

## Areawide Diamondback Moth Trapping Network

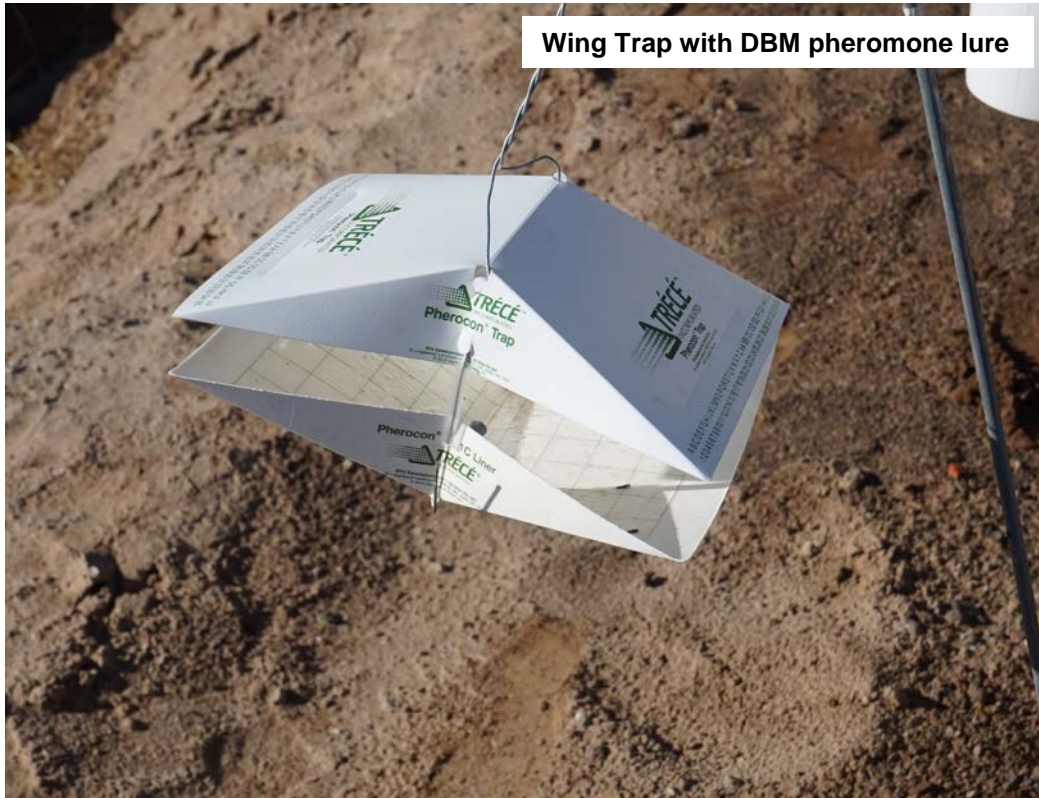
In response to the recent outbreaks of Diamondback moth (DBM) , *Plutella xylostella* in Yuma, we have established a pheromone trap network designed to monitor the activity and movement of adult populations of DBM. PCAs have had difficulty controlling DBM in cabbage, broccoli and cauliflower since October. 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. 21<sup>st</sup> up to Co. 9<sup>th</sup> 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 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



