WORMS in Fall Produce (September 30, 2015)

Historically, worms (Lepidopterous larvae; -beet armyworm, cabbage looper and corn earworm) are the most important pests of desert pruduce during September and October. So, it is no surprise that worms are everywhere particularly in Dome Valley where heavy beet armyworm pressure has been reported over the past week or so. Many PCAs have reported that armyworm have been infesting lettuce as early as 8 days after wet date, which seems quicker than usual. Corn earworm larvae have also been reported in a few fields. Here at the Yuma Ag Center, one can easily find newly new egg masses and neonate beet armyworm larvae on 10 day old lettuce and broccoli stands. Cabbage loopers are beginning to show up and their populations will likely increase. Remember, temperatures drive larval development and adult moth activity, particularly when night time temps remain high (in the mid-70s or higher). The moths are nocturnal and will actively oviposit when evenings are warm and winds are light. With shorter days coming, the moths have more time to lay eggs at night. As long as the average temperature remains around 80-85°F, worms should be active at damaging levels. Those ideal conditions are consistent with the weather forecast for the next 10 days (daytime highs in the low 100's and nighttime lows in the mid 70's). Fortunately, there are a number of very effective insecticides that can be applied as stand-alone foliar products that provide effective residual control of both of these lepidopterous species. Radiant, Proclaim, Intrepid, Avaunt and any one of the Diamide products (Belt, Coragen, Exirell, Vetica, and Voliam Xpress) can provide good knockdown and extended residual control of armyworms and loopers. Addition of a pyrethroid often enhances knockdown of corn earworm and cabbage looper for many of the products. Of course, residual control will often depend on the rate applied. In general, the higher the rate, the longer the residual. But this will also depend on plant size at time of application and how fast the plant is growing. Before selecting a product for worm control, be conscious of products (chemistries) previously used on the crop. Avoid using products with the same mode of action more than twice on any given field. More information on the insecticides available for effective control of beet armyworm and cabbage looper can be found in this document: Lepidopterous Larvae Management in Desert Produce Crops, 2015..

Worms are everywhere!

Remember, When in Doubt . . . . . "SCOUT"

Click picture to listen to John's update 

To contact John Palumbo go to: jpalumbo@ag.arizona.edu

Back

For questions or comments on any of the topics please contact Marco Pena at the Yuma Agricultural Center.
College of Agriculture, The University of Arizona, Tucson, AZ.

PBN1588 PBNX 115

Search

Advanced

College of Agriculture and Life Sciences

Webmaster: Al Fournier (acis@ag.arizona.edu)

Lepidopterous Larvae Management in Desert Produce Crops, 2015

THE UNIVERSITY OF ARIZONA
COLLEGE OF AGRICULTURE AND LIFE SCIENCES
COOPERATIVE EXTENSION
Yuma Agricultural Center

Product	IRAC [1] MOA	Beet armyworm	Cabbage looper	*Corn earworm*	Comments*
Lannate	1A	•••	•	•••	Tank mix with another product for broad spectrum Lep activity; provides thrips control; PHI: 10 d on lettuce; Use rates above 0.75 lb AI/ac.
Lorsban	1B	•••	•	•••	Tank mix with another product for broad spectrum Lep activity; For use on cole crops, PHI: 21 d; use top of label rates if possible.
Acephate	1B	•	••	••	Tank mix with another product for broad spectrum Lep activity; PHI: 21 d on head lettuce only.
Pyrethroids	3	•	•••	•••	Tank mix with another product for broad spectrum Lep activity; PHI: varies with products ; use high labeled rates
Radiant	5	•••	•••	•••	Stand alone Lep, leafminer, and thrips control; PHI: 1 day on lettuce; Use rates at 5-7 oz depending on pest spectrum.
Proclaim	6	•••	••	•••	Stand alone Lep control; use a penetrating adjuvant ; PHI: 7 day on lettuce; use at rates above 3.6 oz; if cabbage looper present tank-mixed with a pyrethroid.
Bt (i.e. Dipel)	11B	•	••	•	Tank mix with another product for broad spectrum Lep activity, numerous Bt products available; PHI: 0 d -good spray coverage desirable
Intrepid	18A	•••	•••	••	Tank mix with another product for broad spectrum Lep activity; PHI: 1 day; good spray coverage desirable; mix with a pyrethroid for best results
Avaunt	22	•••	•••	••	Tank mix with another product for broad spectrum Lep activity; PHI: 1 day, good spray coverage desirable, use higher rates for best control
Belt	28	•••	•••	•••	Stand alone Lep control; PHI: 1 day on lettuce, Use at higher rates.
Coragen	28	•••	•••	•••	Stand alone Lep and leafminer control; PHI: 1 day for lettuce- Use at or above 5 oz. for best residual effectiveness.
Exirel	28	•••	•••	•••	Foliar only; Stand alone Lep, whitefly and leafminer control; PHI: 1 day for lettuce- Use at or above 13 oz. for best residual effectiveness.
Verimark	28	•••	•••	•••	Soil only; Stand alone Lep, whitefly and leafminer control; Use at or above 10 oz. for best residual effectiveness.
Voliam Xpress	28+3	•••	•••	•••	Stand alone Lep and leafminer control; PHI: 1 day forlettuce; Use higher rates (8 oz or > for best residual effectiveness.
Volium Flexi	28+4A	•••	•••	•••	Stand alone Lep and leafminer control; PHI: 7 day for lettuce; Has aphid activity. Use higher rates for best residual effectiveness.
Durivo	28+4A	•••	•••	•••	Soil only; Stand alone Lep and leafminer control; PHI: 30 day for lettuce; Use at 13 oz. for best residual effectiveness. Has aphid activity.
Vetica	28+16	•••	•••	•••	Stand alone Lep control; PHI: 7 day for lettuce; Has whitefly immature activity. Use at 17 oz for best residual effectiveness.

•••	**Good residual control (7-14 d)**
••	**Marginal residual control (4-6 d)**
•	**Poor residual control (1-3 d)**

[1] IRAC Mode of Action - for more infor go to - http://www.irac-online.org/

*** always consult the label before applying any of these products**

PBN1590