

Areawide Diamondback Moth Trapping Network

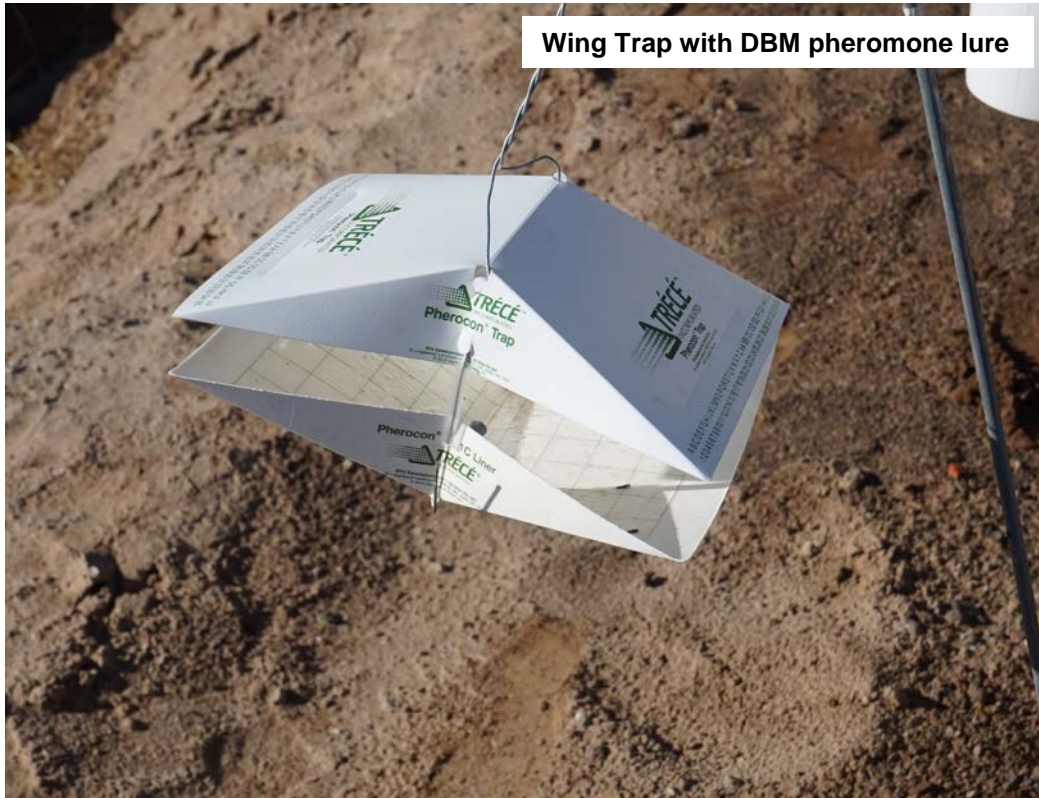
In response to the recent outbreaks of Diamondback moth (DBM) , *Plutella xylostella* in Yuma, we have established a pheromone trap network in January of 2017 designed to monitor the activity and movement of adult populations of DBM. PCAs had difficulty controlling DBM in cabbage, broccoli and cauliflower last season. In the 2017 -2018 season we have expanded our network to include traps placed in Texas Hill, Tacna, Roll, Wellton, Dome Valley, Gila Valley, Yuma Valley and in the Bard /Winterhaven area in locations where cole crops are presently being grown or in areas where infestations were known to occur last 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.

