

Areawide Diamondback Moth Trapping Network

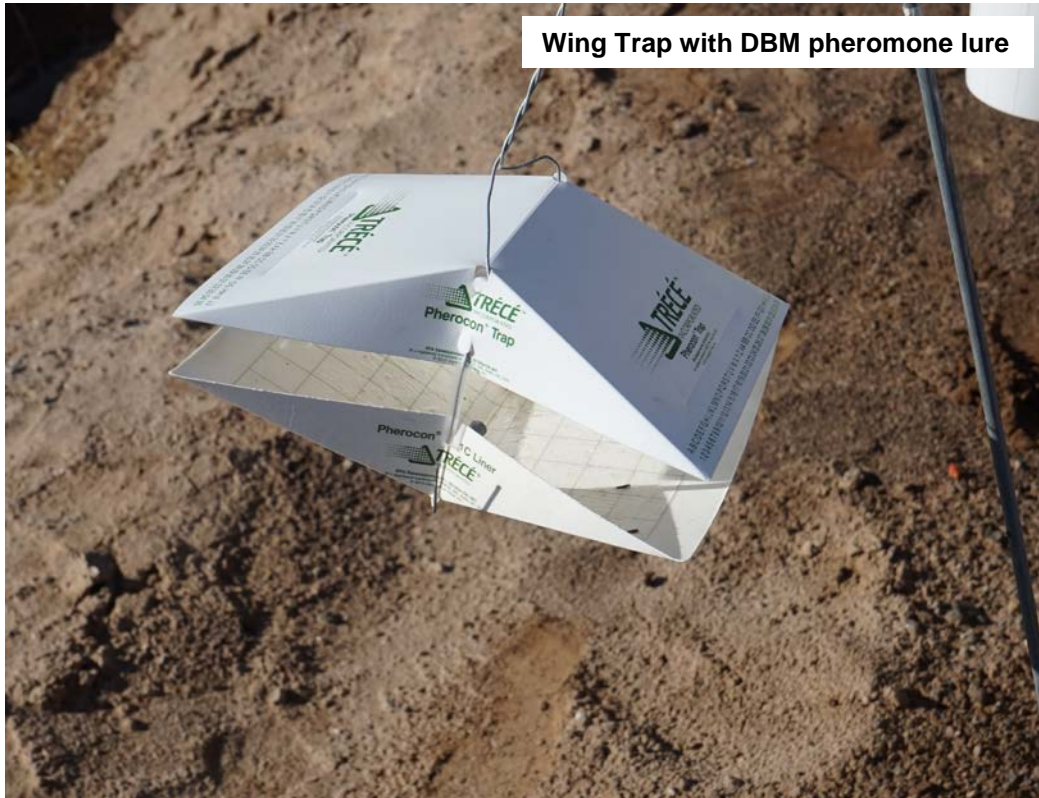
In response to the recent outbreaks of Diamondback moth (DBM) , *Plutella xylostella* in Yuma, we have established a pheromone trap network in January of 2017 designed to monitor the activity and movement of adult populations of DBM. PCAs had difficulty controlling DBM in cabbage, broccoli and cauliflower 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.

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Area-wide DBM Trapping Network Yuma, Arizona



