

Lower emission of nutrients with controlled released fertilizers

In the Netherlands, the government and horticultural industry have agreed to lower the emission of nutrients to the environment. Previous research in pot orchid cultivation research showed that the reuse of drain water can lower the emission of nutrients significantly and had no adverse effects on plant growth or disease incidence.

For further reduction of the emission of nutrients research into the effects of controlled released fertilizers (CRF) and reusing drain water (recirculation) in Phalaenopsis was conducted at Wageningen University & Research, Business Unit Greenhouse Horticulture. Two treatments with CRF were compared with a treatment without CRF with reusing drain water. The EC in the drain water of the treatments with CRF was 30% to 60% lower and the total amount of N in the drain water was 40 to 75% lower than in the treatment without CRF. This research is funded by the Phalaenopsis growers in the Netherlands, ICL Specialty Fertilizers, Top Sector Horticulture & Propagation Materials and Foundation Program Fund Greenhouse Horticulture.

