

# The BioFiltre

## A unique filtre of its kind !



Thank you for choosing the BioFiltre.

Created by GHE, then tested in our greenhouse for several years, the **BioFiltre** is a new product that brings a new dimension to hydroponics. It replicates, in the nutritive solution, a microcosm until now exclusive to earth, by hosting beneficial colonies of living micro-organisms (**BioMagix**) which protect roots from some of their main predators: Pythium, Fusarium and other pathogen fungi.

The BioFiltre allows you to keep healthy roots under all circumstances. It is useful each time a plant faces a difficult situation:

- ✓ too high a temperature, insufficient ventilation, or too much humidity.
- ✓ a low oxygen level in the solution
- ✓ a poorly designed circulation system
- ✓ a substrate badly drained
- ✓ an unbalanced nutritive solution
- ... and these are just a few among multitudes of others.

**The BioFiltre is a complete, ready-to-use, product. It includes a blue case with its motor (1), 7 «stars», a «high-tech» substrate (2) for BioMagix, and a bag of 10 g of BioMagix (3).**



### 1. THE CASE includes:

- a. a reservoir
- b. a cover
- c. a motor (guaranteed 3 years)
- d. a white and black propeller
- e. a black input line and its extension
- f. a black filtre
- g. a blue extension tube
- h. a quadrangular filtre sponge
- i. a zig-zag blue cascade

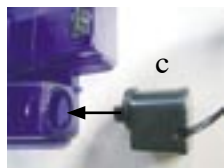


### ASSEMBLY

When you receive the BioFiltre, the case is ready-to-use. But when you want to wash it or open it for any other reason, you will find it easy to assemble.

*Notice that each part fits perfectly in the grooves prepared to that effect. As long as it wiggles, your part is not correctly embedded.*

1 - The motor (c) can be unscrewed easily. Be careful, it includes a very fine gasket that you must not loose. With the motor comes a magnetic propeller (d) that naturally fastens it to the input line (e).



2 - The input line (e) must be placed in the grooves in the left compartment. It perfectly snuggles on top of the propeller. It is expandable and includes an extension. We added another blue extension to it (g), so that you can reach even in deep reservoirs.



3 - The rectangular sponge (h) and the blue cascade (i) slide «back to back» on each side of the right compartment, in order to leave in between a sufficient space where to place BioMagix and the stars (fig. 2).

4 - Close the cover.

### OPERATING

No matter which growing system you use:

1. Adjust the input lines so that they always dip into the solution; then simply place your BioFiltre on the edge of the reservoir (fig. 1).



2. Introduce the 7 stars in the right compartment between the sponge and the cascade. fig. 1
3. Fill the reservoir and prepare your usual nutritive solution.
4. Remove the cover from the BioFiltre. Turn on the motor and prime the filtre by filling the casing completely with a glass several time, until the flow takes care of itself (fig. 1).

*Notice: Never let the motor run without water, you would damage it !*

5. Let it run for 24 hours then turn the filtre off and take the stars out (fig. 2).

fig. 3



6. Pour BioMagix in the bottom of the compartment (fig. 3), and put the stars back in.

7. Turn your motor on, prime the filtre again. Let it run non-stop. *Notice: Never leave your filtre without water, your micro-organisms would die !*

**The simplest mainenance !** Once your filtre is running, it should never stop. Only if you want to add BioMagix (once every 6 to 8 weeks) or change your stars (half every 6 months) should you stop it: take the stars out, add BioMagix, and/or replace some of the stars, then prime. As simple as that !

## 2. THE STARS

The stars are a porous substrate. They are crossed by a multitude of minute canals precisely designed to let oxygen, water and inert particles circulate freely, so that the environment stays healthy and clean.

- You need 7 stars to give your micro-organisms the adequate habitat where to thrive.
- They are self-cleaning as all inert particles are easily ejected out while the new-born cells replace them naturally. They need no special maintenance. You can rinse them occasionally and it is recommended to replace them by half every 6 months.
- Their black color prevents algae growth.

## 3. BIOMAGIX

BioMagix is a beneficial mix of micro-organisms that protects the root mass from pathogen fungi by surrounding the roots with a protective barrier, and inhibiting growth, propagation, and thus survival of their predators.

It is a 100% biological root inoculum that contains a wide diversity of micro-organisms and bacterias, and whose first goal is to protect the root mass from damaging fungi, like Pythium, Fusarium, Phytophthora, Verticillium, etc.

### **How does it work?**

- BioMagix covers the integrality of the roots with a protective mycelium and emits fungicidal elements which impede pathogens from feeding and growing, thus from propagating, and eventually from surviving.
- BioMagix has a second and equally essential function:  
This specific mix of bacteria decomposes the organic matter and debris swimming in the nutritive solution and transforms this potential source of disease into a supplement of mineral salts readily available to the plants.

### **When and how to use?**

BioMagix is a natural 100% organic protector. Use as a preventative, as well as in curative applications. Pour 10 g for 150 to 200 litres of water, every 6 to 8 weeks.

BioMagix is used as a drench when planting seeds ; it is poured in the watering solution for soil irrigation, or directly in the reservoir of your hydroponic system.

- In hydroponics: use it with the BioFiltre
- In soil: simply add it in the watering solution.

Note : To maximize the efficiency of BioMagix in soil, you can let the BioFiltre run permanently in a bucket - to allow the micro-organisms to establish - and then draw from it to water the plants.

BioMagix comes in 10, 25 and 50 gr.

For more information, call your favorite retailer or contact us directly:

Ph: +33 (0)5 62 606 098 30 - Fax: +33 (0)5 62 64 04 - email: [info@eurohydro.com](mailto:info@eurohydro.com)



fig. 2

