



Tomato/Potato Psyllid

Heinz Wattie's Monitoring Plan



2008/2009 Monitoring Procedure

- 3 full time students
- Each Paddock Monitored Weekly
 - 400ha 50 paddocks
 - 1 yellow sticky trap per ha
 - 5 full plants counted per ha
- Plant Counts
 - Eggs
 - Small, Med and Large Nymphs



2008/2009 Monitoring Procedure

cont.

- Adult numbers per trap
- Plant size (H×W) near trap
- Weed Pressure/Presence of weeds

DATE: _____

PADDOCK NAME: _____

NUMBER OF TRAPS:

Trap	Psyllid Count	Plant Size		Trap	Psyllid Count	Plant Size	
		H	W			H	W
1				14			
2				15			
3				16			
4				17			
5				18			
6				19			
7				20			
8				21			
9				22			
10				23			
11				24			
12				25			
13				26			
AVG				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Weed Pressure: Rated from (0) = Clean, to (5) = Dense and well established
Identify Weed Present

In plant line: _____
Outside plant line: _____
Fence lines: _____

Soil Moisture: _____

NUMBER OF PLANTS SAMPLED:

AVERAGE	Small	Med	Large	Eggs
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

	Nymphs			Eggs		Nymphs			Eggs
	Small	Med	Large			Small	Med	Large	
1					19				
2					20				
3					21				
4					22				
5					23				
6					24				
7					25				
8					26				
9					27				
10					28				
11					29				
12					30				
13					31				
14					32				
15					33				
16					34				
17					35				
18					36				



2008/2009 Monitoring Procedure

cont.

- Paper copies of monitoring sheet
- Input data into laptop
- Daily download of info onto work desktop.
- Updated Graphs sent to individual grower

DATE: 17.02.09

Paddock Name: Ortons

TRAP NUMBER:	Psyllid Count	Plant Size	
		H	W
1	16	41	110
2	38	42	126
3	13	40	118
4	7	43	127
5	31	36	113
AVG	21	40.4	119

Weed Pressure: Rated from (0) = Clean, to (5) = Dense and well established
 In plant line: (2) grass fat hen and redroot
 Outside plant line: (2) fat hen, grass, and nightshade seedlings
 Fence lines: (0) clean

