Insect Pest Management Department of Entomology Insect Note

Note 2.04 (Previously Note # 3C)

HONEY BEE MEDICATION FACT SHEET

Following is simply a list of the major honey bee diseases and mite pests in North Carolina, common treatments, and a summary of drug therapy. Read label directions for more detailed information.

AMERICAN FOULBROOD (Bacillus larvae)

Treatment: Destroy bees. Have NCDA fumigate equipment with ethylene oxide (ETO) or burn infested hives. Treatment of AFB with Terramycin will only control the symptoms. The bees may recover, but will not be free of the organism. Disease may still be spread to other hives and routine treatment may become necessary.

EUROPEAN FOULBROOD (Mellisococcus pluton)

Treatment: Terramycin treatments, requeening

SACBROOD (Virus)

Treatment: No drugs available. Maintain strong, vigorous colonies.

CHALKBROOD (Ascophaera apis)

Treatment: No drugs available. Maintain vigorous colonies; resistant strains.

NOSEMA (Nosema apis)

Treatment: Fall Fumidil-B treatment in suspect colonies.

TRACHEAL MITE (Acarapis woodi)

Treatment: Menthol treatment in suspect colonies (early fall best). Avoid other infected colonies; resistant strains; vigorous colonies.

VARROA MITE (Varroa jacobsoni)

Treatment: Apistan strips in any infested colony. Avoid other infected colonies; resistant strains. Purchase bees treated with Apistan strips. Spring and Fall treatments necessary.

WAX MOTH (Galleria mellonella & Achroia grisella)

Treatment: Freeze combs overnight; paradichlorobenzene(PDB) for empty comb; Phostoxin (for certified applicators ONLY!) Freeze or treat stored combs immediately with PDB after removal from hive. Store protected.

DRUG RECIPES

Terramycin dust:

1 level teaspoon Terramycin Soluble Powder (TSP)/oz powdered sugar for each colony. Treat 2-3 times at 7-day intervals.

1 pkg. (6.4 oz) Terramycin Soluble Powder (TSP)/2 lbs. powdered sugar. Use 3 tablespoons/hive. Treat 2-3 times at 7-day intervals.

1 lb. Terra-guard 50-D/10 lbs. powdered sugar. Use 1 oz mixture per colony. Treat 2-3 times at 7-day intervals.

Terramycin patty:

2 tablespoons (TSP) in 2/3 lb. granulated sugar mixed with 1/3 lb. ALL VEGETABLE shortening. Makes two patties. 1 pkg. (6.4 oz) Terramycin Soluble Powder (TSP) with 6 lbs. granulated sugar and 2 lbs. VEGETABLE shortening.

NOTE: Other formulations of Terramycin are NOT recommended for bees and may actually do harm. Terramycin fed in syrup breaks down too quickly to be effective. Suspend treatments at least 4 weeks prior to main honey flow to avoid contamination of marketable honey.

PDB (paradichlorobenzene)

Use 3 oz crystals on a piece of paper placed on top of a stack of 5 hive bodies containing <u>empty</u> combs. Cover. Check every 2-3 weeks. Most effective above 70 F. Air supers 2 weeks before reusing. Moderately effective. Do not use in human living quarters.

Menthol

Use 50 grams (3 1/2 tablespoons) in one, or split into two screen packets placed above the brood next. Not effective below 70 F. High temperatures can cause repellent action on bees. Treat 3-5 weeks depending on temperature. Best when used in the early fall (or late summer in mountains). Moderately effective.

Apistan_(fluvalinate)

Avoid all contact with skin when handling strips. Use two strips per brood chamber spaced about three frames apart in the brood nest area. Use strips 6 weeks. Always remove any honey supers that would be used for human food (honey or wax) production during the treatment period. Apistan strips may also be used for detection with sticky boards. NEVER use any other formulation of fluvalinate in a beehive. Fall and Spring treatments recommended in most situations.

NOTE: Read label directions for more detailed information on using these chemicals and NEVER apply a chemical contrary to the labelling. For more information about honey bees and diseases, you may also contact your Cooperative Extension Agent.

THE USE OF CHEMICAL PRODUCT NAMES IS FOR THE AID OF THE READER AND DOES NOT CONSTITUTE AN ENDORSEMENT OF ANY PRODUCT TO THE EXCLUSION OF ANOTHER, OR ONE NOT MENTIONED.

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