

Possible Varroa Treatments *C-contact S-systemic F-fumigant

	Application Form	Effectiveness (best without brood)	Treatment Length	*Kills By	Time of Treatment	Temperature When Used	Adverse Effects	Residue Problems	Danger to beekeeper
CHEMICAL									
Apiguard Thymol	Gel	68-82% Cn 98% Sp	2x2 wks	F	Fall	+15°C	Few if any	Honey taste	Skin irritant
Apilife VAR Thymol + e-oils	Tablet	70-90%	2-21 days apart	F	Fall	+15	Over- wintering problems	Honey taste	None
Apistan Fluvalinate	Embedded Strip	95-99%	42 days	C	Spring Fall	+10	Drones, Queens poor development	Honey, propolis ,wax builds up	Low risk Toxic to fish
Apitol Cymiazole	Syrup	83-98%	2-7 days apart	S	Fall	+10	Brood food glands reduced development	None	Low risk
Apivar Amitraz	Embedded Strip	90-99%	6 wks	C	Spring Fall	+10	Larvae and adult die products mutagenic	Degrades quickly	Low risk
Bayvarol Flumethrin	Embedded Strip	95-99%	6 wks	C	Spring Fall	+10	None	Propolis (wax)	Low risk
Check-Mite coumaphos	Embedded Strips	85-99%	6 wks	C	Spring Fall	+10	Queens, Drones sub par performance	Honey, Wax for +8 years	Low risk
Evaporators (Formic)	Gel Vapor	61-98%	Varies	F	Spring Fall	15-30	Drones,brood,adults Some deaths	Honey taste	Corrosive; combustible
Oxalic Acid	Sprayed Syrup Vapor	82-99%	1 treatment Fall	C	Fall	+0	Reduced brood in spring	Honey taste	Corrosive
Lactic Acid	Sprayed	41-99%	2-4/yr	C	Fall	+0	Possible egg loss	Honey taste	Skin irritant
NON- CHEMICAL	Biotechnical Control								
Screened bottom board	<ul style="list-style-type: none"> - reduces mite populations; must be setup to prevent return of mites into the hive - estimated to reduce mite population from 20 – 70% - may not be the best wintering setup in cold climates 								
Icing Sugar	<ul style="list-style-type: none"> - powdered sugar prevents mites clinging to bees plus bees grooming each other removes more mites - 4 – 6 treatments can be highly effective at mite suppression in conjunction with screened bottom boards 								
Resistant Bees	<ul style="list-style-type: none"> - some fall inspected Russian Queened hives in the Calgary area recorded no mites while neighboring hives were infected - can expect fewer mites and a better tolerance to remaining mites 								
Brood/Drone Removal	<ul style="list-style-type: none"> - drone comb cycled thru the hives allows for mites in the cells to be removed, frozen, and cleaned up in the hive - close to 60% of mites in a hive are estimated to be in developing drone cells 								