Moisture: Good

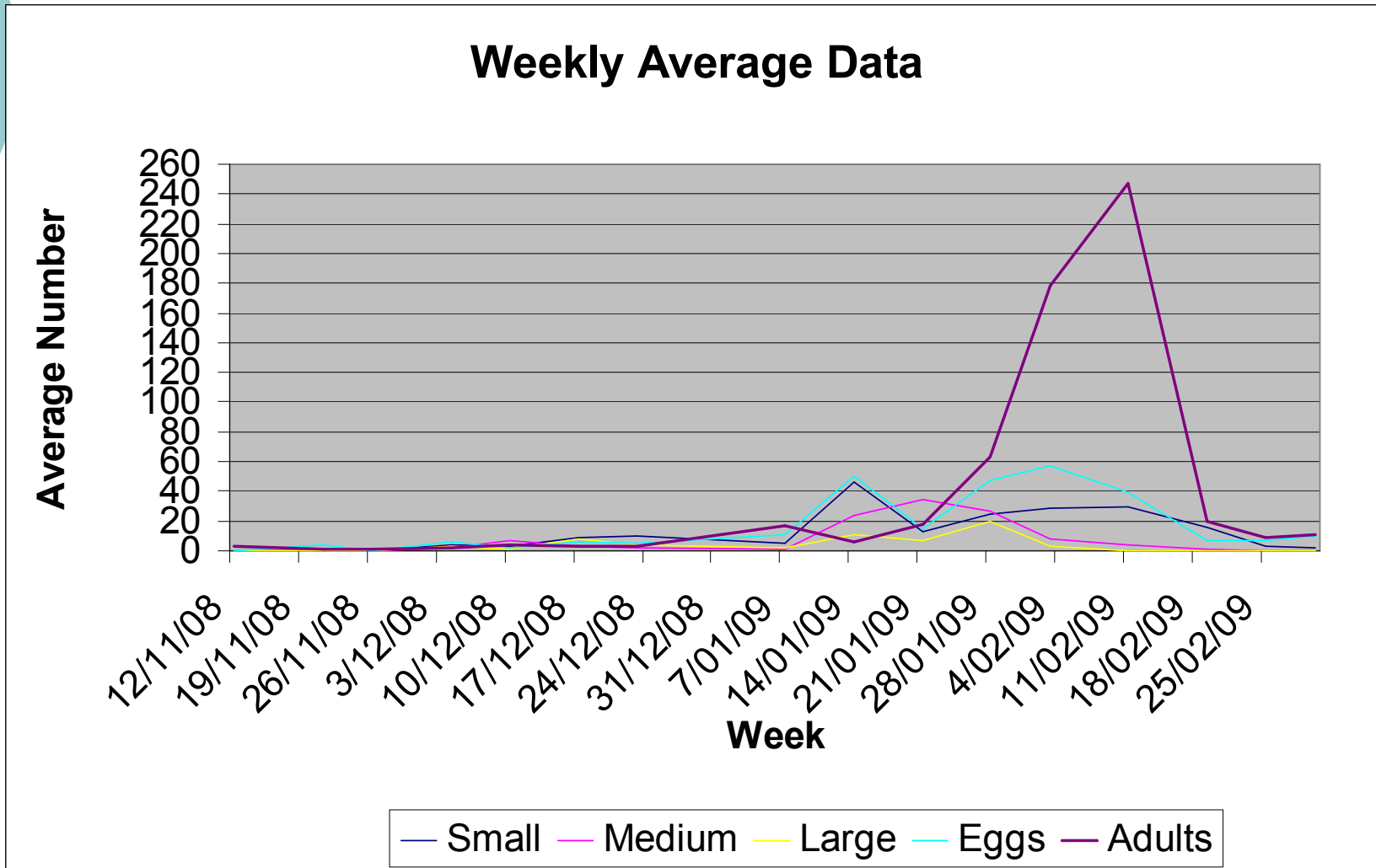
General Comments:

	Nymphs			Eggs		Nymphs			Eggs
	Small	Med	Large			Small	Med	Large	
1				11	21	15	12	4	30
2				15	22	100	18	8	75
3	22			5	23	3	1		6
4	5	1		30	24	17			10
5	10			18	25	2	3		10
6	5			16	26	6			15
7				10	27	25	4		18
8	3			11	28		20		25
9				13	29		5		20
10	5	11		5	30				15
11	5	2			31		7		10
12	11			20	32	5	25		15
13	3			5	33		8		15
14	10	1		2	34	4	6		10
15	50	11		35	35	9	1		15
16	5			10	36		36		5
17	3	2			37	34	21		
18	10			6	38		65	6	30
19	5			2	39	10	30	1	
20	21	9			40	25	20	8	18

