

Advanced Agriculture -
Practice & Theory.

Lecture 16:

Quercus ithaburensis
Controlled by
'AutoAgronom'
in an un-heated
Gerbera greenhouse.

Lecture - 16

Dr. Yoseph Shoub
Gerbera Breeding Ltd. Israel
September 2019

Photos by the author

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Quercus ithaburensis in the wild, the Lower Galilee, Israel - January, 2018.





Quercus ithaburensis (QI) - 1 of 5 Israeli local species.



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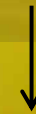
Quercus ithaburensis - April 2017, in a nature reserve, in the Sharon region.

QI - In the Lower Galilee - January, 2018.

So let us go 



October 2018, well developed acorns of (QI).



October 30, 2018

Acorns towards radical emerging, after being stored for 1 month in a humid dark storage.

31.03.2019, AutoAgronom
controlled (QI) Seedlings,
121 days after sowing.

Sown on 30 November, 2018,
in Coco peat, in 4 liter 'Rosier'
containers.

Irrigated by an 'AutoAgronom ('AA')
irrigation control system, led by
a gerbera Plant (*where the 'AA'
Tensiometer was located*).

See next slide.





The AutoAgronom Electronic Tensiometer - is continuously measures the micro- changes of the **‘Water tension’** in the roots-media. The water tension values, are related to the amount of water - presented in the measured location. It accurately synchronizes the fertigation schedules to the rhythms of the plant’s physiological activities, expressed by absorbing the **‘soil solution’**. Practically; the **Water tension** cyclic-changes, are resulted by the - decreasing / increasing - amounts of the soil solution in the roots-media.

The high accuracy of the ‘AA’ sensors, allows it to maintain: **‘Hydroponic conditions values - in solid media’**.

30.04.2019 - 'AA'
151 days after sowing.

