardini (Roma, Italia),

Farm Castello di Torrimpietra (Roma, Italia),

GREECE; Koroneiki a local variety

- Very small plantations 1-3 ha.
- 300 Ha, spread out in the areas of Patras, Lakonia y Agrinios
- Quick adaptation of the system

Portugal: líder with Spain

- Less cost of the land, water available, fertile soils
- Spanish and Portuges investors
- Need to have oil availability (internal market + export Brazil) increasing the plantings. Now 10.000 Ha

Beja (Portugal).

PORTUGAL

Ferreira do Alentejo

Tunisia: an example of modernization

- Difficulty to obtain a quality olive oil with hand harvesting.
- Delay into production with traditional plantings.
- Goverment wants to renovate the traditional plantings.
- Promotion of tunisian olve oil in international markets.
- Year 2000, North of Tunisia (Mornang y CapBon) 5.000 Ha

TUNISIA

SADIRA – First plantation 2000

Morocco: A reality that advance very rapidly

- Traditional growers with 1-2Ha.Big projects with local investors and overseas companies (Spanish, French).
- Morocco goverment consider olives as priority for its economy.
- Goverment farms given to private companies with condition to develop agricultural projects.
- First plantings in 2003. Now 4.000 Ha and projections of 3.000 Ha/year.

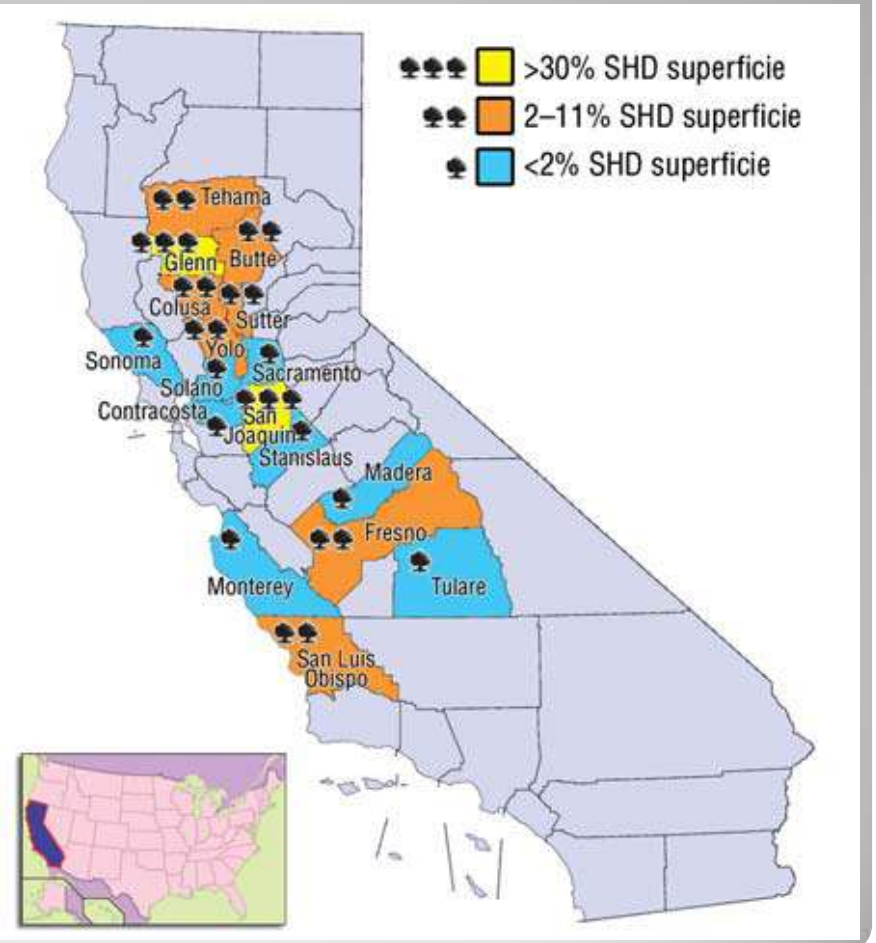
MOROCCO

Atlas Farming
MARRAKESH


مدينة مكناس
VILLE DE MEKNES

USA: the oportunity of the internal market

- A system and crop suitable for their mentality, mechanised crops and possibility to be competitives at global level.
- California; good climate conditions, Fertile land at good price and water
- Big size properties. Average per grower 84 Ha
- Glenn and San Joaquin valley 66% planted area.



California (Estados Unidos). *Cortesía Lodi Farm.*

- Texas, Oregón, Georgia, other areas

- Arbequina 78%, Arbosana 16% and Koroneiki 6%.

