

2025 Wisconsin Honey Bee Pest Management Options

Read the product label thoroughly before applying any treatments and follow label instructions precisely. <u>The pesticide label is the law</u>. This list may not be complete, and information is subject to change. Information in this document does not imply endorsement by the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP), and is provided strictly as a resource for honey bee pest management.

Name of Pest	Registered Treatment	Registration Number	Applications	App. Season & Temps.
Varroa mite Varroa destructor Shuthetic chemicals	Apistan* (Tau-fluvalinate)	EPA Reg. No. 2724-406-79671	Refer to label. * NOT recommended for Varroa mite control due to documented widespread resistance.	spring, fall; temps >50°F
	CheckMite+* (Coumaphos)	EPA Reg. No. 11556-138	Refer to label. * NOT recommended for Varroa mite control due to documented widespread resistance.	spring, fall
	Apivar Strips (Amitraz)	EPA Reg. No. <u>87243-1</u>	Use 2 strips per brood box (1 strip per 5 frames of bees), separate strips, hang each in bee cluster with 2 frames between strips. Leave strips inside hive for 42 days, then remove (<i>maximum 56 days</i>). Do not reuse strips. Do not use more than 2 times a year. Remove strips 2 weeks before honey flow. Do NOT use during honey flow, refer to label.	spring, fall
	AmiFlex (Amitraz)	EPA Reg. No. <u>87243-4</u>	Restricted use pesticide requiring pesticide applicator certification to purchase and use. Applied as a gel using dosing gun. Do NOT use during honey flow, refer to label. More info: <u>https://datcp.wi.gov/Documents2/AmiFlexFAQ.pdf</u>	spring, fall; temps >50°F
	HopGuard III (Hop Beta Acids Resin)	EPA Reg. No. <u>83623-2</u>	Use 2 strips per brood box (1 strip per 5 frames of bees). Unfold strips and hang over a center brood frame with $1/2$ of the strip on each side of the frame. If using 2 strips, keep 2 frames between strips. Leave strips in hive for 14 days (<i>maximum 30 days</i>). Efficacy can increase with low brood present or back-to-back treatments (2 weeks apart). Use \leq 4 times per year. Can be used during honey flow, refer to label.	spring, summer, fall; temps >50°F
	Formic Pro (Formic Acid)	EPA Reg. No. 75710-3	Use 2 pads (staggered) for 14 days – OR – first pad for 10 days, remove and replace with second pad for additional 10 days. <i>Allow minimum 1 month between applications</i> . Lay pads flat across the frames of lower brood box. Do NOT disturb hive during treatment period. Close screen bottom board, open entrance fully. Can be used during honey flow, refer to label .	spring, summer, fall; temps 50°F-85°I
Essential Organic oils	Api-Bioxal (Oxalic Acid Dihydrate)	EPA Reg. No. <u>73291-2</u>	Ensure bees are clustered before applying trickle or spray methods. Trickle solution or vaporize in the hive late fall or early spring when little or no brood is present. Treat packages with spray method, refer to label. Can be used during honey flow. Respirator required, refer to label.	spring, fall; temps > 37°F
	EZ-OX (Oxalic Acid Dihydrate)	EPA Reg. No. <u>101743-2</u>	Vaporizer or solution method. Do NOT use tablets for solution method. Use when little to no brood left in hive. Can be used on packages. Vapor should only be applied to outdoor colonies. Can be used during honey flow. Respirator required, refer to label.	spring, fall; temps > 37°F
	VarroxSan (Oxalic Acid Dihydrate)	EPA Reg. No. 94413-3	One strip per 2.5 frames of bees (<i>maximum 4 strips per brood box</i>). Leave strips in hive for 42-56 days (<i>maximum 56 days</i>). Do not reuse strips. Avoid using during periods of intense nectar flow. Most effective when colony is actively foraging. Can be used during honey flow. Respirator required, refer to label.	Spring, summer, fall; temps >60°F
	ApiGuard (Thymol)	EPA Reg. No. 79671-1	Combine weak colonies. Open and place 1 tray – OR – administer 51ml of gel, refer to label, centrally on top of brood frames. Make sure worker bees can access tray. After 2 weeks, repeat treatment for 2-4 <i>weeks</i> (4-6 weeks total for entire treatment). Use 25mg dose if temps above 77°F. Do not enter or allow others to enter treated area(s) for 48 hours after treatment. Do NOT use during honey flow, refer to label.	late summer after honey harvest (preferred), fall, spring; temps 60°F-105°F
	Api Life Var (Thymol, Eucalyptus, L-Menthol)	EPA Reg. No. 73291-1	Combine weak colonies before treatment. Cut pack in half lengthwise. Break 2 half tablets into 2 pieces and place the 4 pieces around edge of brood nest. Leave first tablet 7-10 days. Place second tablet for 7-10 days. Place third tablet for 12 days. Close off screen bottom boards and reduce entrances. 2 applications per year max. Remove from hive at least 30 days before honey harvest. Do NOT use during honey flow. Respirator required, refer to label. nic behavior and <i>Varroa</i> resistance are available through many queen breeders	fall (preferred), spring; temps 64°F-95°F

Stock Bred for Hygienic Behavior: Queens bred for hygienic behavior and *Varroa* resistance are available through many queen breeders. These queen lines include Russian, VSH/Pol-line, MN Hygienic, and Purdue mite/ankle biters.

