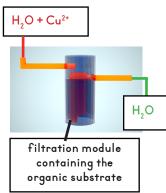
# HM ORGAFILTER

HEAVY METALS ORGANIC FILTER

# WHAT IS THE POINT?

During the filling and washing of the sprayer equipment, the copper-bearing effluents frequently end up in nearby water bodies. Thus, for those who only use copper (biological productions), the installation of a "HM OrgaFilter" in a washing area can directly counteract this pollution. For those who also use organic phyto-pharmaceutical substances and who have installed a biobed system, the filter prevents the pollution of the substrate with copper. This increases its longevity and minimizes the risk of an accident that can lead to a cost-intensive waste disposal.

# **HOW DOES IT WORK?**



The positively charged ions of the dissolved copper are attracted and retained by the big amount of negative charges on the surface of the organic substrate. This filter configuration also allows sand and oil removal from the effluents.

# WHO IS CONCERNED?

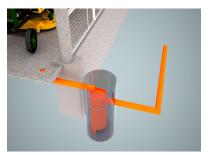
Originally, the filter was created in combination with the biobed systems that are installed on the farms of wine-makers and fruit farmers. Today the filter is also applied separately on certified organic farms, or in order to protect various environmental designs (ponds, natural swimming pools, etc.).

### **COSTELLATIONS OF THE FILTRATION SYSTEM**



I) Copper filter placed in front of the reservoir of a VG Biobed <sup>tm</sup>

2) Insertion of effluents from a grassy slope



#### STEPS TO THE REALIZATION OF A FILTER

- visit on the farm from an engineer of ecaVert Ltd, in order to evaluate the need and to note the dimensions of possible locations
- 2) for every project, ecaVert Ltd prepares an offer for free, which contains the following:
  - a) a suggestion for the constellation/location of an individual filter, or integrated in a reservoir
  - b) a corresponding estimate of costs
- eca Vert Ltd can either construct the system itself (according to option "ready-for-use"), or just oversee the construction (option "deliver & oversee")
- 4) ecaVert Ltd instructs (with documentation) the operators and can, if desired, take over the maintenance of the filter

## COMPONENTS OF AN HM ORGAFILTER

- -Filtration module out of PVC or PE(4 parts)
- -Metallic connection piece
- -Joint ring
- -Organic substrate (coconut fibres, biochar)

## COSTS OF AN HM ORGAFILTER

From 1'270 CHF for a filter out of PVC

From 1'480 CHF for a filter out of PE

## RESEARCH ON THE HM ORGAFILTER

2010-2012, hepia, investigation of the adsorption of copper on organic substrates







2011 - 2014, pilot project in Founex, in-situ investigations

#### CONTACT & INFORMATION

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