AVE	Nymphs			Eggs
	Small	Med.	Large	
	11	8	1	14

Total Nymphs
19

Example Individual Paddock Graph

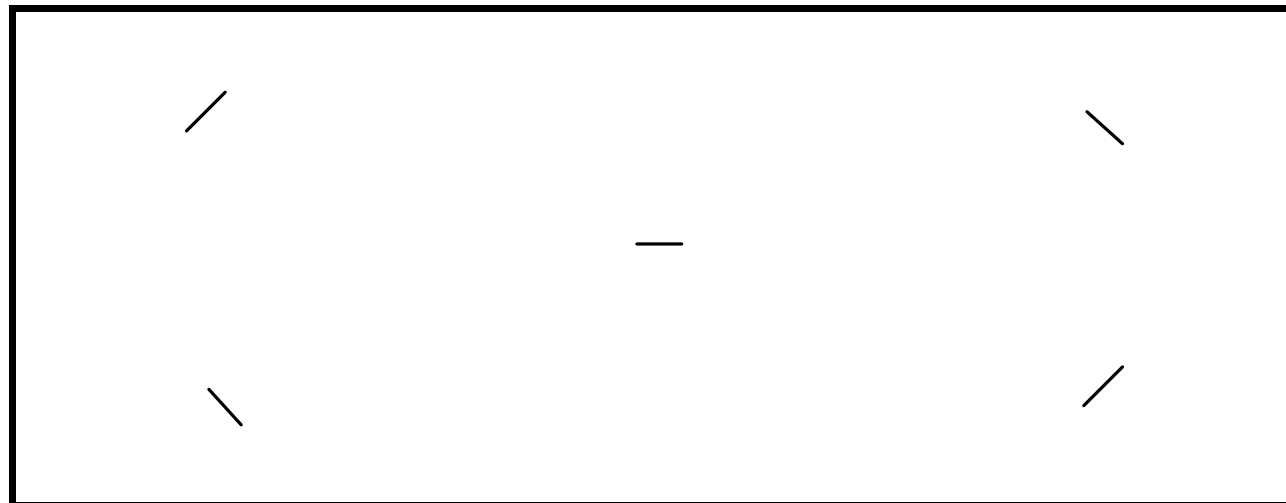








