

Areawide Diamondback Moth Trapping Network

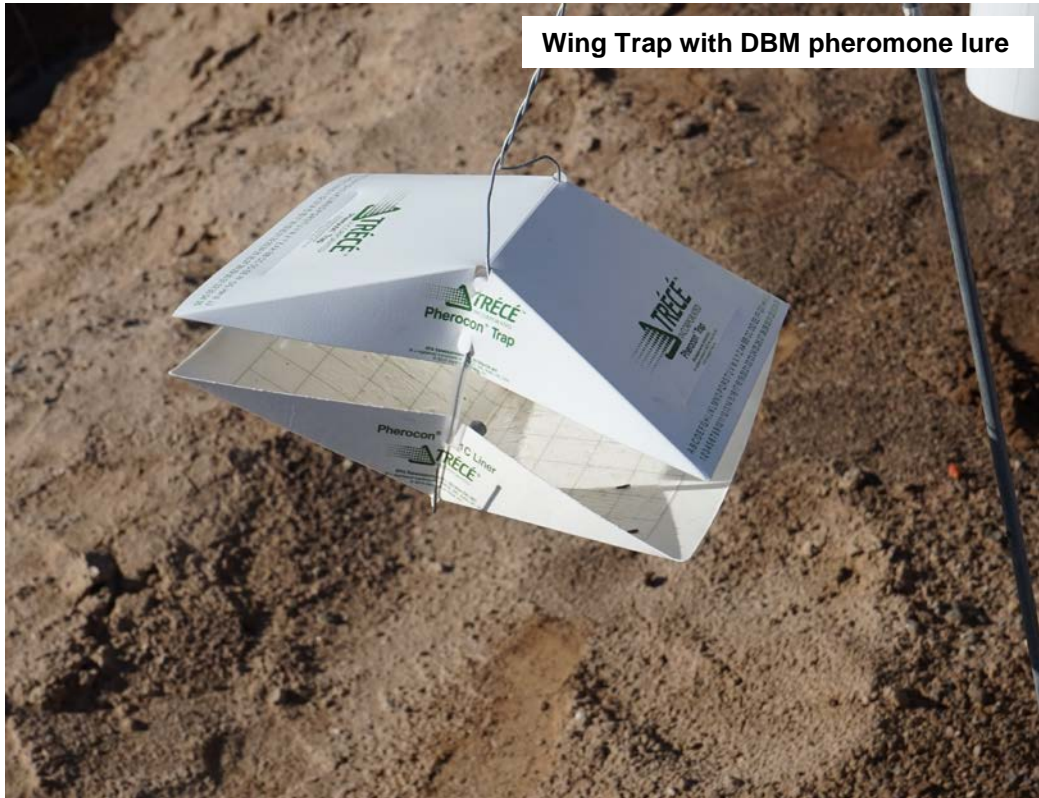
In response to the recent outbreaks of Diamondback moth (DBM) , *Plutella xylostella* in Yuma, we have established a pheromone trap network designed to monitor the activity and movement of adult populations of DBM. PCAs have had difficulty controlling DBM in cabbage, broccoli and cauliflower since October. Traps have been placed in Roll, Wellton, Dome Valley, Gila Valley and Yuma Valley in locations where cole crops are presently being grown or in areas where infestations were known to occur this fall.

The data is not intended to indicate field infestations, as trap data is largely a reflection of adult movement. The data may reflect emergence of adults in adjacent fields with known infestations, or provide an indication that DBM may be moving into fields not previously infested. If nothing else, the data may make PCAs aware of increased pest activity in some areas and encourage intensified scouting in susceptible produce fields.

Of great importance is the fact that DBM populations are beginning to spread into direct-seeded crops that were not previously effected by DBM. For this reason, we would like to track moth activity, particularly relative to what would normally be expected in Yuma. Historically, from 1998-2000, we established trap network in Yuma which included DBM. Data from those studies is provided below for a historical perspective. What concerns us the most, is that during that 2-year trapping period DBM counts never exceed 6 moths/trap/day. However, in just the few weeks we've been trapping DBM since Dec 20, we've had four trap locations where DBM counts have exceeded 10 moths/trap/day and in one location we caught over 25 moths /day. These traps were all located in the Yuma Valley, stretching from Co. 21st up to Co. 9th street.

