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Trial Center Tomato The Netherlands New season has started



"The seeds from Anatolia since the dawn of agriculture" art of seed breeding



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Why electromagnification can result in better water usage and nutrient uptake

Electromagnetic treatment of irrigation water is rapidly gaining ground in both greenhouse and open field production. After years of R&D and extensive trials in cooperation with commercial growers and research centers, Swiss company Aqua4D is installing its system in a growing number of countries.

Better quality irrigation water, solutions for salt saturated soils, efficient use of nutrients and fertilizers, stronger vigorous crops, a decrease of algae and biofilm in irrigation systems and more resistance to diseases such as nematodes. These are the claims that Aqua4D puts on the table. Their secret: a mysterious tube through which the irrigation water flows, just before it is sent towards the field.

According to Aqua4D, the magic happens inside their treatment unit in which electromagnetic signals modify the physical aspects of the water. "To make a long story short; the electromagnification changes the properties of the water, leading to a finer and more homogeneous state of the water and the salts and nutrients in it. Nutrients are dissolved and distributed much better and more easily absorbed by the plants., while excess water is trickled down well under the rhizosphere. There is no more crystallization of salts in the soil pores damaging the plant and the improved water retention allows for more water savings."



Installation at a Mexican tomato grower.

While this still all sounds Greek to me and you cannot see what is happening inside the treatment unit, a lot of growers have been convinced by the technology due to the outstanding results it brought them after trials and commercial installations in their fields. The system has been installed in more than 32 countries, from a dozen of tubes at small commercial greenhouse operations in Canada, to installation on a 7,000 hectare drip-irrigated melon field in Brazil.



PHILIPS



Growing Systems Manager – Australia  
 Nursery / Grower Manager - UK  
 Assistant Grower - US  
 Business Development Manager – US  
 Export Sales Manager grapes and citrus



Control box in the greenhouse of a Mexican tomato grower.

Patrick Rosat, Sales Director at Aqua4D explained that the technology is proven and the story of their system spreads like wildfire. Especially in Latin America. "We have a dominant presence in markets where growers are challenged by a lack of good quality irrigation water. Water with high salinity levels, but also high salinity levels in the soil are a big problem here. Luckily, the farmers in these areas are eager to experiment with new, innovative, eco-friendly technologies, which is why we grew very fast in this market."



Other noteworthy markets named by Rosat are located in Central America. Mexico and Ecuador are big markets for greenhouse horticulture, but many growers are challenged by the salinity levels in their irrigation water. But also problems with nematodes or clogged irrigation pipes as a result of algae, biofilm and other materials can be reduced with the Aqua4D system.

"Our solution can be easily implemented in any kind of field or crop that makes use of some form of micro irrigation, whether it is via drip irrigation or via micro sprinklers. It comes in two sizes, a standard 2 inch version with a capacity to treat up to 22 m3 per hour and a smaller 1 inch version that can treat up to 3.6 m3 per hour", Rosat said when asked about the technical aspects of the installation. He explained that the system is modular and works well with any kind of irrigation unit. "We have systems installed at growers that use Priva, Hoogendoorn and HortiMaX units, basically it does not matter what kind of unit is used, as the tubes are installed after the units. It is the last treatment the water receives before it's directed towards the crops."

An advertisement for ARaymond products. It features the company logo and the text 'Support your plants with TwinHook and FlexTruss'. Images show black plastic clips and truss components being used on green plants. The website 'www.araymond-agriculture.com' is listed at the bottom.

An advertisement for greenvass Tomato Clips. It features the greenvass logo and the text 'Technology &amp; Innovation in agriculture'. Images show white plastic clips. The text lists sizes: 'Tomato Clips 28 mm / 25 mm 23 mm / 21 mm'.

Tweeting Growers

Valley Grown Salads Retweeted  
 Ottolenghi @ottolenghi  
 Roasted romano peppers in #nopi



Embed View on Twitter

An advertisement for Meteo Systems. It features a photo of a greenhouse and the text 'Worldwide leading manufacturer in horticultural systems'. The Meteo Systems logo is at the bottom.

An advertisement for 3B Blue Berry Blend and Pelemix. It features the text '3B Blue Berry Blend' and the Pelemix logo with the tagline 'Professionals In Coir Substrates'.

