

VERIFICATION TESTING – AUGUST TO SEPTEMBER 2004

VII - LOOKING AT THE CHART:

- You must do your tests at the same time each year otherwise your numbers will not be comparable.
- In the Apistan Resistance column, we have two 15x and one 20x multiples. Acid treatment postpones resistance but this is a warning that some resistant mites have gotten to us; however this is only 20% of the hives and still low. We will verify the situation in the spring. This fall, Apistan (fluvalinate), will still work in our operation.
- In the Acid Efficacy section, the multiples are lower when compared to last year but sufficient for acid. This is likely the result of some unusually cold and wet weather we received during the test period.
- LEVEL OF INFESTATION: The 24 hour prorated drops shows drops of 9 and 6. This is still below the negligible level but twice as much as our long time maximum of four mites. The rest (80% of the hives) are below 4 mites drop. Again, a spring evaluation is a must.

Hive Number & Location O = Outside circle I = Inside circle Test for Treatment		Natural Drop Aug 30 (11am) to Sept 4 (11am) Total x .2		Pesticide Drop Sept 4 (11am) to Sept 5 (1 pm) Total x .92		Treatment Efficacy and Resistance Multiple	Hive Evaluation 2 Story Langstroth Frames of brood			
		120Hr	24Hr	26Hr	24Hr		Frames of bees (lbs)	Notes	↓	↓
Resistance and Efficacy Apistan 2 strips in top box	O1	15	3	201	185	61 x	92		18	4
	O2	16	3.2	140	129	40 x	92		18	6
	O3	13	2.6	202	186	72 x	69		18	4.5
	O4	14	2.8	87 _{30%}	80	29 x *	76		18	4.5
	O5	12	2.4	88	81	34 x	86		18	5.5
	O6	8	1.6	107	98	62 x	98		18	5.5
	O7	33	6.6	108	99	15 x	69		17	6.5
	O8	46	9.2	150	138	15 x	71		18	5.5
	O9	9 _{50%}	3.	68 _{20%}	63	20 x *	84		18	4.5
	O10	12	2.4	114	104	43 x	81		18	5.5
Efficacy 21 days 2 pads formic acid 12 gram/day	I 1	14	2.8	113	104	37.2 x	88		18	7.5
	I 2	30	6.	47	43	7.2 x	82		18	4.5
	I 3	7	1.4	32	30	21.0 x	67		16	4
	I 4	5	1 -	52	48	47.8 x	74		18	6
	I 5	13	2.6	29	27	10.3 x	83		16	4.5
formic acid 21 day 3 pads 18 gram/day	I 6	45	9 -	214	197	21.8 x	97		18	4.5
	I 7	11	2.2	42	39	17.5 x	74		18	7.5
	I 8	15	3 -	33	30	10.0 x	61		18	4
	I 9	23	4.6	54	50	10.8 x	61		17	4
	I 10	17	3.4	105	96	28.4 x	66		18	5.5

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

% = indicates percentage of boards cleaned.

* = interpolated figure due to boards cleaned