We will continue to monitor DBM trap activity throughout the season. We will also continue to trap population activity throughout the summer to determine whether DBM is active when brassica hosts are not available. This may give us an indication of the potential for more problems on next years fall crops. From a historical perspective we ran traps during the summer of 1999-2001 in the Yuma Valley and consistently found DBM moths in traps at low levels (0-1.2 moths/trap/night from July-August). We concluded at that time that many of the DBM captured may have come in with transplants, but were not certain whether DBM is capable of over summering in the desert. We hope to gain more insight into the pest's activity during summer moths in Yuma this year.

Area-wide DBM Trapping Network Yuma, Arizona



Wing Trap with DBM pheromone lure



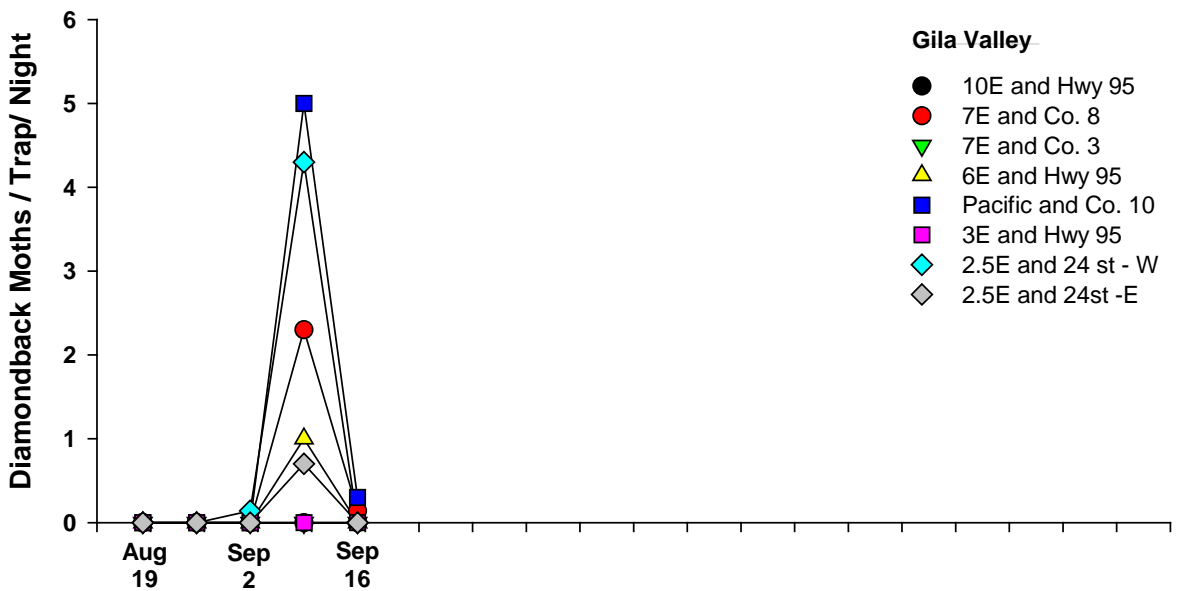
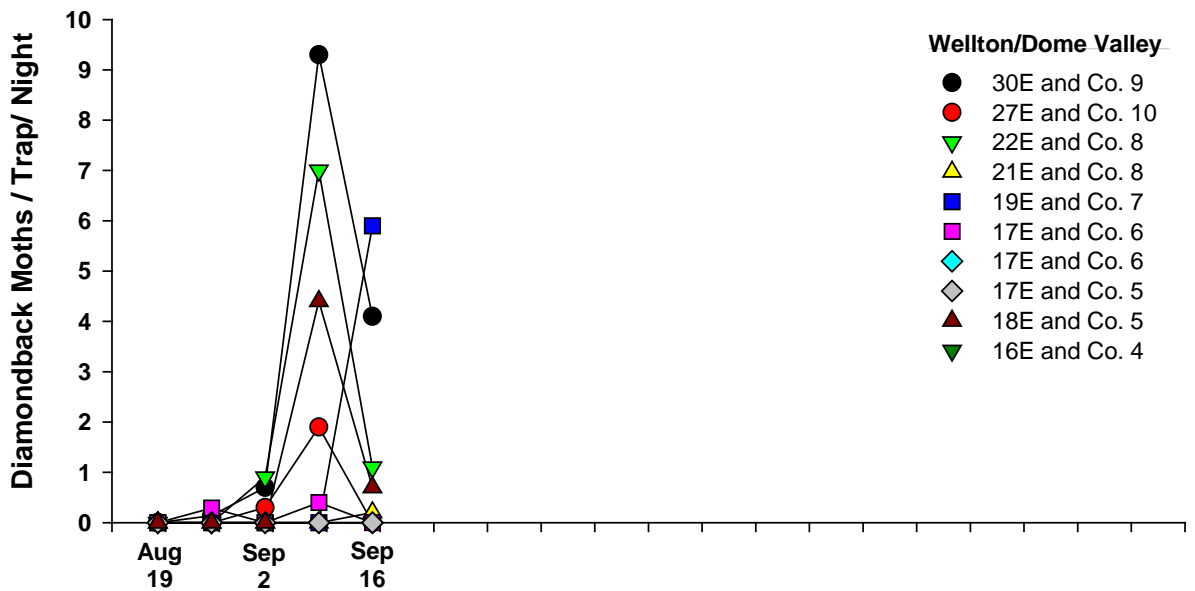
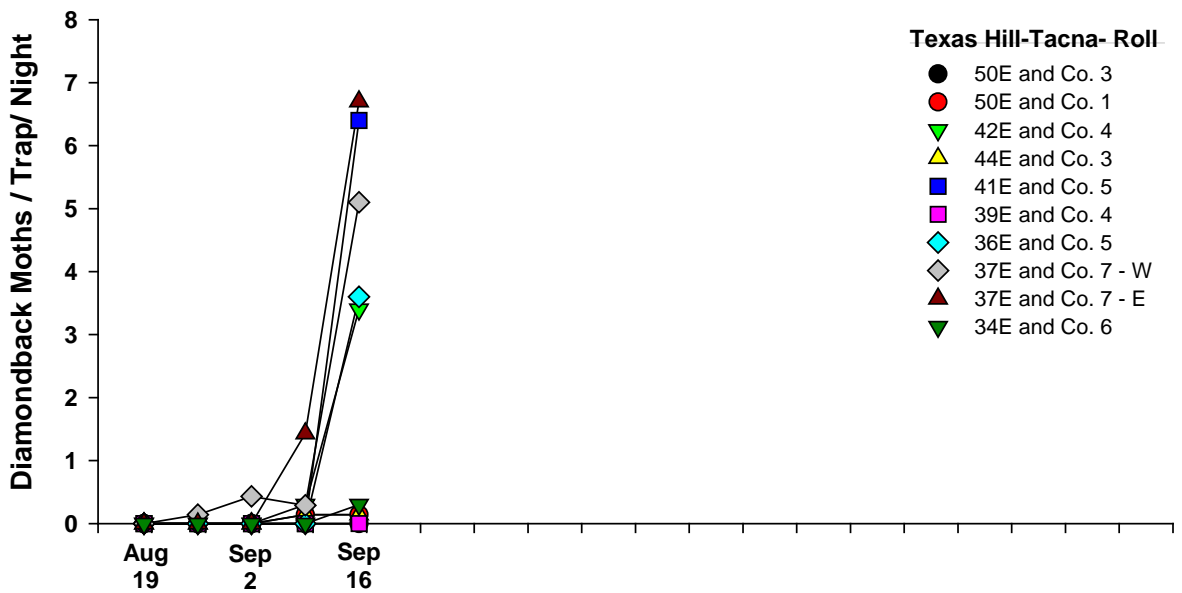
DBM moths captured in trap

