

# Use of EM-technology in Austria

Josef Greinöcker

*In der Leithen 9*

*A-4701 Bad Schallerbach*

*gwd.resch@gmx.at*

## Abstract

We want to discuss two topics:

1. EM-Carwash in Europe
2. Treatment of bees suffering from Varroa-mite

### 1. EM-Carwash in Europe

The ECODrom-carwash-centre in Braunau and Wels (Austria) are using EM extended in prewash since summer 1999. The results are higher gleam of the varnish surfaces, better rust protection and clear windows.

The cleaning and recycling of the sewages by EMa in the clearing chambers of the sewage are a terrific success. 80% of the so produced sewage can be used again and by the recurring circulation a lot of water is saved. Besides, cleaning shampoo and care-wax could be saved. All cleaning brushes have a fundamentally longer life time by use of EM and wear off less. Prof. Higa used the opportunity during his stay in Europe to inspect this project.

We hope we will convince further companies to prefer this method as an alternative to common procedures as a tribute to environmental protection.

### 2. Treatment of bees suffering from Varroa-mite

*Varroa jacobsoni* is the most frightening bee-parasite in most parts of the world. This mite attacks the bees and sucks their lymph (bee-blood). Due to the exponential increase in population the bee-folk is wiped out in a very short time. Because of experimental-cultivation in the later 1980ies the mite was brought in from Asia to Western-Europe. Since this time we have a constant struggle against it.

Various methods, chemical and biological ones, have been invented. However, they didn't show a lasting success as the mites developed a resistance.

I am a bee-keeper myself and I have heard about experiments with oxalic acid in Russia and I started research. Different formulae were tried out with EM and oxalic acid in many field tests. A mixture of EM-Ceramics and oxalic acid kills the mites. As examinations of honey, bee-wax and propolis show, there is no toxic effect on these products. Moreover, the bee-breed is not endangered. The acid in form of a tablet melts by a temperature of 160°-180° into an aerosol that spreads within the bee-folk (4-5 min.). After 5 to 6 days the aerosol disintegrates into CO, CO<sub>2</sub> and water. Therefore, in this short time a resistance cannot be developed.