HEATTREATMENT

HEAT TREATMENT OF BROOD FRAMES
AN EFFECTIVE PHYSICAL METHOD

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* Heat treatment of sealed brood provides an effective control of the varroa mite
*The varroa mite is more sensitive than bee brood to temperatures that lie above the normal brood temperature
* Heat treatment can be carried out in various types of thermostatically controlled boxes
* Only frames without dead brood should be treated
* Below the Borgstadter -Thermo- Box and Apitherm boxes are described.

BORGSTADTER - THERMO - BOX

* One can heat treat 16 -17 day old brood frames from queen caged frames (see previous article
* Treatment lasts for four hours at 44°C
* Few brood injuries - some shortening of the bees life

APITHERM BOX

* Varroa can be treated exclusively with this apparatus
* treatment can be carried out at any time on sealed brood, irrespective of the honey flow, e.g. at the end of May or June
* One makes a decision about how many treatments are required from the results of monitoring surveys.
* One treats brood frames where at least 75% of the cells are sealed. The open
brood dies.
* Up to 18 frames can be treated at any one time
* The treatment is carried out for three hours, under which the temperature gradually rises to just under 44° C.
* The bees develop normally and their lifespan is not shortened.
* An Apitherm box, for which the electricity in generated by solar cells, is under development in Germany.

THE EFFECT

* Borgstadter-Thermo- Box: 100% mite mortality immediately
* Apitherm Box: varroa females and nymphs are injured under treatment. The main part die within 24 hours. Those that survive lose their ability to procreate.