

COLLEGE OF AGRICULTURE AND LIFE SCIENCES COOPERATIVE EXTENSION Yuma Agricultural Center

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.

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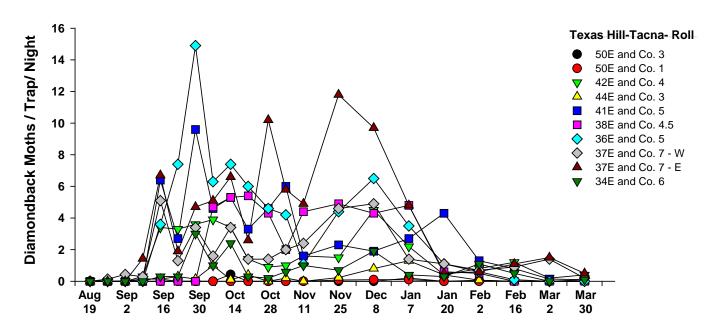
Area-wide DBM Trapping Network Yuma, Arizona

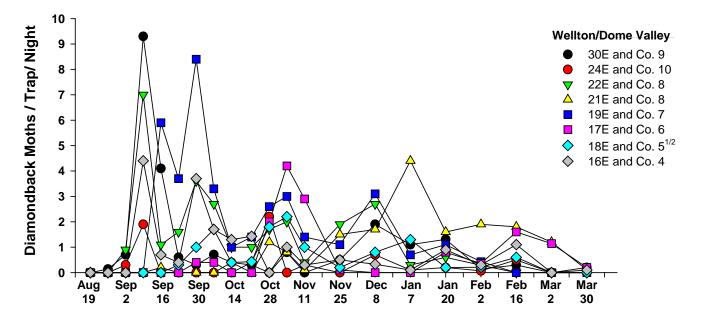






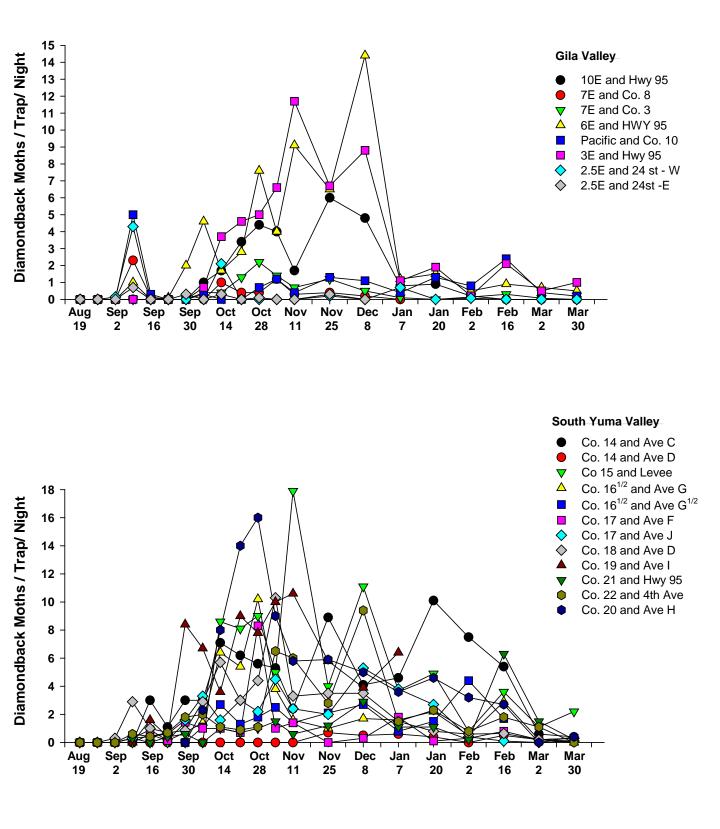
Trapping Data – by Location and Crop







Trapping Data – by Location and Crop

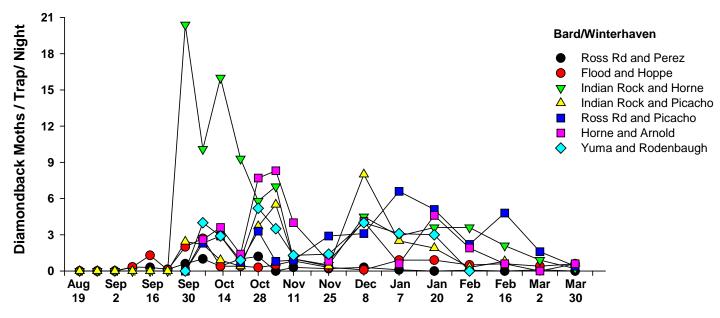




North Yuma Valley

Trapping Data – by Location and Crop

YAC (Hope Ave) Co. 8 and Ave E Co. 8.5 and Ave F $\mathbf{\nabla}$ Diamondback Moths / Trap/ Night Δ Co. 11 and Fortuna 28 Co. 11 and Ave F^{1/2} Co. 11 and Ave F 24 Co. 12 and Ave G \diamond Co. 12 and Ave H \diamond 20 Co. 13 and Ave G 1st St. and Ave C 16 12 8 $\overline{\mathsf{X}}$ 4 0 Sep Sep Nov Nov Dec Feb Feb Mar Aug Sep Oct Oct Jan Jan Mar 20 30 19 2 16 30 28 14 11 25 8 7 2 16 2





Historic DBM Trap Data – 1998-2001

