

# Aqualite™ Water Treatment



## The Aqualite™ Gardening systems

Developed to increase the quality and transmission values of incoming and recirculating water.

The market is today demanding easy-to-use, robust systems exhibiting flawless continuous operation and low maintenance costs. In light of this, we have put our efforts in the design and construction of simple and rugged systems exhibiting high throughput.

The Aqualite™ Gardening systems purify water from a variety of sources, such as ground water or rain water. The Gardening systems are used primarily for the incoming water from the source, and/or for recirculating water. Aqualite™ Gardening systems operate up to flows of 100 m<sup>3</sup>/h, and are installed as 1 or more filter tanks, connected in parallel.

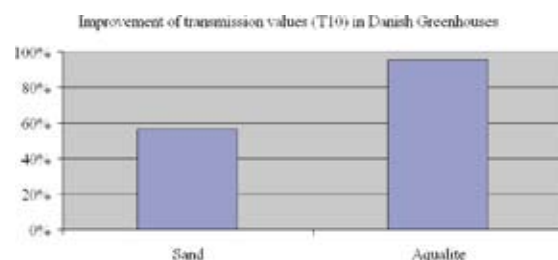
The system series have been designed with reference to experiences from field installations in Denmark.



## Of all good qualities with Aqualite™ Gardening, two major effects stand out:

### 1. Transmission values are dramatically increased

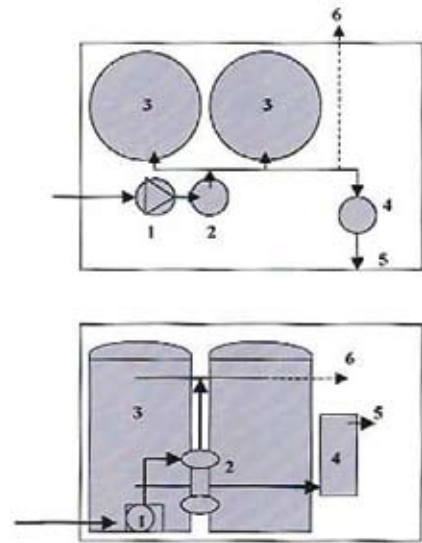
Aqualite™ Gardening will filter off particles down to as low as 1  $\mu\text{m}$ . In comparison, a typical sand filter remove particles down to 50  $\mu\text{m}$ , and carbon filters down to 25  $\mu\text{m}$ . This is important for the efficiency of the down-stream UV. Hence, with your installed UV system, the flow rate can be increased accordingly. Alternatively, a smaller and less expensive UV source can be installed.



### 2. The sterilization process starts already in the filter

Aqualite™ Gardening exhibit a documented reduction of bacteria, viruses and fungi from 44% to 98%. Bacteria are retained by the bead, partly because of their size. Clearly, no such effect can be seen in sand or carbon filters, that on the contrary often are media promoting bacterial growth. The combination of higher transmission values and less microorganisms in the effluent water, highly increases the efficiency of the UV.

## Aqualite™ Gardening<sup>15</sup> system at Gartneriet Bladgrønt in Denmark



Mounted in a 10-Foot container

1. Process pump (C-pump) capacity 15 m<sup>3</sup>/h at 25 mwp
2. Sludge filter 10 - 16 m<sup>3</sup>/h
3. 2 filters with Aqualite™, diam. 800 mm, height 2100 mm.
4. UV-logic filter, max capacity 26 m<sup>3</sup>/h
5. Treated water outlet
6. Backflush outlet

Aqualite™ Gardening<sup>15</sup> system is producing 15 m<sup>3</sup>/h for every 50.000 m<sup>2</sup> greenhouse area.

### Filter material with tailor made properties for water purification



A microscopic picture of a 2 mm Aqualite™ A 100x (left) and a 1000x (right) granule enhancement.

The versatility of Aqualite™ is drawn from the material's ability to filter off particles down to 1 μm and it's high ion-exchange capacity. The material is used for purifying water in a wealth of applications such as:

- \* Drinking water
- \* Swimming pools and public baths
- \* Aquatic breeding
- \* Ships and boats
- \* Gardening
- \* Agriculture