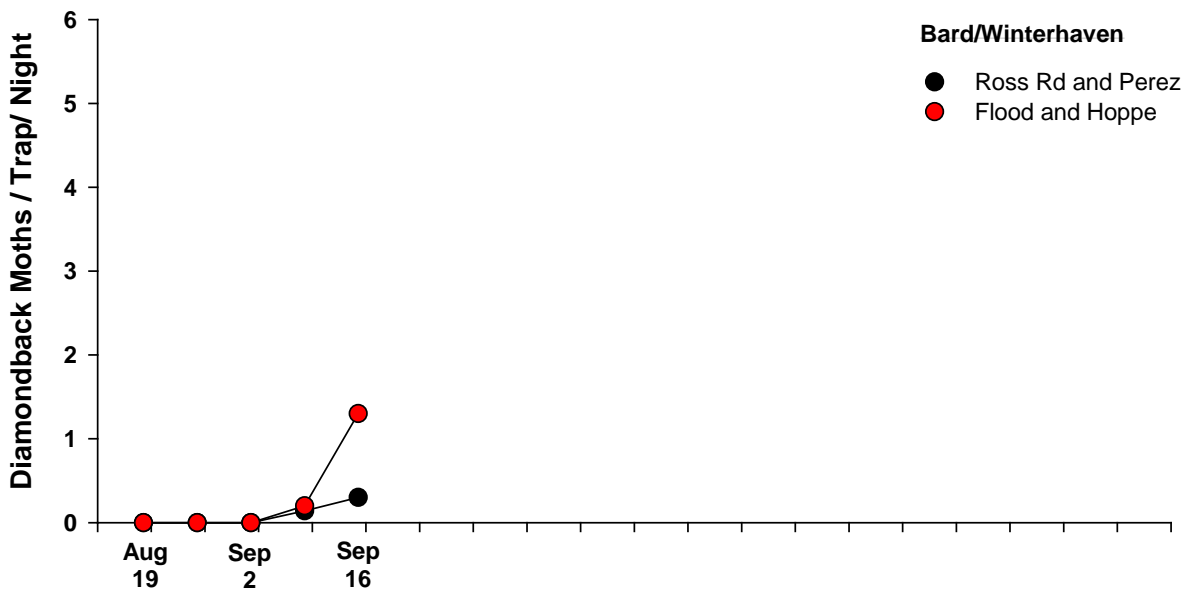
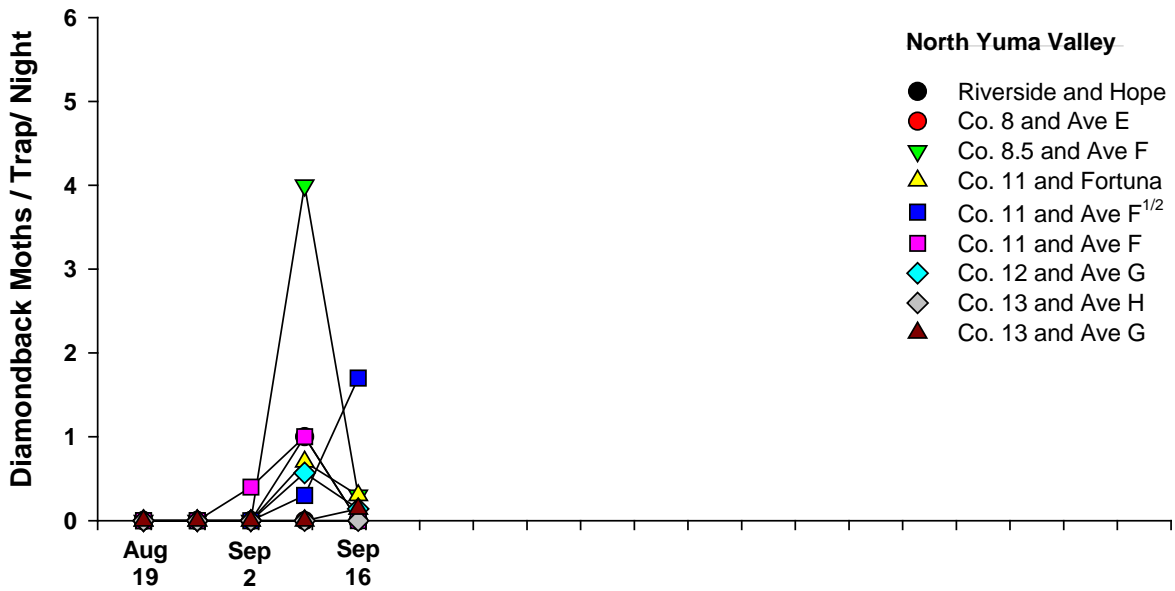
