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	Gel	68-82% Cn	2x2 wks	F	Fall	+15°C	Few if any	Honey taste	Skin irritant	
Thymol	T-1-1-4	98% Sp	2.21.1	F	D-11	. 15	0	II 4 4 .	NI	
Apilife VAR	Tablet	70-90%	2-21 days apart	F	Fall	+15	Over-	Honey taste	None	
Thymol + e-oils			_				wintering problems			
Apistan	Embedded	95-99%	42 days	C	Spring	+10	Drones, Queens	Honey,	Low risk	
Fluvalinate	Strip				Fall		poor development	propolis ,wax builds up	Toxic to fish	
Apitol Cymiazole	Syrup	83-98%	2-7 days apart	S	Fall	+10	Brood food glands reduced development	None	Low risk	
Apivar	Embedded	90-99%	6 wks	С	Spring	+10	Larvae and adult die	Degrades	Low risk	
Amitraz	Strip	70 77 70	O WKS		Fall	110	products mutagenic	quickly	LOW HSR	
Bayvarol	Embedded	95-99%	6 wks	С	Spring	+10	None	Propolis	Low risk	
Flumethrin	Strip				Fall			(wax)		
Check-Mite	Embedded	85-99%	6 wks	C	Spring	+10	Queens, Drones sub	Honey,Wax	Low risk	
coumaphos	Strips				Fall		par performance	for +8 years		
Evaporators	Gel	61-98%	Varies	F	Spring	15-30	Drones,brood,adults	Honey taste	Corrosive;	
(Formic)	Vapor				Fall		Some deaths		combustible	
Oxalic	Sprayed		1	С	Fall	+0	Reduced brood in	Honey taste	Corrosive	
Acid	Syrup	82-99%	treatment				spring			
T 4* .	Vapor	41 000	Fall		D-11	.0	D'l-11	TT	01-1 1144	
Lactic Acid	Sprayed	41-99%	2-4/yr	С	Fall	+0	Possible egg loss	Honey taste	Skin irritant	
NON-	Biotechnic	cal Control								
CHEMICAL		0010101								
Screened	- reduces mite populations; must be setup to prevent return of mites into the hive									
bottom	- estimated to reduce mite population from $20 - 70\%$									
board	- may not be the best wintering setup in cold climates									
Icing Sugar		- powered 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	- some fall inspected Russian Queened hives in the Calgary area recorded no mites while neighboring hives were infected									
Bees	- can expect fewer mites and a better tolerance to remaining mites									
<b>Brood/Drone</b>	- drone comb cycled thru the hives allows for mites in the cells to be removed, frozen, and cleaned up in the hive									
Removal	- close to 60% of mites in a hive are estimated to be in developing drone cells									