An advertisement for Lumisol. It features the text 'VISQUEEN LUMISOL' and a logo with a stylized sun and water droplet.

An advertisement for ASSET. It features the text 'TCL Asset Group Inc. ASSET' and a logo with a stylized 'A'.

An advertisement for KINGJENG. It features a photo of a large greenhouse and the text 'KINGJENG' with a logo.

An advertisement for the Greenhouse Guide ONLINE EDITION. It features the text 'Greenhouse Guide ONLINE EDITION' and a logo with a stylized greenhouse.

An advertisement for horti daily Global Greenhouse News. It features the text 'Click here to subscribe to our free newsletter' and the horti daily logo.

A small chart or graphic showing 'category weekly instore fresh produce retailers analysis' with a pie chart.



**Top 5 - yesterday**

- Syngenta expands tomato catalog in multiple segments
- "To make the most of biopesticides, growers need to improve knowledge"
- Webinar topics Russia's industrial greenhouse boom
- CAN (ON): Proposed greenhouse needs water supply
- US (OH): CropKing organizes new Introductory Grower Workshops

**Top 5 - last week**

- Mastronardi acquires Backyard Farms
- Village Farms to place marijuana crops in Delta greenhouses
- Bayer reduces stake in polymer spin-off Covestro
- CAN (ON): Greenhouse farmers in disbelief over minimum wage announcement
- What to look for in a hydroponic strawberry system?

**Top 5 - last month**

- Water conservation aid helps root development in strawberries
- Spain: Geothermal deposit for greenhouse air-conditioning discovered
- Hydroponic high wire melons taking off globally
- Mastronardi acquires Backyard Farms
- US (NV): Urban Seed to break ground on greenhouses 10 minutes from the Las Vegas Strip

**Exchange rates** [more »](#)

- USD: 1.1217
- JPY: 123.43
- GBP: 0.88075
- AUD: 1.4880
- BRL: 3.7045
- CAD: 1.4892
- CNY: 7.6245
- NZD: 1.5528
- ZAR: 14.3297

*Euro foreign exchange reference rates*  
Source: ECB



*Aqua4D installation at a California almond grower.*

Rosat affirmed that the installation is designed in such a way that the treatment is powerful enough to last for more than 4 km in the irrigation system. "This is because the system changes the memory of the water, this prevents it from going back to its original state."



*Aqua4D tubes in a Canadian greenhouse operation.*

Aqua4D claims a reduce in fertilizer use of 30% and reports water savings up to 25%, against a very low power consumption. More information on the system can be obtained at their website [www.aqua4d-irrigation.com](http://www.aqua4d-irrigation.com) or by sending an email to [info@aqua4d.com](mailto:info@aqua4d.com)

[Click here to watch some testimonials on the Aqua4D YouTube Channel.](#)

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- 6/13/2017 Elimination of USDA's Rural Development Mission Area heavily opposed
- 6/13/2017 USDA lifts PACA reparation sanctions on Texas produce business
- 6/12/2017 Vitotherm acquired by Anders Invest
- 6/12/2017 "No more pushing, dragging or sweeping thanks to automation"
- 6/9/2017 British Pound sees drop, but exporters remain calm
- 6/9/2017 Greece: Winning the local market with Hellenic farming strategies
- 6/9/2017 FMC issues 'Built for Progress' sustainability report
- 6/9/2017 UK: Less than two months for Nuffield Scholarship Applications
- 6/9/2017 Belgium: Greenyard reports 7.1% growth in sales
- 6/8/2017 Marijuana at Village Farms: Even their stocks get high
- 6/8/2017 ChemChina completes second settlement of tender offers for Syngenta
- 6/8/2017 What to look for in a hydroponic strawberry system?
- 6/8/2017 John Meijer joins Bom Group as Commercial Manager
- 6/8/2017 NL: Daily Fresh Radish celebrates 25-year anniversary
- 6/7/2017 Sunset surpasses \$200,000 in donations to MS Society
- 6/7/2017 Bayer reduces stake in polymer spin-off Covestro
- 6/7/2017 US (IN): Monsanto plans \$30M research facility in Greenwood