## **WISCONSIN HONEY BEE PEST CONTROL TREATMENTS 2016**

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PEST	REGISTERED TREATMENT (Active Ingredient)	<b>REGISTRATION #</b>	APPLICATION
VARROA MITE Varroa destructor	Apistan (Fluvalinate)	EPA Reg No. <u>2724-406</u>	6-8 weeks, in spring and fall. No more than 2 strips per brood box. No use during honeyflow
	CheckMite+ (Coumaphos)	EPA Reg No. <u>11556-138-61671</u>	6-8 weeks, in spring and fall. No more than 2 strips per brood box. No use during honeyflow
	Widespread resistance of Varroa mites to above products. Not recommended for Varroa control in WI.		
	Apivar Strips (Amitraz)	EPA Reg No. <u>872443-1</u>	2 strips per brood chamber (or 1 strip per 5 frames of bees), hang each in bee cluster with 2 frames between strips. Leave strips inside hive for 42 days, then remove. 2 treatments per year. <u>Remove</u> strips 2 wks prior to honey flow.
	HopGuard II (Potassium Salt of Hop Beta Acids)	EPA Reg No. <u>83623-2</u>	1 strip per 5 frames covered with bees in each brood super (or) 2 strips per 10 frames covered in bees in brood super. <b>No strips in honey</b> <b>supers.</b> Unfold strips and hang over a center brood frame with 1/2 the strip on each side of frame. Remove after 30 days. 3 applications per year max. <u>Can</u> be used during honey flow. – can also be used in packages – see label.
	Mite Away Quick Strip (MAQS) (Formic Acid)	EPA Reg No. <u>75710-2</u>	Place strips on the brood frames, staggered, across width of box. Do not disturb colony for 7 days (or) apply single strip every 2-6 wks. <u>Can</u> <b>be used during honey flow.</b> Outside temperatures between 50°-85°F.
	ApiGuard (Thymol)	EPA Reg No. <u>79671-1</u>	2 50gm trays per hive, add the second tray after 14 days. Use in fall; best results when daily maximum temperature is above 60°F.(use 25mg dose at temps above 77°F) <u>Do not</u> treat during honey flow. Remove product prior to installing honey supers.
	Api Life Var (Thymol, eucalyptol, menthol)	EPA Reg No. <u>73291-1</u>	Break 1 tablet into 4 pieces. Place near 4 corners of brood nest. Repeat 2x more. (7-10 day intervals, leave last treatment 12 days) Remove all residuals. Use when temperatures are 64°- 95°F. It is a fumigant; close off screen bottom boards. <b>Do not use</b> when honey supers are on.
	Oxalic Acid Dihydrate	EPA Reg No. <u>91266-1-91832</u>	Dribble or vaporize in the hive; late fall or early spring when little or no brood is present; can also spray broodless packages. See label for application instructions. <u>Do not use</u> when honey supers are in place.
	MAQS, ApiLife Var and Apiguard also show some control of tracheal mites.		
	RESISTANT BEES: Russia MN Hygenic Stock	n, SMR, VSH and	Queens and packages available for order from many producers.
	<b>INTEGRATED PEST MANAGEMENT (IPM):</b> resistant stock, check mite levels frequently, drone comb trapping and removal and ALWAYS FOLLOW LABELS AND ROTATE CHEMICALS.		

\*\*Mite products discontinued for use in Wisconsin: Sucrocide, Hivastan, Mite-Away II\*\*

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AMERICAN FOULBROOD Paenibacillus larvae EUROPEAN FOULBROOD melissococcus pluton	Terramycin, OXTC, Pennox, Tetroxy (Oxytetracycline Hydrochloride)	<u>FDA Reg No.</u> NADA 008-804 NADA 008-622 NADA 095-143 NADA 138-938 ANADA 200-146 ANADA 200-247	<b>Labels vary</b> . Dusting or feed in syrup, 3 applications in spring or fall. <b>Remove 6 weeks</b> <b>prior to honey flow.</b> <i>Can be used as a</i> <i>preventative. If AFB is detected, hives must be</i> <i>burned.</i>	
(treats AFB but NOT EFB)	Tylan, Pharmasin, Tylovet, Bilovet (Tylosin Tartrate)	<u>FDA Reg No.</u> NADA 013-076, ANADA 200-473, ANADA 200-455	Labels vary. Read directions carefully. Dusting only. 200mg dose in 20g powdered sugar applied weekly for 3 weeks. Complete treatment 4 weeks prior to main honey flow.	
Treats AFB	Lincomix (Lincomycin Hydrochloride)	<u>FDA Reg No.</u> NADA 111-636	<i>NEW for 2016: Requires a VFD order.</i> Dusting only. Mix with powdered sugar applied once weekly for 3 weeks. <b>Complete treatment 4</b> weeks prior to main honey flow.	
	<b>INTEGRATED PEST MANAGEMENT:</b> Inspect hives for symptoms of AFB. <b>Burn frames</b> with AFB symptoms! Burn or scorch the insides of boxes. Start with new frames and foundation.			
SACBROOD virus	No treatment available		Usually goes away by mid-June. If not, powerwash equipment and requeen hive.	
<b>CHALKBROOD</b> Ascosphaera apis	No treatment available		Maintain strong colony health. Requeen with a queen bred for hygenic behavior.	
NOSEMA Nosema apis, N. ceranae	Fumagilin-B (Fumagillin)		Add to feeding syrup in spring and fall, especially to packages.	
	Dissolve 1 rounded teaspoon in 2 oz warm water (not hot) and add mixture to 1 gal of sugar syrup. Feed 2 gals medicated 1:1 sugar/water in spring and 2 gals medicated 2:1 sugar/water in fall. Feed additional unmedicated syrup if necessary but <i>do not dilute the medicated syrup</i> .			
WAXMOTH Achroia grisella, Galleria mellonella	Para-Moth (Paradichlorobenzene)	EPA Reg No. <u>61671-2</u>	Use on stored equipment only. Freeze equipment in a freezer or store in unheated buildings in winter.	
SMALL HIVE BEETLE Aethina tumida	GardStar 40% EC (Permethrin)	EPA Reg No. <u>39039-8</u>	Soil drench only. <b>Highly toxic to bees!!</b> Follow label directions carefully.	
	CheckMite+ (Coumaphos)	EPA Reg No. <u>11556-138-61671</u>	1 week, temp >70°F. No more than 2 strips per brood box. <u>No use</u> during honey flow.	
	<b>INTEGRATED PEST MANAGEMENT:</b> West SHB Trap - Trap beetles in the hive. Anytime. Other traps include: Hood, Beetle Blaster, Freeman bottom board.			
<b>SMALL HIVE BEETLE (SHB) &amp; WAXMOTH IN THE HONEY HOUSE</b> Keep honey house extremely clean. Extract every 2-3 days or weekly. Do not store supers with brood. Increase air flow with fans, lower humidity with dehumidifiers. Freeze supers if needed; 10°F for 24 hours kills all life stages of small hive beetle.				



The above listed application instructions are only short summaries, **read the product label thoroughly before applying any treatments.** This list may not be complete. Listing of a product does not infer endorsement by the Department. Omissions are not intended to discriminate against registered products.