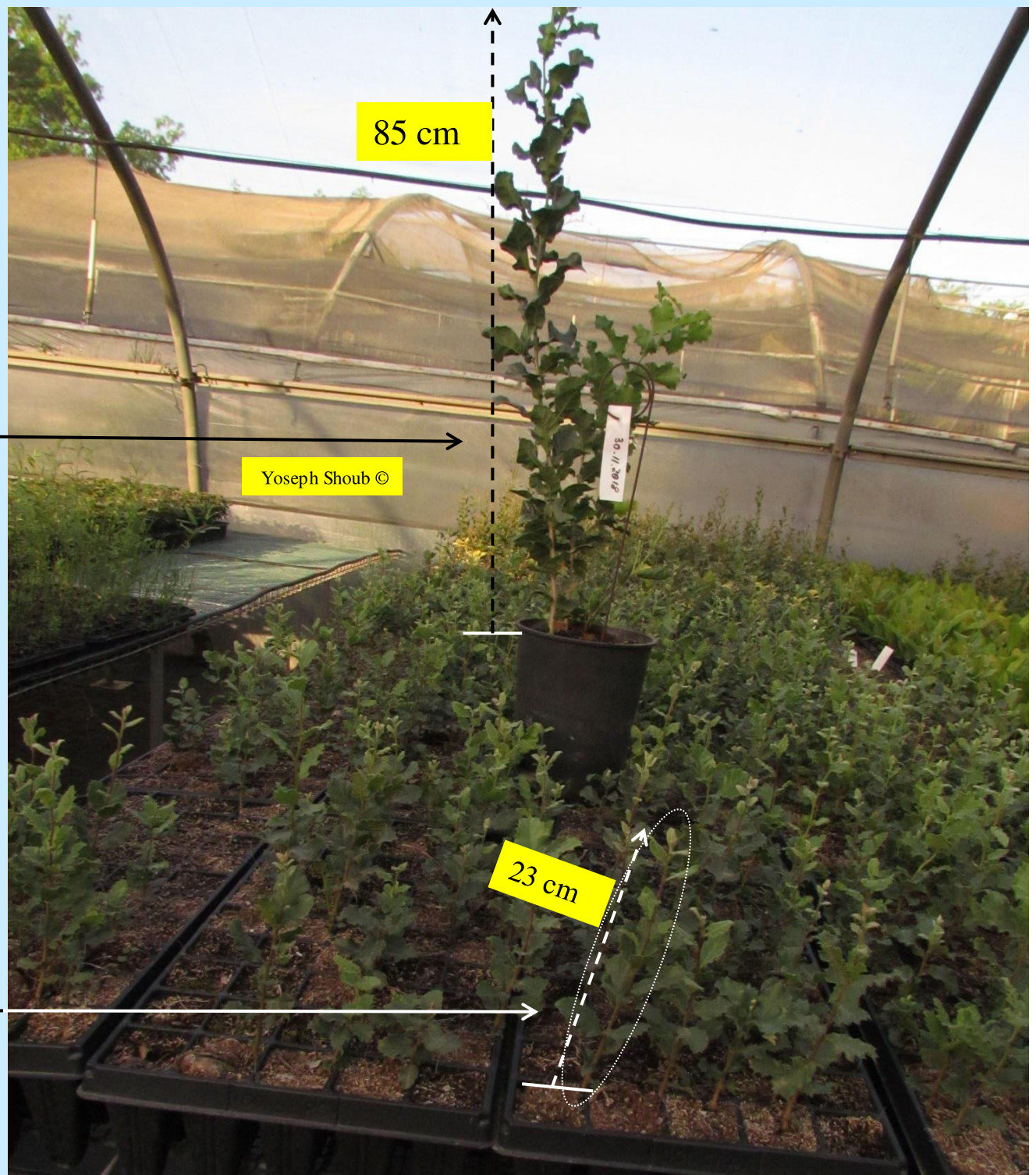


QI Controlled by 'AA'.
Sown on 30, November 2018,
156 days after sowing.

05.05.2019

Same *Quercus ithaburensis*.
Under conventional irrigation
conditions, in an Israeli nursery.

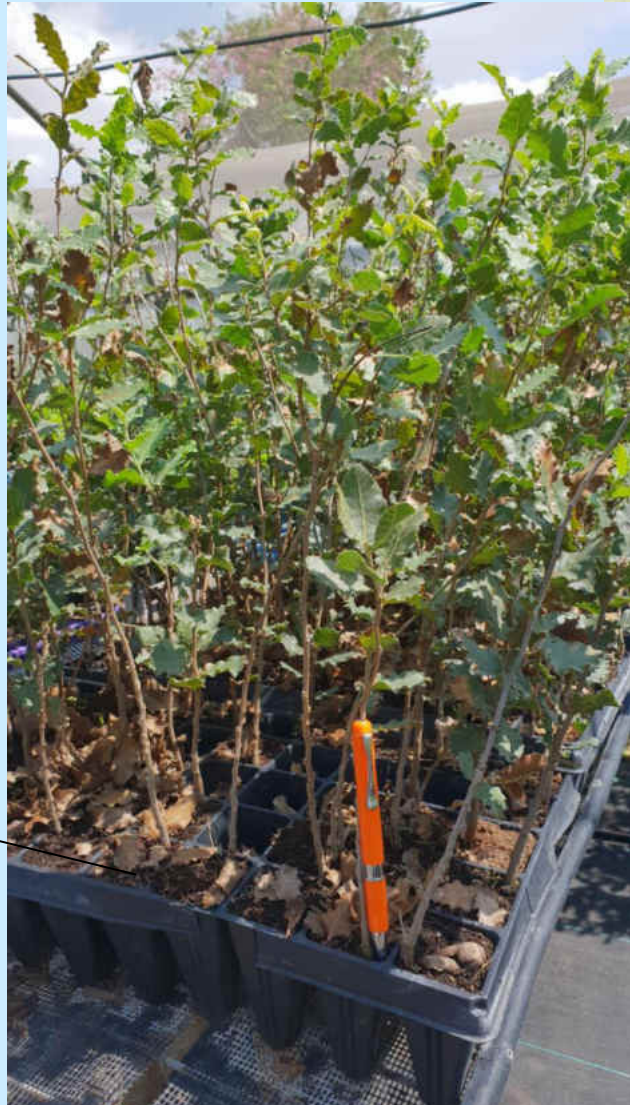
Sown on 09, November 2018,
in Coco peat, in 0.110 liter, cells-
pallets. **177 days after sowing.**



Photographed
05.09.2019
300 days
after sowing

Average
height 50 cm

Conventional
irrigation
conditions,
in an Israeli nursery.
Sown - 09.11.2018



150 cm

Photographed
16.08.2019
259 days
after sowing

AutoAgronom
conditions.
Sown -
30.11.2018



03.09.2019 - 'AA',
277 days after sowing.

*The seedlings were already suitable
for transplanting, some months ago .*



03.09.2019 - 'AA'
(*same plant*)
277 days after sowing.



06.09.2019 - 'AA',
280 days after sowing.

Roots system of 2 QI
seedlings, 6 cm above
the container bottom.



That's the END of the presentation,
but not the end of our very old wild tree.

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Quercus ithaburensis - hope & courage.



Bye bye, see you later!

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