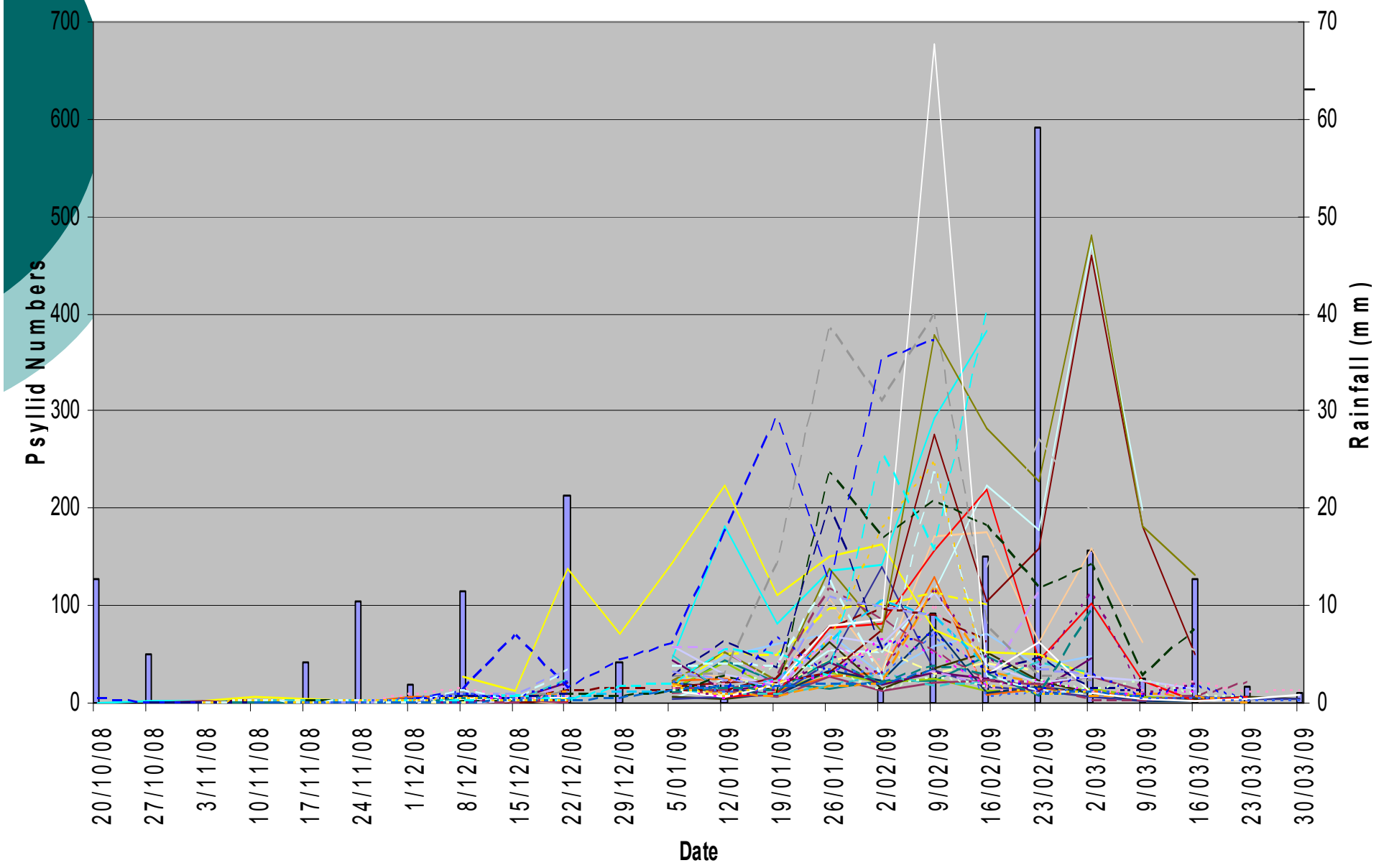
2008 Ideal Trap Positioning



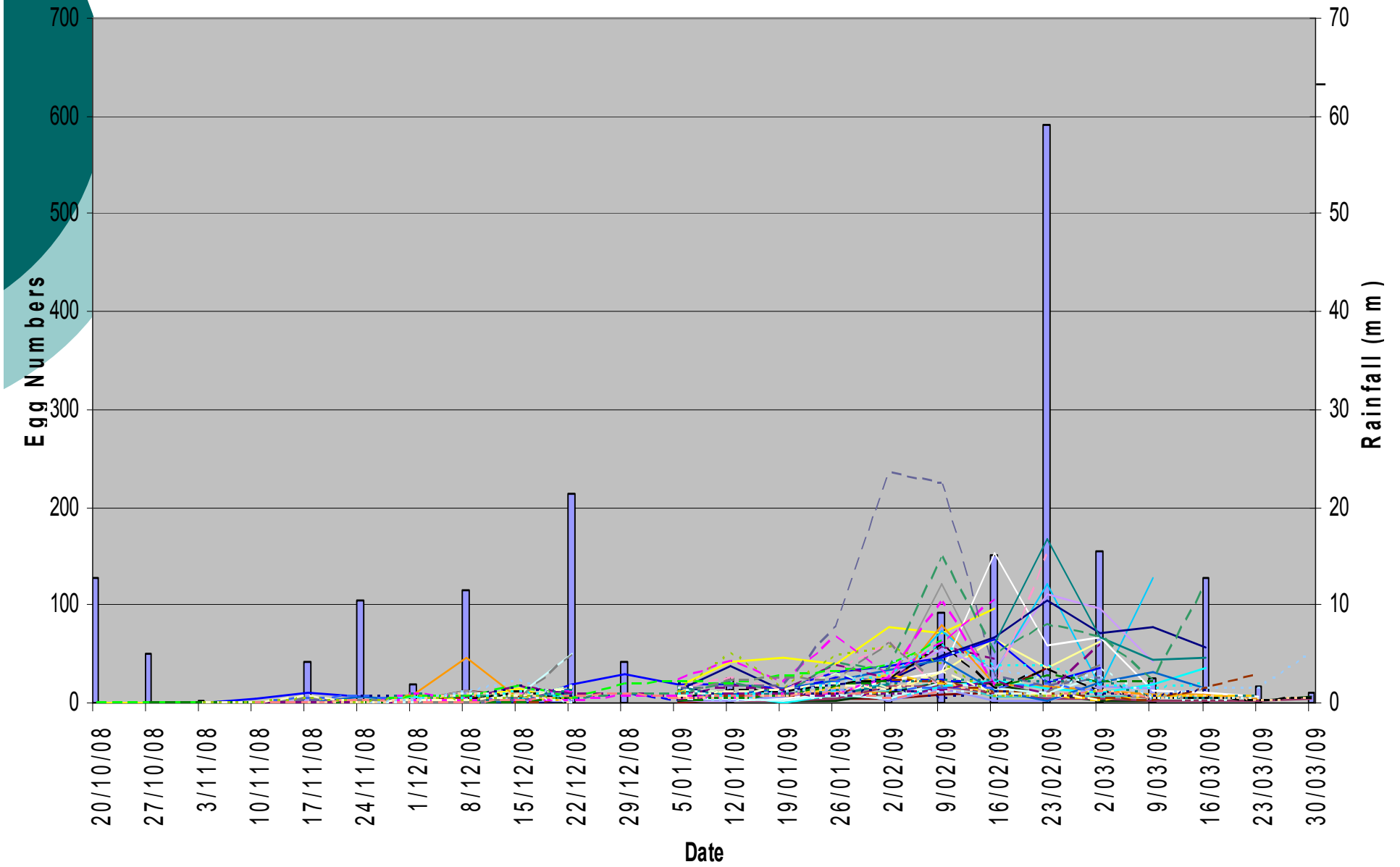