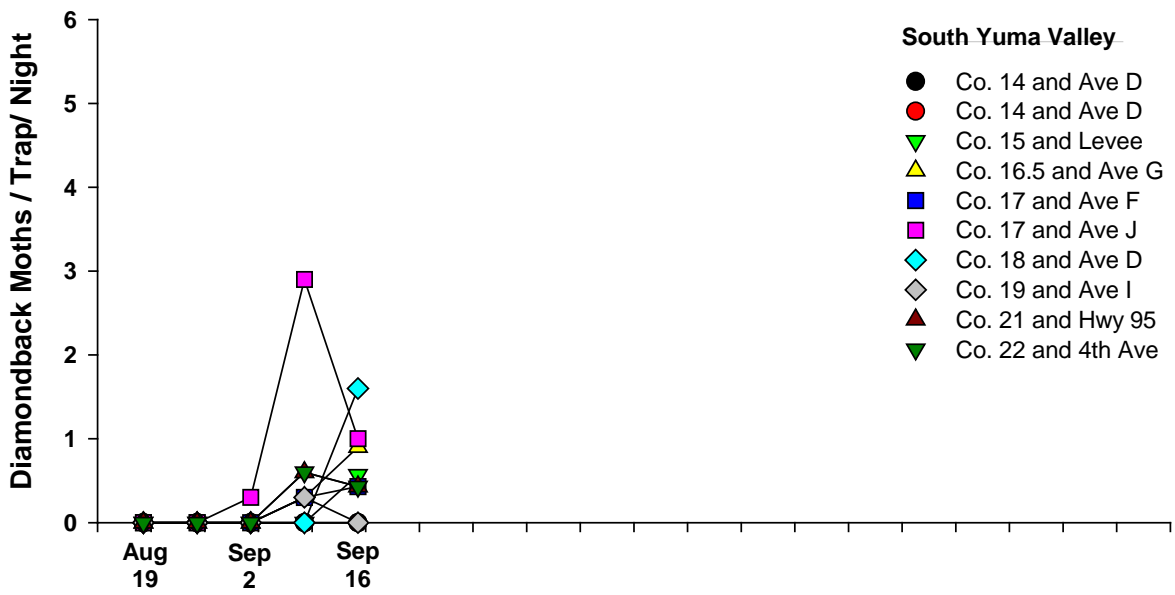
Trapping Data – by Location and Crop



