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 outs 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. <u>See label</u> 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 <u>differ</u>.

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)