

## Recommendations for Management of Honey Bee Diseases and Parasites in 2010

-greatly condensed version of Medhat's March article in the Alberta BeeNews

Maintaining healthy hives can be helped by the following:

Requeen colonies with new queens, preferably hygienic ones.

Replace 3-4 combs every year reducing pathogens and chemical residues.

Disinfect dead out frames, lids, bottoms and supers with Virkon(disinfectant UFA sell)/Virkon Aqua

**Beekeepers should follow procedures which limit their exposure to the drugs used and have a 4 – 6 week drug free period before the honey flow starts.**

### 1. American Foul Brood (AFB)/as preventative, infection involves other measures.

**OxyTeT25** more effective as powder icing sugar mix than syrup which has a very short life.

See label for the proper mix.

Apply 28 g (2 tablespoons-30 ml) of the mix / colony 4 times at 4-5 day intervals on the outer frames.

#### **Foul Brood Mix**

Apply 18 g (1.3 tablespoons) / colony 4 times at 4 -5 day intervals on the outer frames.

### 2. European Foul Brood (EFB) treatment as **AFB**.

### 3. Chalkbrood and Sacbrood

No registered treatment, need healthy colonies.

### 4. Honey Bee Tracheal Mites (HBTM)

Monitor by sampling older bees and dissecting.

Mite level of 10%(10 mites/100 bees) requires treatment.

Treat with 65% formic acid. Medhat has details.

Use **Mite Awayll** formic acid pads as per label.

**HBTM** resistant queens can help.

### 5. Varroa Mite

Monitor by collecting a 1/3 of a cup/about 300 bees.

Use either a winter windshield washing fluid or 70% alcohol(rubbing alcohol) to do a wash(icing sugar not Medhat's favorite). Fluid can be reused.

Multiply mite number by 1.3, then divide by 3 to get % of mites/100 bees.

If less than 3% okay, greater than 3% treat.

If using the sticky sheet(don't use Tanglefoot) a count of less than 10 mites/day okay; more requires treatment.

**Formic acid** may be used as with **HBTM**.

**Oxalic Acid** may be dripped or sublimated according to the label(hives usually broodless)

**Checkmite** or **Apistan** can be used, but you need to make sure the varroa are not resistant to these.

**Apivar** is another choice.

### 6. Nosema apis and ceranae

Monitoring with spore count over 1 million/bee requires treatment.

A **Fumagilin** sugar syrup mixed as the label states is recommended. Avoid prolonged light exposure.

Remember that the spring and fall treatments differ.

If bees not taking syrup then a drench 200-400 ml of 50% syrup with 2 g (rounded ½ tsp)fumagilin/litre applied 4 times 10 days apart.

(slightly rounded teaspoon / 1 gallon of 1:1 Syrup)