2008 Results

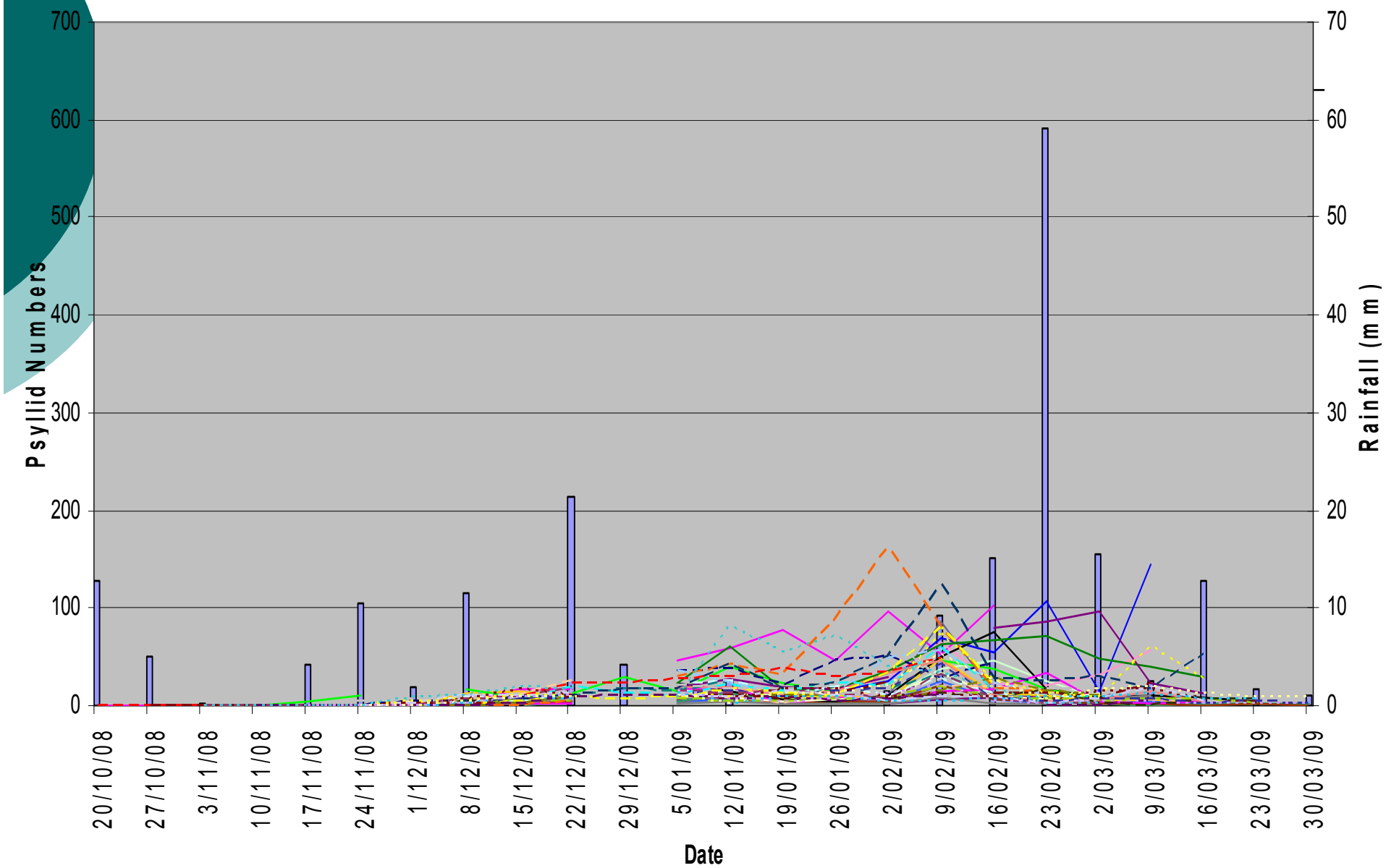
Heinz Wattie's Average Number of Adults Per Trap