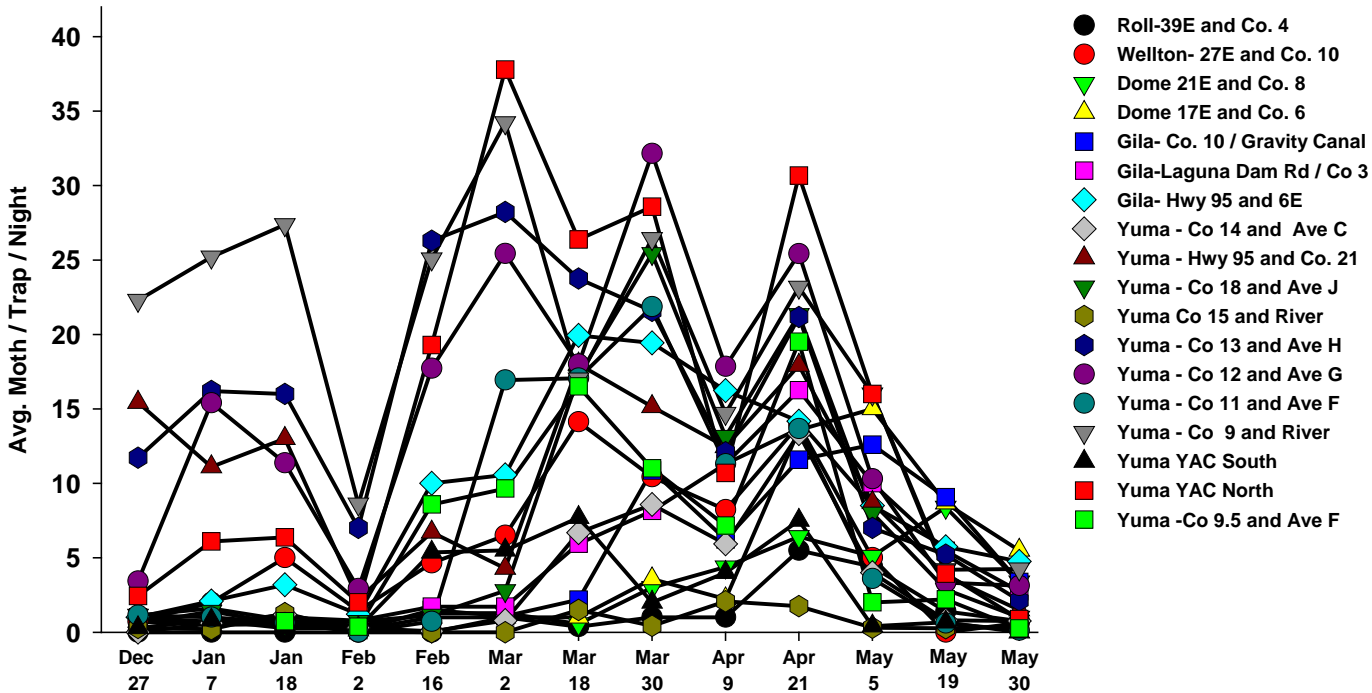
DBM moths captured in trap

# Historic Diamondback Moth Trap Data from 1998-2000

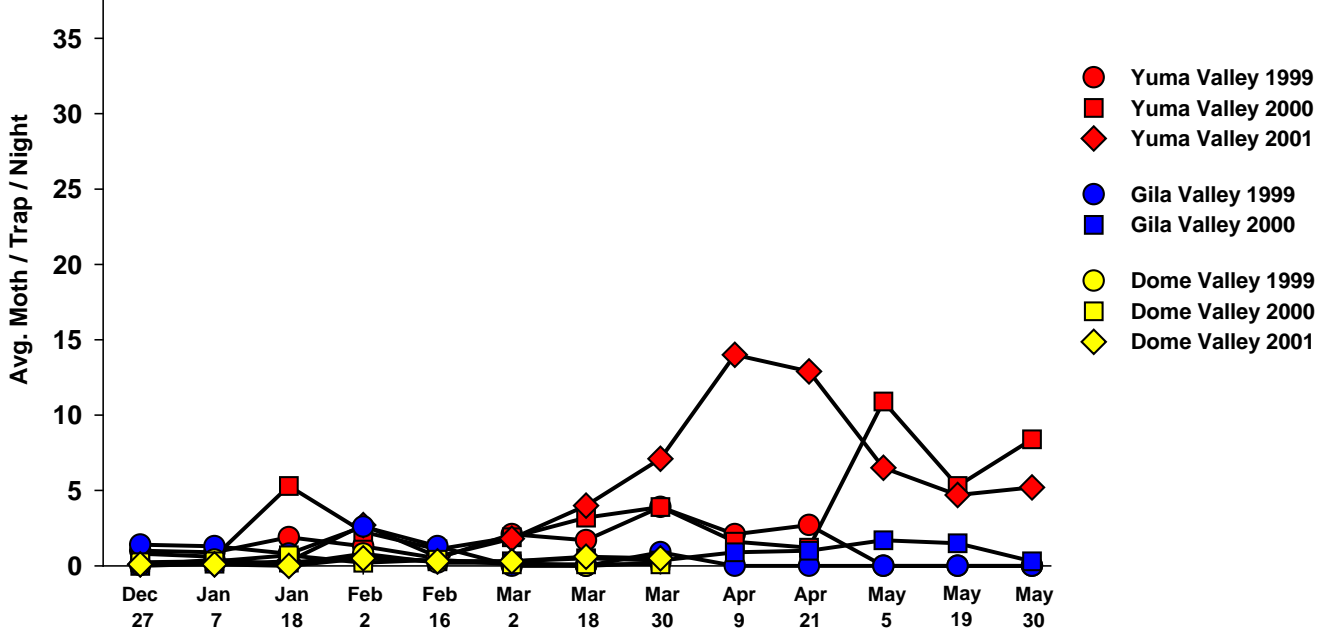
1999-2001 Sites	Location
Yuma Valley	<ol style="list-style-type: none"> <li>1. Co. 22<sup>nd</sup> and Ave I</li> <li>2. Co. 16<sup>th</sup> and Ave G</li> <li>3. Co. 12<sup>th</sup> and Ave C</li> <li>4. Co. 8<sup>th</sup> and Somerton Ave</li> </ol>
Gila Valley	<ol style="list-style-type: none"> <li>1. Co. 8<sup>th</sup> and Ave 5E</li> <li>2. Co. 7<sup>th</sup> and Ave 10E</li> <li>3. Laguna Dam Rd and Chavez Ln.</li> <li>4. Co. 8<sup>th</sup> and Ave 7E</li> </ol>
Dome Valley	<ol style="list-style-type: none"> <li>1. Co 7<sup>th</sup> and Ave 17E</li> <li>2. Co 8<sup>th</sup> and Ave 20E</li> <li>3. Ave 25E /Gila River</li> <li>4. Co.9<sup>th</sup> and Ave 27E</li> </ol>

Trap	Area	Location	Date set