Integrated Pest Management (IPM) – Varroa: No single treatment option is 100% effective. Check mite levels monthly and after treatment to ensure efficacy. Use a combination of hygienic or mite resistant stock, drone brood removal, screen bottom boards, and brood breaks. Rotate "hard" and "soft" controls and keep records of each treatment type and date. Refer to the <u>Honey Bee Health Coalition's (HBHC) Varroa Management Guide</u> for more information. Refer to the EPA's IPM instructional video <u>Protecting Honey Bees: Integrated Pest Management for Varroa Mites</u>, and NC Department Agriculture's video Managing Hive Pests.

	Registered Treatment (Active Ingredient)	Registration Number	Applications	App. Season & Temps.
			tive (VFD) Order or a prescription from a veterinarian. Labels and fo the <u>DATCP Veterinary Feed Directives</u> webpage for more information.	rmulations vary.
Foulbrood (AFB) Paenibacillus larvae and European Foulbrood (EFB) Melissococcus plutonis	TM- (50, 50D, 100, 100D), Tetroxy 25, Pennox 343, Tetroxy 343 (Oxytetracycline hydrochloride)	FDA Reg. No. <u>NADA 008-804</u> <u>ANADA 200-146</u> <u>ANADA 200-026</u> <u>ANADA 200-247</u>	American Foulbrood (AFB) Guidance: If hive(s) are suspected of having AFB, contact DATCP Apiary Program staff at DATCPapiary@wisconsin.gov. Refer to the <u>HBHC's Managing</u> Foulbrood Guide for more information about AFB and EFB.	
	Terramycin (10, 30, 50, 100, 200), Terramycin 200 Granular, Terramycin 100MR Type A (Oxytetracycline dihydrate)	FDA Reg. No. <u>NADA 095-143</u>		As needed in
	Pennox (50, 100-MR, 100 Hi-Flo, 200-Hi-Flo) (Oxytetracycline)	FDA Reg. No. <u>NADA 138-938</u>	After consultation with your veterinarian, follow VFD order/ prescription and label precisely. Remove at least 6 weeks prior to honey flow to avoid contamination of production honey.	fall.
AFB (NOT effective for EFB)	Tylan Soluble, BiloVet, Tylovet (Tylosin Tartrate)	FDA Reg. No. <u>NADA 013-076</u> <u>ANADA 200-455</u> <u>ANADA 200-473</u>		
	Terramycin (-343, soluble powder concentrate) (Oxytetracycline hydrochloride)	FDA Reg. No. <u>NADA 008-622</u>		
	Lincomix (Lincomycin Hydrochloride)	FDA Reg. No. <u>NADA 111-636</u>		
Sacbrood virus (SBV) Morator aetatulas	No treatment available	N/A	Viral pathogen largely caused by stress. Maintain strong colony health. Requeen if problem persists. Provide proper nutrition.	N/A
Chalkbrood Ascosphaera apis	No treatment available	N/A	Fungal pathogen largely caused by stress. Maintain strong colony health. Requeen with a queen bred for hygienic behavior. Provide proper nutrition.	N/A
Nosema Nosema ceranae, Nosema apis	<u>No FDA approved animal</u> <u>drug</u> available	N/A	Parasitic fungal disease largely caused by stress. Maintain strong colony health. Reduce moisture in hive and improve air circulation. Requeen. Cull old frames. Provide proper nutrition.	N/A
	Para-Moth Insecticide (Paradichlorobenzene)	EPA Reg. No. <u>61671-2</u>	Use on extracted, stored combs. Stack boxes tightly on several layers of newspaper. No more than 5 deeps or 10 mediums per stack. Kills adults and immature stages, but not eggs. Treated stored combs must be thoroughly aired out before use, otherwise bees will be killed, refer to label.	N/A
Small hive beetle (SHB) Aethina tumida	GardStar 40% EC (Permethrin)	EPA Reg. No. <u>39039-8</u>	Treats SHB larval stage. Soil drench only. Refer to label for directions and follow carefully. Cut grass prior to application. Apply 24-48 hours prior to placement of hive support(s) (e.g. pallet(s)). Highly toxic to bees.	N/A
	CheckMite+ (Coumaphos)	EPA Reg. No. <u>11556-138</u>	Refer to label for directions and follow carefully. Remove honey supers before application. Prepare 4X4in piece cardboard. Cut one strip in half crossways and staple the 2 pieces to the cardboard. Place near center of bottom board with strips down. Leave strips in hive for \leq 42 days (<i>maximum 45 days</i>). Do NOT treat for SHB >4 times per year.	N/A

Wisconsin Department of Agriculture, Trade and Consumer Protection Division of Agricultural Resource Management | Bureau of Plant Industry 2811 Agriculture Dr., PO Box 8911, Madison, WI 53708-8911 DATCPApiary@wisconsin.gov P-DARM410 (02/2025)