

Irrigation water treatment

Crousaz Fleurs, Floriculture, Yvorne/VD, Switzerland "The oxygen input through the OLOID reduces algae growth"



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Operation
1 Irrigation basin
with approx. 3000 m³
with 1 OLOID Type 400

Period Since approx. 2008

Success
Algae reduction

Reduction of duckweed

Plant description

The Crousaz Fleurs SA farm has been growing 60 types of horticultural flowers on 15 hectares in the Vaud Rhone plain since 1975, for the retail trade of cut flowers. In 2008, an irrigation basin with 35 m x 20 m x 4 m (approximately $3000 \, \text{m}^3$) was built to use rainwater instead of only tap water. The drainage pipes for the process water had already been laid, however, so that at certain points the rainwater is mixed with the process water, which also contains fertiliser residues. Thus, the corresponding nutrient content in the irrigation basin is relatively high (although varying depending on the season), which promotes the undesirable growth of plankton, algae and duckweed.

Goal of the OLOID operation

Simultaneously with the construction of the irrigation basin, an OLOID type 400 was installed in 2008. The agitator is immersed approximately halfway in the water and thus allows a considerable oxygen input, which should reduce the growth of algae and duckweed and thus improve the quality of irrigation water. The OLOID runs continuously, provided that there is enough water in the pool, which is not always the case, because there are regularly longer periods without rainfall in this region. Then you have to switch to tap water again, which in 2018 was unusually long, i.e. lasted for several months.

Success

The algae growth can not be prevented because of the structurally high nutrient input through process water. However, the oxygen input through the OLOID contributes to the fact that the growth can be reduced. What the situation without OLOID would look like was not investigated. One can assume, however, that the use of the OLOID has a positive effect on the quality of the water.

The OLOID was recommended and installed by our partner GVZ-Rossat.