Content per pack SymBeeotic®

• Capsules with the bees' own freeze-dried lactic acid bacteria* and sterile fermented bee pollen (H13ferment®), which contains active antimicrobial substances and is nutrition for the lactic acid bacteria.

* The 13 different patented lactic acid bacteria from honeybees (H13microbiome®): *Lactobacillus kunkeei* Fhon2, *Lactobacillus apinorum* Fhon13, *Lactobacillus mellis* Hon2, *Lactobacillus mellifer* Bin4, *Lactobacillus apis* Hma11, *Lactobacillus kimbladii* Hma2 *Lactobacillus melliventris* Hma8, *Lactobacillus kullabergensis* Biut2, *Lactobacillus helsingborgensis* Bma5, *Bifidobacterium coryneforme* Bma6, *Bifidobacterium asteroides* Bin2 *Bifidobacterium mellis* Bin7 och *Bifidobacterium asteroides* Hma3.

Storage
Room temperature. If not all capsules are used on the first occasion, it is possible to seal the package with its zip and use within a year.

Materials that the beekeeper also needs

- Tap water.
- A a large enough clean container (e.g. can or bottle) with lid or sealing.
- A 60 ml plastic syringe, often used in beekeeping.
- Honey (recommended) or HFCS (or similar feed).
  IMPORTANT! In order not to spread the American or European foulbrood between colonies, use honey from symptom-free colonies. Otherwise recommended HFCS or products of similar composition of sugars. Do not use table sugar solution (sucrose) since the lactic acid bacteria grow poorly in it.

Instructions
Each capsule is sufficient to treat 1 bee colony over two consecutive days. Multiply the recipe below by the number of hives to be treated.

Recipe:
The lactic acid bacteria need to come to life, and produce antimicrobial fermentation substances, after their hibernation as freeze-dried.

1. Mix 25 g of honey with 100 ml (1 dl) of hot tap water in a clean container with lid. Let cool down to below 45 °C (otherwise the lactic acid bacteria will die of).
2. Remove one capsule from the sachet and put it in the container with the honey water solution. Wait 30 minutes and make sure that the capsule dissolves, you may have to shake the container.
3. Place the container warm (30-42 °C) for two days, for example on top of or against a hot radiator or in room temperature close to a sunny window.

Distribute SymBeeotic® in the beehive

The container now holds about 1.2 deciliters SymBeeotic®. Follow steps 1-4 below. Approximately 60 ml, should be distributed per day in each colony. Distribute 60 ml on top of the bees between the frames by using a syringe. The bees will clean each other and ingest the lactic acid bacteria through SymBeeotic®. This is done repeatedly for 2 consecutive days. One can also use the entire amount to feed the bees through a feed balloon in the early spring or summer, or in a mix with the winter-feed.

1. Day 1 in the apiary. Mix the content of the container. Fill the syringe and distribute about 60 mL per hive, on top of the bees, between all top frames in a box with high bee density.
2. Replace the container at the source of heat and let stand until the next day.
3. Repeat the treatment day 2.
4. Clean and store containers and syringe for another occasion.

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