

SEPTEMBER 2005 TEST EVALUATION & WHAT THE NUMBERS TELL YOU.

NATURAL DROP:

The average natural drop in the pesticide and acid groups is below 10 which is still below the economic damage threshold but almost double of previous years, probably a result of a really good summer and hives with lots of brood.

APISTAN GROUP:

The group average dropped to 10.19 times the mites in its application than the natural drop. At 20x times we do not have measurable resistance. At 10x times we doubt it will provide sufficient treatment and we will be able to evaluate it in the spring.

GABON GROUP:

It is a little different formula of fluvalinate and that may explain why it has an average of 18.67 and why our mites have low resistance to it. We are testing it because of use in off shore markets.

FORMIC ACID:

2 pads with an average multiple of 3.00 is deemed insufficient but the Canary tests show application with 3 – 5 still reducing mites to a very low number in the spring. Again the spring tests will tell us.

3 pads with an average multiple of 31.72 proves that our last year change in recommendation to use 3 pads in the fall are correct, especially if the hives are boomers and the mites are up in 8 – 10 and more level of natural drop.

TEST CHART FALL - AUGUST TO SEPTEMBER 2005

Hive Number & Location O = Outside circle I = Inside circle Test for Treatment	Natural Drop Fr: Sept 2 (11am) To: Sept 5 (11am) Total ÷ 3 Group			Pesticide Drop Fr: Sept 5 (11am) To: Sept 6 (11 am) Total = same Group			Treatment Efficacy Pesticide Resistance Multiple Of Group Natural Drop Avg.		Hive Evaluation 2 Story Langstroth Frames of: Brood (lbs) Bees			
	72Hr	24Hr	Avg.	24Hr	24Hr	Avg.	↓	↓	↓	↓	↓	
Resistance & Efficacy: Apistan 2 strips in top box Gabon 3 strips in top box	O1	75	25.0		172	172		6.8		112	18	4
	O2	5	1.66		27	27		16.2		105	18	3
	O3	11	3.66		93	93		25.4	10.1	90	16	5
	O4	45	15.00		51	51		3.4			18	4
	O5	60	20.00		149	149		7.4		110	17	5
	O6	11	3.66	9.91	104	104		28.4		86	16	4
	O7	38	12.66		190	190		15.0		107	18	4
	O8	19	6.33		236	236		37.2	18.6	115	18	4
	O9	10	3.33		42	42		12.6		117	18	3
	O10	44	14.66		175	175		11.9		111	16	4
Efficacy of formic acid: 21 days 2 pads 12 g / day 21 day 3 pads 18g / day	I1	36	12.00		50	50		4.1		93	16	4
	I2	18	6.00		23	23		3.8		94	17	3
	I3	20	6.66		6	6		1.0	3.0	113	18	3
	I4	37	12.33		29	29		2.3		97	16	4
	I5	30	10.00		28	28		2.8		98	15	4
	I6	38	12.66	8.23	46	46		3.6		105	18	5
	I7	25	8.33		124	124		14.8		101	17	4
	I8	11	3.66		161	161		43.9	31.7	92	15	3
	I9	6	2.00		87	87		43.5		80	14	3
	I10	15	5.00		184	184		36.8		108	18	4

Total Natural Drop Collected for 3 – 5 Days Natural Drop interpolated to 24 Hours

Pesticide drop interpolated into 24 hours Pesticide drop collected during the first 24-48 hours after application

*To achieve olympic average the highest, lowest & problematic figures are deleted from the count.