1	Roll	39E and Co. 4th	20-Dec
2	Wellton	27E and Co. 10th	20-Dec
3	Dome Valley	21E and Co. 8th	20-Dec
4	Dome Valley	17E and Co. 6th	20-Dec
5	Gila Valley	Ave 10.5E and Gila Gravity Canal	20-Dec
6	Gila Valley	Laguna Dam Rd and Co. 3	20-Dec
7	Gila Valley	6E and Hwy 95	20-Dec
8	Yuma Valley	Co. 14.5th and Ave D	27-Dec
9	Yuma Valley	Hwy 95 and Co. 21st	20-Dec
10	Yuma Valley	Ave J and Co. 18th	20-Dec
11	Yuma Valley	Co. 15th and River	20-Dec
12	Yuma Valley	Co. 13th and Ave H	20-Dec
13	Yuma Valley	Co. 12th and Ave G	20-Dec
14	Yuma Valley	Co. 11.5 and Ave F	20-Dec
15	Yuma Valley	Co. 9 and Ave F	20-Dec
16	Yuma Valley	Co. 8th and Ave E	20-Dec
17	Yuma Valley	Riverside Drive and Hope Ave.	20-Dec
18	Yuma Valley	Co. 10.5 and Ave F	7-Jan

## 2017 DBM Pheromone Trap Network



## Historic DBM Trap Data, 1999-2001



## Year-round DBM Activity in Yuma Valley

DBM moths / trap / day