Heinz Wattie's Average Number of Eggs per Plant

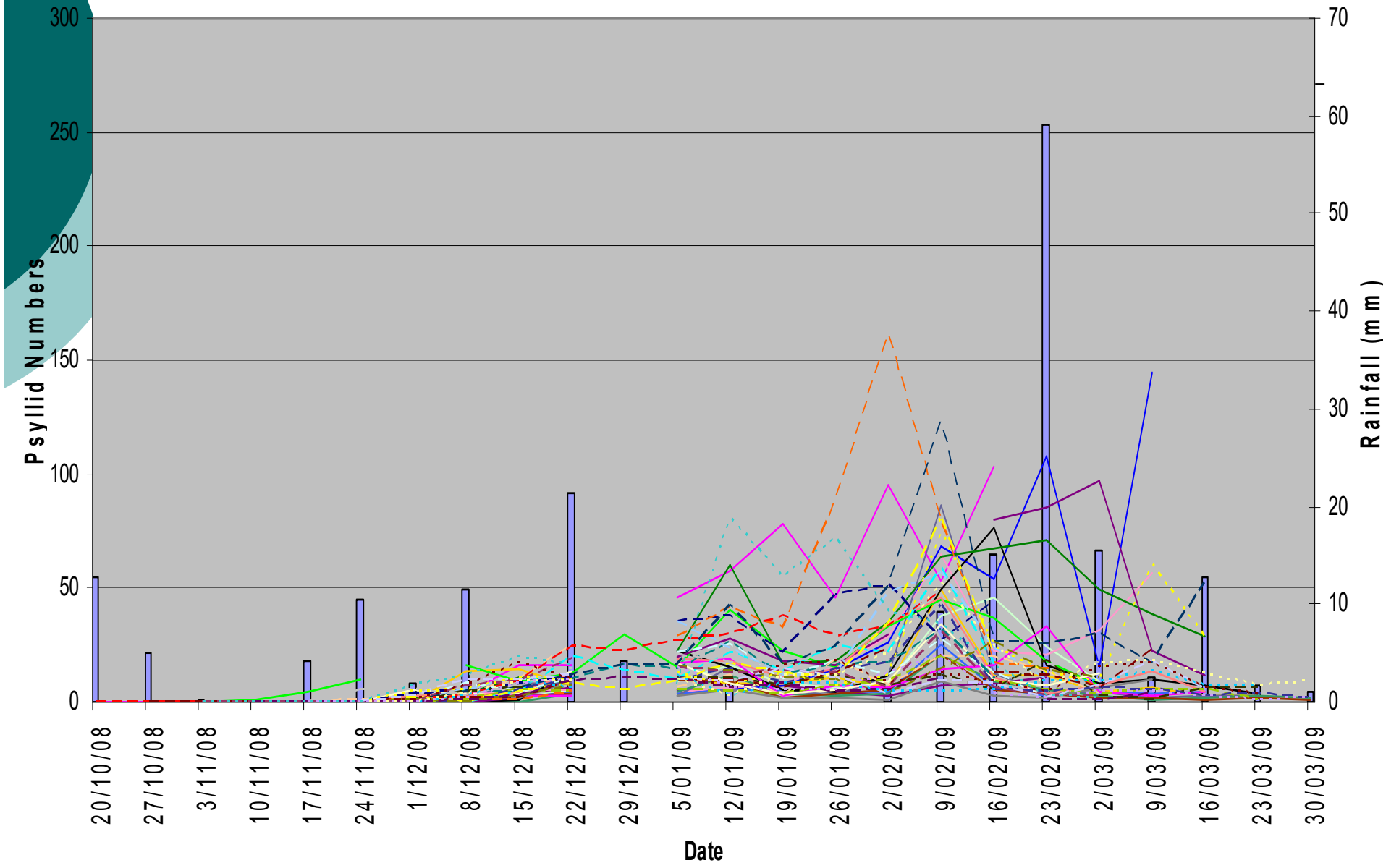


Heinz Wattie's Average Number of Nymphs per Plant

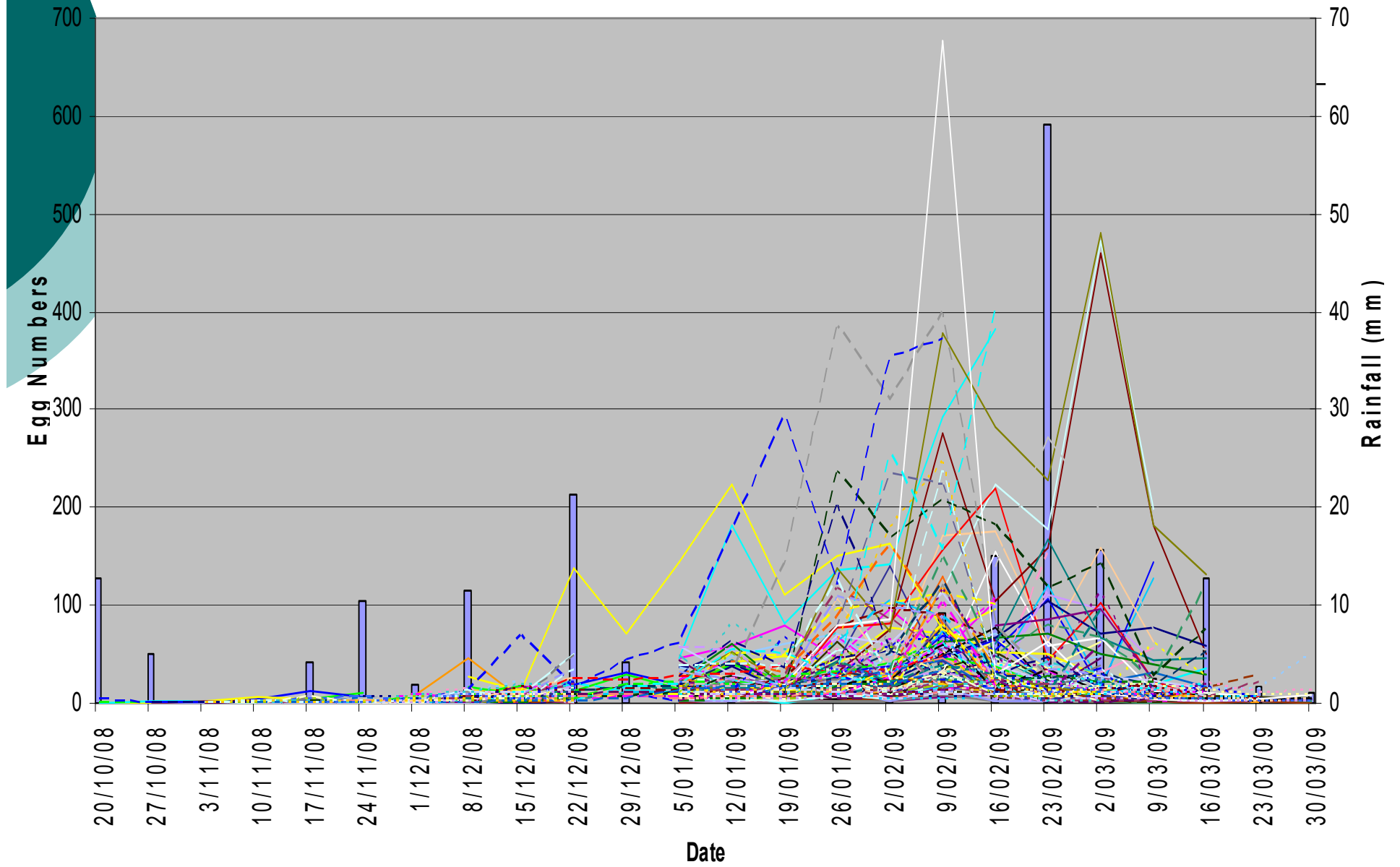


Heinz Wattie's Average Number of Nymphs per Plant

(same graph as previous; just different scale)



