

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 out 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 <u>not</u> 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





Trapping Data – by Location and Crop



			Diamondback Moths / Trap / Week				
Area	Location	Crop	9-Sep	16-Sep	23-Sep	30-Sep	
1 Texas Hill	50E and Co. 2.5	Cabbage TP	0	0	0	0	
2 Texas Hill	50E and Co. 1	Cabbage TP	1	1	0	0	
3 <mark>Tacna</mark>	42E and Co. 4.5	Cauliflower TP	2	24	23	25	
4 <mark>Tacna</mark>	44E and Co. 3	Cauliflower TP	1	1	2	1	
5 <mark>Tacna</mark>	41E and Co. 5	Flower/Broccoli	Set	45	19	67	
6Roll	38E and Co. 4.5	Broccoli	0	0	0	0	
7 <mark>Roll</mark>	36E and Co. 5	Broccoli	Set	25	52	104	
8 Roll	37E and Co. 6.5-E	Cauliflower TP	2	36	9	24	
9Roll	37E and Co. 6.5-W	Cauliflower TP	10	47	13	33	
10Roll	34E and Co. 6	Fallow	0	2	2	21	
11 Wellton	30E and Co. 9	Cabbage TP	65	29	4	2	
12Wellton	27E and Co. 10	Cotton	13	0	0	0	
13 Dome Valley	22E and Co. 8	Cauliflower TP	49	8	11	25	
14 Dome Valley	21E and Co. 8	Cotton, Sudan	0	1	0	0	
15 Dome Valley	19E and Co. 7	Cauliflower TP	Set	41	26	59	
16 Dome Valley	17E and Co. 5	Broccoli	-	Set	0	3	
17 Dome Valley	18E and Co. 5.5	Broccoli	-	Set	2	7	
18 Dome Valley	16E and Co. 4	Cauliflower TP	31	5	3	26	
19Gila Valley	10.5E and Hwy 95	Cotton	0	0	0	0	
20Gila Valley	7E and Co. 8	Cauliflower TP	16	1	0	0	
21 Gila Valley	7E and Co. 3	Cotton	0	0	0	0	
22 Gila Valley	6E and Hwy 95	Fallow	7	0	1	14	
23 Gila Valley	Pacific and Co. 10	Cabbage TP	35	2	0	0	
24Gila Valley	3E and Co. 10	Broccoli	-	Set	0	0	
25 Yuma	2.5E and 24th St-W	Cauliflower TP	30	0	0	0	
26 Yuma	2.5E and 24th St-E	Cauliflower TP	5	0	0	2	
27 Yuma Valley	Co 14 and Ave C.	Kale	set	6	8	21	
28 Yuma Valley	Co. 14 and Ave D	Fallow	0	0	0	0	
29 Yuma Valley	Co 18 and Ave D	Cauliflower TP	20	7	5	6	
30 Yuma Valley	Co. 17 and Ave F	Cauliflower TP	2	6	1	10	
31 Yuma Valley	Co. 16.5 and Ave G	Caulfilower TP	0	4	0	5	
32 Yuma Valley	Co. 16.5 and Ave G.5	Cabbage TP	-	-	Set	13	
33 Yuma Valley	Co. 22 and 4th Ave	Broccoli	4	3	5	12	
34 Yuma Valley	Co. 21 and Hwy 95	Fallow	2	0	0	4	
35 Yuma Valley	Co. 20 and Ave H	Cauliflower	-	-	-	Set	
36 Yuma Valley	Co. 19 and Ave I	Broccoli	Set	11	3	59	
37 Yuma Valley	Co. 17th and Ave J	Cauliflower TP	2	3	4	10	
38 Yuma Valley	Co. 15th and River	Fallow	0	0	0	0	

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Area	Location	Crop	9-Sep	16-Sep	23-Sep	30-Sep
39 Yuma Valley	Co. 13 and Ave G	Cauliflower TP	Set	1	0	2
40 Yuma Valley	Co. 13th and Ave H	Fallow	0	0	2	10
41 Yuma Valley	Co. 12th and Ave G	Fallow	4	1	1	0
42 Yuma Valley	Co. 11 and Ave F	Brassicas	7	0	1	8
43 Yuma Valley	Co. 11 and Ave F1/2	Cauliflower TP	2	12	16	33
44 Yuma Valley	Co 11 and Fortuna	Cabbage TP	5	4	4	33
45 Yuma Valley	Co. 8.5 and Ave F	Cauliflower TP	28	2	2	65
46 Yuma Valley	Co. 8 and Ave E	Fallow	0	0	0	0
47 Yuma Valley	Riverside and Hope	Cauliflower TP	7	0	2	7
48 Bard/Winterha Ross Rd and Perez		Cauliflower TP	1	2	1	4
49Bard/Winterha Flood and Hoppe		Broccoli	1	9	1	7
50 Bard/Winterha	Indian Rock/ Horne	Cauliflower	-	•	Set	143
51 Bard/Winterha	Indian Rock/Picacho	Broccoli	-	•	Set	17
52 Bard/Winterha	Ross and Picacho	Kale	-	-	-	Set
53 Bard/Winterha	Horne and Arnold	Cauliflower	-	-	-	Set
54Bard/Winterha	Yuma and Rodenbagh	Broccoli	-	-	-	Set

Historic DBM Trap Data – 1998-2001