COR 1

Borges- CALIFORNIA

Xile: exporting to international markets

- Year 2001, several wineries started with olives.
- Xile a country with low preassure of pest and diseases.
- Many different climates from the desert in the North (La Serena) to wet and humid in the south (Curicó)
- Now 13.000 Ha, idea to arrive to 50.000 Ha in a short period.
- Private projects 500-1000 Ha integrated with olive productión,mill and botteling facilities.
- Comercial agreements with USA, Brazil, India, Corea.

CHILI

Agrícola Las Pircas, 250 Ha.
V REGION

CHILI

Costanera, 1000 Ha.
VII REGION

Australia; A big oportunity

In total around 300 ha, spread out in all estates

Western Australia has more plantings

Big possibilities for being big in international market like did with grapes

Water availability a problem for expansion in some regions

AUSTRALIA

Gorman Ranch
SOUTH AUSTRALIA

Waterville Estate
Western Australia

SHD in the rest of the world

France,Turkey, Saudi Arabia, Libya, Algeria, Irán, Irak, Uruguay, Perú, Mexico, Brazil, Argentina

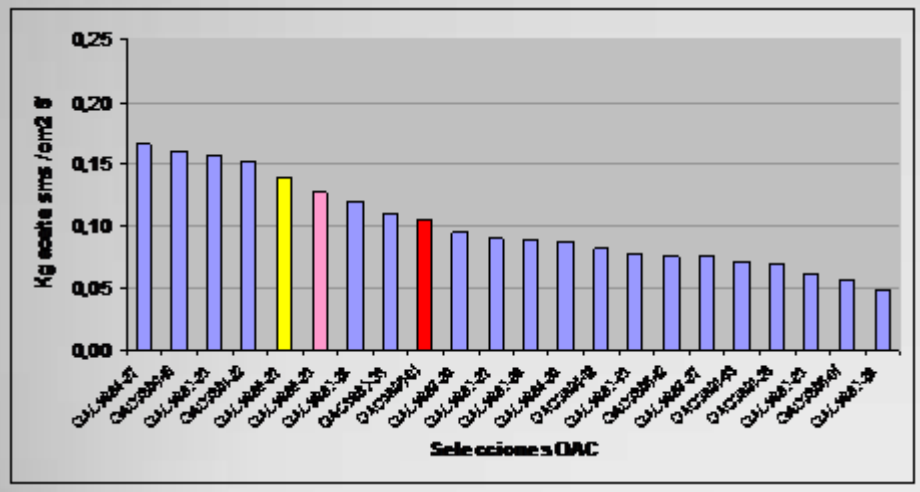
Algeria

Sao Paolo (Brazil).

SAUDI ARABIA

- The changes in training the trees and prunning systems even towards a more simple and mechanised methods.
- The research and development to obtain new varieties adapted to the SHD system.

Will originate a bigger push to the SHD and in less than 5 years will achieve 200.000 hectáreas around the world.



LESSONS LEARNT FROM THE PAST

ASPECTS TO CONSIDER IN THE PLANTINGS OF SHD

Before planting

-Not adequate soil preparation.
Compactactions, pH adjustments, salts leaching,

-Planting in areas with high risk of verticilium (cotton, tomatoes).

-Irrigation design with no soil type differentiation.

-Plants planted too deep.

-Dark guards or taller than the plant creating lack of light

-Irrigation design with out taking to account varieties

-Drippers too far away (75 cm) in sandy soils.

-Drippers too much precipitation rate in poor infiltration soils or slope.

-Applying organic matter not adequate
(too fresh, salty, high pH).

-Bambu stake to low < 2m.

-Bambu stake to thin.

-Not good tight up the stake to the wire.

-Trellis with too much tension (olives falling down before harvest)

-Bad orientation of the plantings

-Wire doing wounds to the plant.

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-Planting with out protectors (herbicide damage).

-Using metal or wooden stakes that damage the tree.

-Incresing distances between plants in the row (2 m)

-Mixiing varieties in the same irrigation shift

2.- During first years.

-Too much prunning

-Dont spray for apple moth (ball shape of the tree)

-Lack of growth due to lack of nutrients and/or water

-Don´t eliminate weeds competition with the plant.

-Too much water and fertilizer in autumn.

- Irregular growth due to irrigation system (blocking, pressure).

-Too much water creating waterlogging (yellowing) and poor root system.

3.- <u>During the productive stage.</u>

-Lack of water in spring to obtain growth for next year.

-Lack of water reducing size of the olives.

-Lack of water producing shrivelling to olives close to harvest

-Not pruning branches too thick that goes to the center of the row.

-Do not do topping, (trees too tall, lack of light next row, poor harvesting efficiency).

-Excess of nitrogen and/or water creates too much growth.

-Not removing low branches (difficulty for harvesting)

-Harvesting fruit too green

-Harvesting machine going too fast

-No program for pest and diseases, specially areas with peacook infection

THANK YOU
for your attention

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