Heinz Wattie's Average Number of Adults per Trap, Eggs and Nymphs per Plant





2009 Season Plan

- Each Paddock Monitored Weekly
 - Approx 1 trap per ha
 - Approx 5 plants per ha
 - Small, medium, large and eggs
- Monitor whole small plants then switch to one lateral per plant

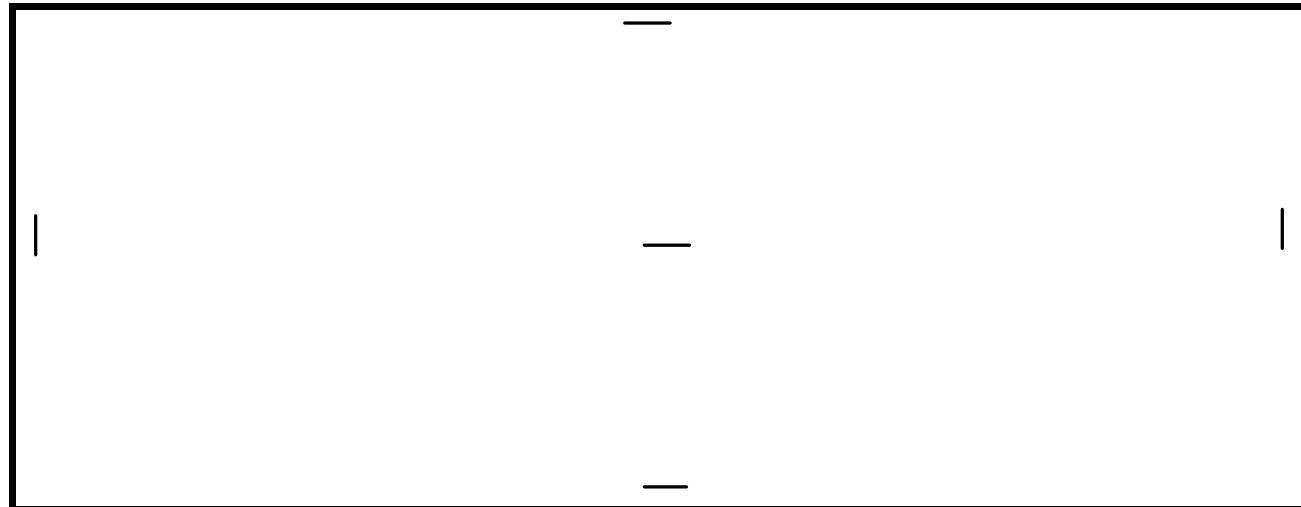


2009 Season Plan cont.

- Ensure lower leaves of smaller plants are checked
- underside of leaves checked
- Email daily reports to growers
- Zero Threshold
 - Target is zero nymphs per plant
 - We are not spraying closer than 7 day intervals



New Trap Placement



- Better understanding of psyllid flight patterns