



Water purification

Background

Dutch greenhouses: growers have to apply now to more stringent standards for emissions of drain water. They have to either completely recirculate all drain water to the crop, or apply purification equipment for the removal of plant protection products. In 2027 also emission of nitrates and phosphates has to be reduced to zero.

Discharge water purification...

In the Innovation & Demo Centre Water of Wageningen University & Research Greenhouse Horticulture in Bleiswijk the infrastructure is present to develop and test equipment for the purpose of water treatment on a scale comparable to a real greenhouse. Together with suppliers we have developed equipment capable of removing plant protection products from drain water. With a test protocol based on Standardised Water (water with a composition representing a realistic worst-case scenario for greenhouse drain water) equipment can be approved for application in the horticultural market. These technologies are applied to improve surface water quality.



... but also improvement of recirculation water quality

The goal of zero-emission in 2027 increases the importance of the quality of irrigation and recirculation water. We have developed technical solutions that:

- Disinfect to prevent spread of pathogens
- Remove growth inhibiting factors
- Breakdown organic material
- Prevent salt accumulation (e.g. sodium)
- Improve resilience of greenhouse crop (e.g. oxygen in rhizosphere)

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