Leafroller Control Options at Petal Fall

What, When, Why, How?

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The Insecticide Resistance Action Committee assigns group numbers (see table) to insecticides based on their mode of action. A resistance management program should focus on rotating products with different IRAC group numbers after each successive generation (see below).

Leafroller generations through time

Delay the onset of leafroller damage through ovicidal activity when applied at petal fall.

No codling moth activity

Bacillus thuringiensis

• Very specific to leafrollers with no known impact on beneficial insects. Larvae stop feeding and die at 7 days.
• Short-lived residue. Weather (>65°F) at time of application is very important.
• Target 4th instar larvae possible. May need to increase rates or repeat applications at 10-day intervals to achieve desired control.

Bacillus thuringiensis

• Highly toxic to leafrollers and fast acting on the nervous system. Target 4th instar larvae or younger.
• Toxic to parasitoids, some impact on other beneficial insects.
• Avoid late applications to improve efficacy and protect beneficial insects. Opportunity to control leafminer at petal fall.

Rimon

• Moderately toxic to leafrollers. Target 4th instar larvae or younger. Disruptive to midgut synthesis. Dead larvae not seen for 14 days.
• May be disruptive to nontarget biologicals and enhanced activity relative to Success or Entrust.
• Effective at delaying leafroller activity when applied at petal fall. Good candidate for tank mixes.

Delegate

• Toxic to leafrollers, Target 4th instar or younger. Muscles are paralyzed following ingestion, thereby stopping the ability to feed.
• Very safe to farm workers and nonlethal to biological control.
• Highly toxic to codling moth larvae and possibly eggs. Field validation is needed to assess potential as an ovicide at petal fall.

Proclaim

• High resistance to leafrollers. Target 4th instar or younger. Disruptive to midgut nervous system.

Success/Entrust

• Effective at delaying the onset of codling moth damage through petal fall. Good candidate for tank mixes targeting codling moth.

Intrepid

• Effective at delaying the onset of codling moth damage through petal fall.

Estem

• Use only with approved bait (e.g., Intrepid) to control leafminer at petal fall.

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