Historically, from 1998-2001, we established a trap network in Yuma which included DBM. Data from those studies is provided below for a historical perspective. 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	Diamondback Moths / Trap / Week			
				23-Sep	30-Sep	7-Oct	14-Oct
1	Texas Hill	50E and Co. 2.5	Cabbage TP	0	0	0	3
2	Texas Hill	50E and Co. 1	Cabbage TP	0	0	0	0
3	Tacna	42E and Co. 4.5	Cauliflower TP	23	25	27	24
4	Tacna	44E and Co. 3	Cauliflower TP	2	1	7	1
5	Tacna	41E and Co. 5	Flower/Broccoli	19	67	32	37
6	Roll	38E and Co. 4.5	Broccoli	0	0	33	37
7	Roll	36E and Co. 5	Broccoli	52	104	44	52
8	Roll	37E and Co. 6.5-E	Cauliflower TP	9	24	11	24
9	Roll	37E and Co. 6.5-W	Cauliflower TP	13	33	36	46
10	Roll	34E and Co. 6	Fallow	2	21	7	15
11	Wellton	30E and Co. 9	Cabbage TP	4	2	5	3
12	Wellton	27E and Co. 10	Cotton	0	0	0	0
13	Dome Valley	22E and Co. 8	Cauliflower TP	11	25	19	7
14	Dome Valley	21E and Co. 8	Cotton, Sudan	0	0	0	3
15	Dome Valley	19E and Co. 7	Cauliflower TP	26	59	23	7
16	Dome Valley	17E and Co. 5	Broccoli	0	3	3	0
17	Dome Valley	18E and Co. 5.5	Broccoli	2	7	12	3
18	Dome Valley	16E and Co. 4	Cauliflower TP	3	26	12	9
19	Gila Valley	10.5E and Hwy 95	Cotton	0	0	7	12
20	Gila Valley	7E and Co. 8	Cauliflower TP	0	0	0	7
21	Gila Valley	7E and Co. 3	Cotton	0	0	3	3
22	Gila Valley	6E and Hwy 95	Fallow	1	14	32	12
23	Gila Valley	Pacific and Co. 10	Cabbage TP	0	0	2	0
24	Gila Valley	3E and Co. 10	Broccoli	0	0	5	26
25	Yuma	2.5E and 24th St-W	Cauliflower TP	0	0	0	15
26	Yuma	2.5E and 24th St-E	Cauliflower TP	0	2	0	2
27	Yuma Valley	Co 14 and Ave C.	Kale	8	21	86	50
28	Yuma Valley	Co. 14 and Ave D	Fallow	0	0	0	0
29	Yuma Valley	Co 18 and Ave D	Cauliflower TP	5	6	20	41
30	Yuma Valley	Co. 17 and Ave F	Cauliflower TP	1	10	7	7
31	Yuma Valley	Co. 16.5 and Ave G	Cauliflower TP	0	5	19	45
32	Yuma Valley	Co. 16.5 and Ave G.5	Cabbage TP	Set	13	8	19
33	Yuma Valley	Co. 22 and 4th Ave	Broccoli	5	12	14	8
34	Yuma Valley	Co. 21 and Hwy 95	Fallow	0	4	0	7
35	Yuma Valley	Co. 20 and Ave H	Cauliflower	-	Set	16	56
36	Yuma Valley	Co. 19 and Ave I	Broccoli	3	59	48	25
37	Yuma Valley	Co. 17th and Ave J	Cauliflower TP	4	10	23	11
38	Yuma Valley	Co. 15th and River	Fallow	0	0	0	60

Trapping Data – by Location and Crop



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Area	Location	Crop	23-Sep	30-Sep	7-Oct	14-Oct	
39	Yuma Valley	Co. 13 and Ave G	Cauliflower TP	0	2	11	18
40	Yuma Valley	Co. 13th and Ave H	Fallow	2	10	7	3
41	Yuma Valley	Co. 12th and Ave G	Fallow	1	0	2	2
42	Yuma Valley	Co. 11 and Ave F	Brassicas	1	8	7	5
43	Yuma Valley	Co. 11 and Ave F1/2	Cauliflower TP	16	33	26	17
44	Yuma Valley	Co 11 and Fortuna	Cabbage TP	4	33	30	8
45	Yuma Valley	Co. 8.5 and Ave F	Cauliflower TP	2	65	6	28
46	Yuma Valley	Co. 8 and Ave E	Fallow	0	0	1	1
47	Yuma Valley	Riverside and Hope	Cauliflower TP	2	7	55	14
48	Bard/Winterha	Ross Rd and Perez	Cauliflower TP	1	4	7	3
49	Bard/Winterha	Flood and Hoppe	Broccoli	1	7	19	3
50	Bard/Winterha	Indian Rock/ Horne	Cauliflower	Set	143	71	112
51	Bard/Winterha	Indian Rock/Picacho	Broccoli	Set	17	down	6
52	Bard/Winterha	Ross and Picacho	Kale	-	Set	16	20
53	Bard/Winterha	Horne and Arnold	Cauliflower	-	Set	18	25
54	Bard/Winterha	Yuma and Rodenbagh	Broccoli	-	Set	28	20

Historic DBM Trap Data – 1998-2001

