

## Areawide Diamondback Moth Trapping Network

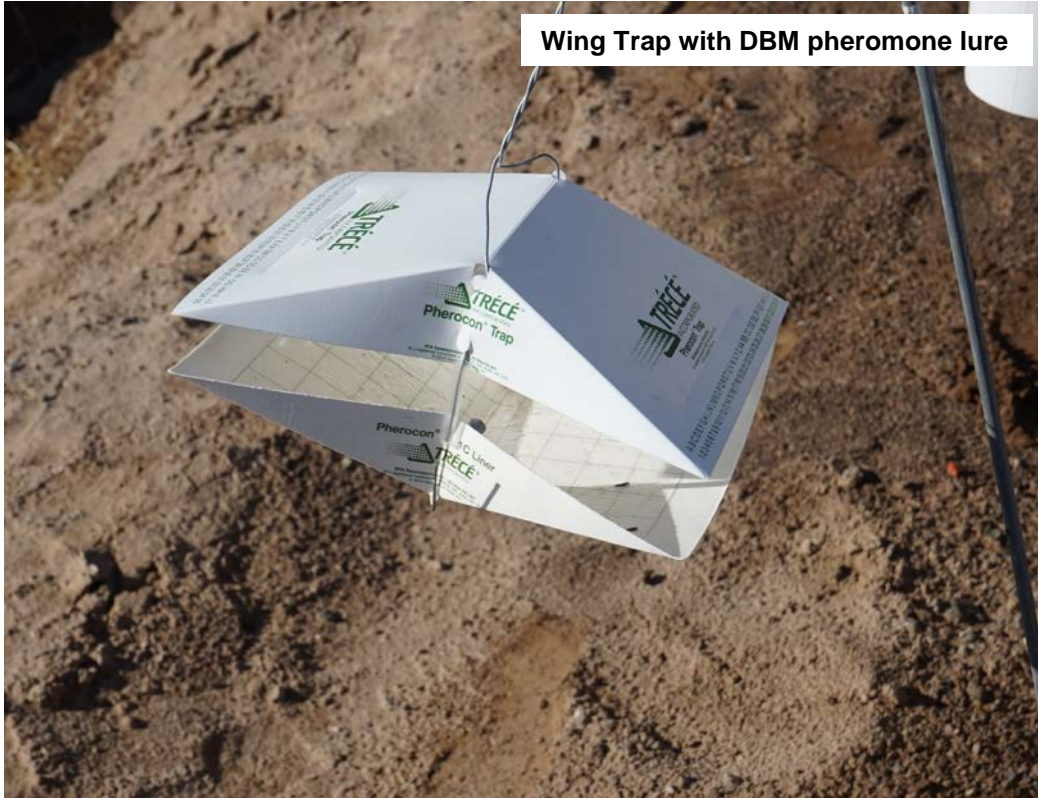
In response to the recent outbreaks of Diamondback moth (DBM) , *Plutella xylostella* in Yuma, we have established a pheromone trap network in January of 2017 designed to monitor the activity and movement of adult populations of DBM. PCAs had difficulty controlling DBM in cabbage, broccoli and cauliflower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



