

Diseases and Parasites and Their Chemical Controls*

<u>Disease or Parasite</u>	<u>Prevention or Control</u>	<u>Dosage</u>	<u>Method</u>	<u>Timing</u>	<u>Cautions</u>
American Foulbrood	Terramycin (Prevention only)	9:1 (powdered sugar to TM25) 1 Tablespoon, 3 times, 1 week apart.	Dusted on ends of top bars of brood frames	Early Spring and Fall	Never to be in hive during honey production. Finish at least 30 days prior to super placement.
American Foulbrood	Tylan (Tylosin) (Not a preventative nor a cure)	As per directions	Mixed with powdered sugar and dusted on ends of top bars.	Early Spring and in the Fall	Never to be used when supers are present. Residues are likely and are not tolerated.
European Foulbrood	Terramycin (prevention but can be a control)	Same as above	Same as above	Same as above	Never to be in hive during honey production. Finish at least 30 days prior to super placement.
Nosema	Fumidil-B (control)	2 teaspoons to two gallons of syrup Or to one gallon of syrup	Feed in syrup	In the fall Or in the Spring	Never to be in hive during honey production.
Tracheal Mites	Menthol crystals (control)	One packet	Placed in hive in temperatures ranging from 60 to 80 degrees.	In the fall &/or in the spring. (Ideally, 21 days of vapors)	Never to be in hive during honey production.
Tracheal Mites	Grease Patties (control)	2 parts table sugar w/ 1 part pure, vegetable shortening	Placed on top bars of frames where bee have ready access	8oz. Patty kept in the hive at all times	
Tracheal Mites	MiteAway II (Control)	1 pack for 2 story hive	Placed on top bars	Spring &/or Fall	Never to be in hive during honey production. Not to be used with supers in place.
Tracheal Mites	ApiGuard (Control)	1 pack for each hive body	Placed on top of frames	Fall and Spring	Never to used during honey production. Wear protective gear.
Varroa Mites	Apistan (Control)	1 strip in brood area for each 5 frames of bees	Hung in between frames in brood area	Fall and Spring	Never to be in hive during honey production. Not to be used with supers in place.
Varroa Mites	CheckMite+ (Bayer Bee Strips) (Control)	1 strip in brood area for each 5 frames of bees	Hung in between frames in brood area	Fall and Spring	Never to be in hive during honey production. To be removed 15 days prior to placing supers.
Varroa Mites	MiteAway II (Control) (Formic Acid gel pack)	1 packette	Placed on top of frames	Fall and Spring	Never to used during honey production. Wear protective gear.
Varroa Mites	Sucroside	Diluted in water	Sprayed on or between frames	Fall and Spring	Not to be used during honey flow.
Varroa Mites	ApiLife Var	Packette	Placed on top of frames	Fall and Spring	Never to used during honey production. Wear protective gear.
Varroa Mites	ApiGuard	Packet or bulk	Placed on top of frames	Fall and Spring	Never to used during honey production. Wear protective gear.
Small Hive Beetle	CheckMite+ (Bayer Bee Strips) (Control)	1 strip cut in half	Stapled under corrugation cardboard placed on bottom board	Fall and spring but only when bees are not clustered.	Never to be in hive during honey production. To be removed 15 days prior to placing supers.
Small Hive Beetle	GardStar	Ground drench	Around hives and honey house	Every six weeks during warm weather	Follow label instructions

*Follow all label instructions

See next page for Non-Chemical Controls

Diseases, Parasites and Their Non-Chemical Controls*

<u>Disease or Parasite</u>	<u>Prevention or Control</u>	<u>Dosage</u>	<u>Method</u>	<u>Timing</u>
American Foulbrood	Prevention		Annual replacement of brood combs. (Prevention only)	Early Spring or Late Fall
American Foulbrood	Control and prevention		Burning infected colonies	When found
European Foulbrood	Prevention or control		Annual replacement of brood combs (prevention but can be a control)	Early spring or late fall or when detected
Tracheal Mites	Control		Using resistant stock	
Tracheal Mites	Grease Patties (control)	2 parts table sugar w/ 1 part pure, vegetable shortening	Placed on top bars of frames where bee have ready access	8oz. Patty kept in the hive at all times
Varroa Mites	Control		Using resistant stock	
Varroa Mites	Control		Trapping mites in drone brood and destroying, repetition	Spring and summer
Varroa Mites	Control		Screened bottom board	Year round
Varroa Mites	Control		Sucroicide	As per label instructions
Small Hive Beetles	Control		Various traps are hitting the markets	As per directions

*These methods are only ways of reducing the chemical controls at this time. They are not intended to totally replace the need for chemical controls but just to reduce the dependence of them.

*For all of these methods, timing is critical and factors that must be taken into consideration include colony strength, time of year and amount of brood.