WAGENINGEN UR
For quality of life

Innovation
& Demo Centre Water

Water

Innovation & Demo Centre Water

Solutions for water-related issues in the horticultural sector are the central theme in the IDC Water. Wageningen UR Greenhouse Horticulture tests and demonstrates solutions for a sustainable, zero water-discharge horticulture, in close collaboration with technology suppliers and other stakeholders. The aim of the IDC Water is to bring newly developed knowledge and new techniques a step closer towards implementation in commercial greenhouse production.

Good water quality is of vital importance for the horticultural sector. Quality greenhouse crops require high quality water for optimal growth and production. (Re)use of water is not always possible, due to the presence of various substances. Within the IDC Water, purification techniques are tested for effectiveness and applicability. Also, sustainable innovative cropping systems are tested and demonstrated, taking as starting point the optimal use of water and nutrients and zero water-discharge.

provincie Zuid Holland
GreenportHortiCampus
Kansen voor West G4P4

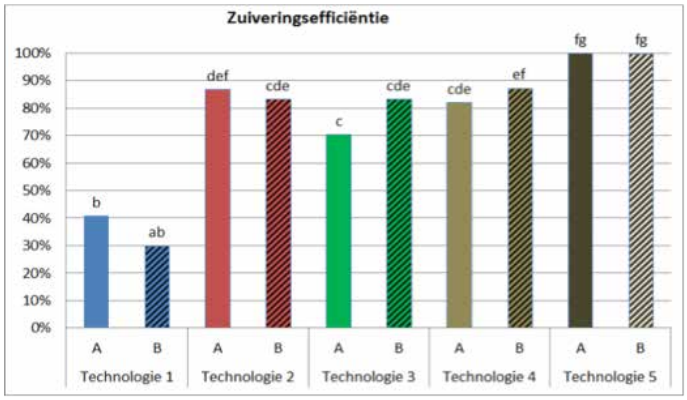
Hier wordt geïnvesteerd in uw toekomst. Dit project wordt mede mogelijk gemaakt door het Europese Fonds voor Regionale Ontwikkelingen van de Europese Unie en een bijdrage van de provincie Zuid Holland.

Aim

- **Selection** and **testing** of water technology for effectiveness and applicability in greenhouse horticulture under standardized conditions
- Demonstration of water technology and water efficient growing systems and methods, together with suppliers and other interested parties
- Knowledge exchange and communication concerning solutions for sustainable, zero-emission greenhouse horticulture

Services

- Optimisation of technology in collaboration with, and commissioned by suppliers
- Independent assessment of effectiveness, costs and applicability
- Assessment and selection of technology commissioned by governments, cooperations, consortia (e.g. Platform Sustainable Greenhouse Horticulture).



Example of an effectiveness study with 5 purification technologies in different settings (A, B)

Examples

- Technology for reuse of good quality nutrient solutions (elimination of pathogens, growth inhibitors, etc.)
  - E.g. heaters, H_2O_2-UV, ECA-water, sensors
- Technologies for optimizing nutrition
  - E.g. ion-specific sensors
- Innovative, water efficient growing systems
- Purification technology for elimination of pesticides and nutrients from discharge water
  - E.g. activated carbon, H_2O_2-UV, ozone, RO

Independent and comparable

- Studies are carried out by an independent research institute
- Results of subsequent tests are comparable due to use of standardised protocols and standardised test water

Purification technologies tested at a commercial scale

Silos for storage of rain water and test water

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