Wing Trap with DBM pheromone lure



DBM moths captured in trap

# Trapping Data – by Location and Crop



## Diamondback Moths / Trap / Week

Area	Location	Crop	30-Oct	4-Nov	11-Nov	24-Nov
Texas Hill	50E and Co. 2.5	Cabbage TP	0	0	0	0
Texas Hill	50E and Co. 1	Cabbage TP	0	2	0	1
Tacna	42E and Co. 4.5	Cauliflower TP	8	5	11	20
Tacna	44E and Co. 3	Cauliflower TP	0	1	0	3
Tacna	41E and Co. 5	Flower/Broccoli	41	31	11	30
Roll	38E and Co. 4.5	Broccoli	39	10	31	63
Roll	36E and Co. 5	Broccoli	41	21	8	57
Roll	37E and Co. 6.5-E	Cauliflower TP	13	10	17	60
Roll	37E and Co. 6.5-W	Cauliflower TP	92	29	34	153
Roll	34E and Co. 6	Broccoli	2	3	7	9
Wellton	30E and Co. 9	Cabbage TP	0	4	0	
Wellton	27E and Co. 10	Lettuce	20	0	2	7
Dome Valley	22E and Co. 8	Cauliflower TP	15	10	3	0
Dome Valley	21E and Co. 8	Fallow	11	4	1	24
Dome Valley	19E and Co. 7	Cauliflower TP	23	15	10	19
Dome Valley	17E and Co. 5	Broccoli	18	21	20	14
Dome Valley	18E and Co. 5.5	Broccoli	16	11	7	1
Dome Valley	16E and Co. 4	Cauliflower TP	0	4	2	2
Gila Valley	10.5E and Hwy 95	Cauliflower TP	40	Down	32	78
Gila Valley	7E and Co. 8	Cauliflower TP	4	6	2	5
Gila Valley	7E and Co. 3	Celery	20	7	5	16
Gila Valley	6E and Hwy 95	Broccoli	68	20	64	84
Gila Valley	Pacific and Co. 10	Cabbage TP	6	6	3	17
Gila Valley	3E and Co. 10	Broccoli	45	33	82	87
Yuma	2.5E and 24th St-W	Cauliflower TP	0	0	0	2
Yuma	2.5E and 24th St-E	Cauliflower TP	1	0	0	4
Yuma Valley	Co 14 and Ave C	Kale	50	21	17	115
Yuma Valley	Co. 14 and Ave D	Fallow	0	0	0	9
Yuma Valley	Co. 15.5 and Ave G.5	Cauliflower	SET	4	7	52
Yuma Valley	Co. 16.5 and Ave G	Cauliflower TP	92	15	11	2
Yuma Valley	Co. 16.5 and Ave G.5	Cabbage TP	16	10	10	13
Yuma Valley	Co. 17 and Ave F	Cauliflower TP	75	4	10	27
Yuma Valley	Co 18 and Ave D	Cauliflower TP	40	41	23	0
Yuma Valley	Co. 22 and 4th Ave	Broccoli	10	26	42	26
Yuma Valley	Co. 21 and Hwy 95	Fallow	9	6	4	45
Yuma Valley	Co. 20 and Ave H	Cauliflower	144	36	41	75
Yuma Valley	Co. 19 and Ave I	Broccoli	70	40	75	16
Yuma Valley	Co. 17th and Ave J	Cauliflower TP	20	18	17	36
Yuma Valley	Co. 15th and River	Broccoli	73	20	12	77

# Trapping Data – by Location and Crop



## Diamondback Moths / Trap / Week

Area	Location	Crop	30-Oct	4-Nov	11-Nov	24-Nov
Yuma Valley	Co. 13 and Ave G	Cauliflower TP	55	47	9	18
Yuma Valley	Co. 13th and Ave H	Fallow	14	5	0	15
Yuma Valley	Co. 12th and Ave G	Fallow	14	7	7	24
Yuma Valley	Co. 11 and Ave F	Brassicas	6	Down	2	3
Yuma Valley	Co. 11 and Ave F1/2	Cauliflower TP	43	27	11	42
Yuma Valley	Co 11 and Fortuna	Cabbage TP	20	4	0	1
Yuma Valley	Co. 8.5 and Ave F	Cauliflower TP	65	62	34	41
Yuma Valley	Co. 8 and Ave E	Fallow	0	4		0
Yuma Valley	Riverside and Hope	Cauliflower TP	161	122	186	370
Yuma Valley	Co. 7 and Ave C	Cauliflower TP	12	8	30	27
Yuma Valley	Co. 14 and Ave F	Broccoli	-	-	Set	18
Bard/Winterha	Ross Rd and Perez	Cauliflower TP	11	0	2	3
Bard/Winterha	Flood and Hoppe	Broccoli	3	2	6	4
Bard/Winterha	Ross and Picacho	Kale	30	3	6	37
Bard/Winterha	Indian Rock/Picacho	Broccoli	33	22	7	5
Bard/Winterha	Indian Rock/ Horne	Cauliflower	52	28	7	7
Bard/Winterha	Horne and Arnold	Cauliflower	69	33	28	10
Bard/Winterha	Yuma and Rodenbagh	Broccoli	47	14	9	16

## Historic DBM Trap Data – 1998-2001

