Tomato—Sequential Sampling for Armyworms on Tomato Fruit

UC IPM

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Supplement to UC IPM Pest Management Guidelines: Tomato

Grower_____ Date of survey_____

Field location_____ Comments_____

Fruit sampling directions

1. Pick fruit that are 1 inch or more in diameter to check for damage due to caterpillars.
2. Start with a sample of 100 fruit, picking them at random one at a time.
   - Count any fruit that contains a larva or feces, has a hole deeper than 1/10 inch, or has a shallow injury that will not scar over by harvest.
   - Don't count shallow injuries that will scar over by harvest.
3. Tally damaged fruit in the columns below using either the 2% or 1% threshold.
4. To reach a treatment decision:
   - Treat if the total number of damaged fruit reaches or exceeds the number in the "treat" column.
   - If the total matches or drops below the "don't treat" level for the number of fruit checked, stop and sample again next week.
   - If the total remains between the two columns after you have checked 300 fruit, stop and sample again in 2 or 3 days.

2% insect damage threshold

Number of fruit sampled	Number of fruit damaged by:		Don't treat	Total damaged fruit	Treat
	Armyworms	Fruitworms			
100			1		7
125			2		8
150			2		9
175			3		10
200			3		11
225			4		12
250			4		13
275			5		13
300			5		14

1% insect damage threshold

Number of fruit sampled	Number of fruit damaged by:		Don't treat	Total damaged fruit	Treat
	Armyworms	Fruitworms			
100			1		5
125			2		5
150			2		6
175			3		6
200			3		7
225			4		7
250			4		8
275			5		8
300			5		8