Hydroponic cultivation techniques and industrial application in strawberry (Fragaria spp.)

Noemi López Martínez. Degree in Biology, 2015

What?
«Hydros – Ponos» crop without land

How?
J. Benton Jones (1984)

Water crops
Floating
“Standing aerated”

Media crops
Inorganic
Sand.
Gravel

Aeroponics
NFT
“Nutrient Film Technique”

Why?
«Strawberry is one of the most exported product nationwide»
«We can know which minerals are needed in every part of the growth cycle» (Chow K. K et al., 1992)

- Faster growth rate.
- Control over nutrition.
- Control over conditions.
- Crops effective surface optimized.
- Plants health improve.
- Effective irrigation management.
- Automation and monitoring.
- Better aeration in root-zone.

- Complete farmer dependence.
- Inert substrate not biodegradable.
- Expensive (build, maintenance and repair).
- Drip irrigation may be blocked.

References:

Images References:
1) http://www.jardisen.cl/parts/comosustratos.html
2) http://jimarconstrucciones.com/1
3) http://www.blackbruco.es/grava-volcanica-gris.aspx