## Use of EM Technology in Austria

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Abstract: Two topics are summarized in studies done in Austria

## 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 produced sewage can be used again and by the recurring circulation a lot of water is saved. Besides, cleaning shampoo and car-wax could be saved. All cleaning brushes have a fundamentally longer life time by use of EM and wear off less. 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 bees are wiped out in a very short time. Because of experimental-cultivation in the later 1980s the mite was brought in from Asia to Western Europe. Since then we have a constant struggle against it.

Various methods, chemical and biological ones, have been used. However, they didnít show a lasting success as the mites developed 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 of these products. Moreover, the bee-breed is not endangered. The acid in form of a tablet melts at a temperature of 160 - 180 into an aerosol that spreads within the bee colony (4-5 min.). After 8 to 10 days the aerosol disintegrates into  $CO_1$   $CO_2$  and water. Therefore, in this short time a resistance cannot be developed.