Trapping Data – by Location and Crop



Diamondback Moths / Trap / Week

Area	Location	Crop	21-Oct	30-Oct	4-Nov	11-Nov
Texas Hill	50E and Co. 2.5	Cabbage TP	0	0	0	0
Texas Hill	50E and Co. 1	Cabbage TP	0	0	2	0
Tacna	42E and Co. 4.5	Cauliflower TP	10	8	5	11
Tacna	44E and Co. 3	Cauliflower TP	3	0	1	0
Tacna	41E and Co. 5	Flower/Broccoli	23	41	31	11
Roll	38E and Co. 4.5	Broccoli	38	39	10	31
Roll	36E and Co. 5	Broccoli	42	41	21	8
Roll	37E and Co. 6.5-E	Cauliflower TP	10	13	10	17
Roll	37E and Co. 6.5-W	Cauliflower TP	18	92	29	34
Roll	34E and Co. 6	Broccoli	2	2	3	7
Wellton	30E and Co. 9	Cabbage TP	2	0	4	0
Wellton	27E and Co. 10	Lettuce	3	20	0	2
Dome Valley	22E and Co. 8	Cauliflower TP	7	15	10	3
Dome Valley	21E and Co. 8	Fallow	0	11	4	1
Dome Valley	19E and Co. 7	Cauliflower TP	10	23	15	10
Dome Valley	17E and Co. 5	Broccoli	0	18	21	20
Dome Valley	18E and Co. 5.5	Broccoli	3	16	11	7
Dome Valley	16E and Co. 4	Cauliflower TP	10	0	4	2
Gila Valley	10.5E and Hwy 95	Cauliflower TP	24	40	Down	32
Gila Valley	7E and Co. 8	Cauliflower TP	3	4	6	2
Gila Valley	7E and Co. 3	Celery	9	20	7	5
Gila Valley	6E and Hwy 95	Broccoli	20	68	20	64
Gila Valley	Pacific and Co. 10	Cabbage TP	0	6	6	3
Gila Valley	3E and Co. 10	Broccoli	32	45	33	82
Yuma	2.5E and 24th St-W	Cauliflower TP	0	0	0	0
Yuma	2.5E and 24th St-E	Cauliflower TP	0	1	0	0
Yuma Valley	Co 14 and Ave C	Kale	43	50	21	17
Yuma Valley	Co. 14 and Ave D	Fallow	down	0	0	0
Yuma Valley	Co. 15.5 and Ave G.5	Cauliflower	-	SET	4	7
Yuma Valley	Co. 16.5 and Ave G	Cauliflower TP	38	92	15	11
Yuma Valley	Co. 16.5 and Ave G.5	Cabbage TP	9	16	10	10
Yuma Valley	Co. 17 and Ave F	Cauliflower TP	5	75	4	10
Yuma Valley	Co 18 and Ave D	Cauliflower TP	21	40	41	23
Yuma Valley	Co. 22 and 4th Ave	Broccoli	6	10	26	42
Yuma Valley	Co. 21 and Hwy 95	Fallow	5	9	6	4
Yuma Valley	Co. 20 and Ave H	Cauliflower	98	144	36	41
Yuma Valley	Co. 19 and Ave I	Broccoli	63	70	40	75
Yuma Valley	Co. 17th and Ave J	Cauliflower TP	21	20	18	17
Yuma Valley	Co. 15th and River	Broccoli	57	73	20	12

Trapping Data – by Location and Crop



Diamondback Moths / Trap / Week

Area	Location	Crop	30-Sep	7-Oct	14-Oct	21-Oct
Yuma Valley	Co. 13 and Ave G	Cauliflower TP	10	55	47	9
Yuma Valley	Co. 13th and Ave H	Fallow	5	14	5	0
Yuma Valley	Co. 12th and Ave G	Fallow	0	14	7	7
Yuma Valley	Co. 11 and Ave F	Brassicas	3	6	Down	2
Yuma Valley	Co. 11 and Ave F1/2	Cauliflower TP	15	43	27	11
Yuma Valley	Co 11 and Fortuna	Cabbage TP	5	20	4	0
Yuma Valley	Co. 8.5 and Ave F	Cauliflower TP	13	65	62	34
Yuma Valley	Co. 8 and Ave E	Fallow	3	0	4	
Yuma Valley	Riverside and Hope	Cauliflower TP	28	161	122	186
Yuma Valley	Co. 7 and Ave C	Cauliflower TP	4	12	8	30
Yuma Valley	Co. 14 and Ave F	Broccoli	-	-	-	Set
Bard/Winterha	Ross Rd and Perez	Cauliflower TP	7	11	0	2
Bard/Winterha	Flood and Hoppe	Broccoli	3	3	2	6
Bard/Winterha	Ross and Picacho	Kale	5	30	3	6
Bard/Winterha	Indian Rock/Picacho	Broccoli	3	33	22	7
Bard/Winterha	Indian Rock/ Horne	Cauliflower	65	52	28	7
Bard/Winterha	Horne and Arnold	Cauliflower	10	69	33	28
Bard/Winterha	Yuma and Rodenbagh	Broccoli	6	47	14	9

Historic DBM Trap Data – 1998-2001