Diamondback Moths / Trap / Week

Area	Location	Crop	26-Aug	2-Sep	9-Sep	16-Sep	
1	Texas Hill	50E and Co. 2.5	Cabbage TP	0	0	0	0
2	Texas Hill	50E and Co. 1	Cabbage TP	-	Set	1	1
3	Tacna	42E and Co. 4.5	Cauliflower TP	-	Set	2	24
4	Tacna	44E and Co. 3	Cauliflower TP	-	Set	1	1
5	Tacna	41E and Co. 5	Flower/Broccoli	-	-	Set	45
6	Roll	39E and Co. 4	Broccoli	0	0	0	0
7	Roll	36E and Co. 5	Broccoli	-	-	Set	25
8	Roll	37E and Co. 6.5-E	Cauliflower TP	1	3	2	36
9	Roll	37E and Co. 6.5-W	Cauliflower TP	-	Set	10	47
10	Roll	34E and Co. 6	Fallow	0	0	0	2
11	Wellton	30E and Co. 9	Cabbage TP	1	5	65	29
12	Wellton	27E and Co. 10	Cotton	0	2	13	0
13	Dome Valley	22E and Co. 8	Cauliflower TP	0	6	49	8
14	Dome Valley	21E and Co. 8	Cotton, Sudan	0	0	0	1
15	Dome Valley	19E and Co. 7	Cauliflower TP	-	-	Set	41
16	Dome Valley	17E and Co. 6	Fallow	2	0	1	0
17	Dome Valley	17E and Co. 5	Broccoli	-	-	-	Set
18	Dome Valley	18E and Co. 5.5	Broccoli	-	-	-	Set
19	Dome Valley	16E and Co. 4	Cauliflower TP	-	Set	31	5
20	Gila Valley	10.5E and Hwy 95	Cotton	0	0	0	0
21	Gila Valley	7E and Co. 8	Cauliflower TP	0	0	16	1
22	Gila Valley	7E and Co. 3	Cotton	0	0	0	0
23	Gila Valley	6E and Hwy 95	Fallow	0	0	7	0
24	Gila Valley	Pacific and Co. 10	Cabbage TP	0	0	35	2
25	Gila Valley	3E and Co. 10	Broccoli	-	-	-	Set
26	Yuma	2.5E and 24th St-W	Cauliflower TP	0	1	30	0
27	Yuma	2.5E and 24th St-E	Cauliflower TP	0	0	5	0
28	Yuma Valley	Co 14 and Ave C.	Kale	-	-	Set	6
29	Yuma Valley	Co. 14 and Ave D	Fallow	0	0	0	0
30	Yuma Valley	Co 18 and Ave D	Cauliflower TP	Set	2	20	7
31	Yuma Valley	Co. 17 and Ave F	Cauliflower TP	-	Set	2	6
32	Yuma Valley	Co. 16.5 and Ave G	Cauliflower TP	-	-	0	4
33	Yuma Valley	Co. 22 and 4th Ave	Broccoli	-	set	4	3
34	Yuma Valley	Co. 21 and Hwy 95	Fallow	0	0	2	0
35	Yuma Valley	Co. 20 and Ave H	Cauliflower	-	-	-	Set
36	Yuma Valley	Co. 19 and Ave I	Broccoli	-	-	Set	11
37	Yuma Valley	Co. 17th and Ave J	Cauliflower TP	0	0	2	3
38	Yuma Valley	Co. 15th and River	Fallow	0	0	0	0
39	Yuma Valley	Co. 13 and Ave G	Cauliflower TP	-	-	Set	1
40	Yuma Valley	Co. 13th and Ave H	Fallow	0	0	0	0
41	Yuma Valley	Co. 12th and Ave G	Fallow	0	0	4	1
42	Yuma Valley	Co. 11 and Ave F	Brassicas	0	3	7	0
43	Yuma Valley	Co. 11 and Ave F1/2	Cauliflower TP	0	0	2	12
44	Yuma Valley	Co 11 and Fortuna	Cabbage TP	-	Set	5	4
45	Yuma Valley	Co. 8.5 and Ave F	Cauliflower TP	0	0	28	2
46	Yuma Valley	Co. 8 and Ave E	Fallow	0	0	0	0
47	Yuma Valley	YAC_Bl k J	Cauliflower TP	0	0	7	0
48	Bard	Ross Rd and Perez	Cauliflower TP	-	Set	1	2
49	Bard	Flood and Hoppe	Broccoli	-	Set	1	9





Historic DBM Trap Data – 1998-2001

