

| Apples, Pears, Stone Fruit |

# Early-Season Use on Apples, Pears and Stone Fruit

Esteem® 35 WP Insect Growth Regulator is the product of choice for early-season pest management programs. *Esteem* controls San Jose scale, white peach scale, rosy apple aphid, first generation codling moth ovicide, pear psylla and leafminers, with a farm-friendly chemistry that does not disrupt beneficial insects of the key pests.

- ▶ **Long-Lasting**—Protection that affects all life stages of pests for longer-lasting control
- **Effective**—*Esteem* provides application timing flexibility; from delayed dormant to in-season. Target immature stages for best results.
- ▶ **Soft Chemistry**—Easy on beneficial insects and the environment

#### San Jose Scale Control

Esteem controlled San Jose scale at pink timing, resulting in more marketable fruit with fewer crawlers and less severity.

Crop: Honeycrisp Apples Location: Traverse City, MI Source: Michigan State University

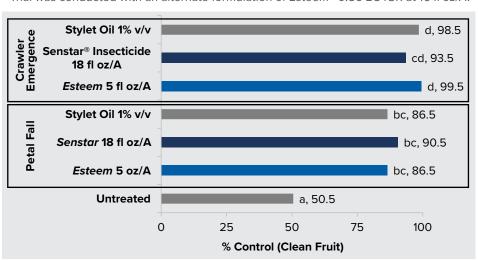
Treatment	Rate/A	Crawlers/ cm Tape	Scale Severity on Fruit (Rated 0 to 4)	% Fruit Marketability
Esteem <sup>1</sup>	0.1 lb Al (~5 oz)	5.91 c	1.35 c	64.79 a
Centaur®	34.5 oz	16.43 b	1.98 b	37.71 ab
Sivanto® Prime	14 fl oz	36.74 ab	2.61 ab	23.24 b
Untreated	_	71.57 a	2.90 a	13.42 b

<sup>&</sup>lt;sup>1</sup>Trial was conducted with an alternate formulation of Esteem® 0.86 EC IGR at 16 fl oz/A.

#### White Peach Scale\* Control

Esteem controlled white peach scale at petal fall and crawler emergence timing. If monitoring for crawlers, apply when they begin to emerge. If not monitoring for crawlers, apply at petal fall for better coverage and before leaves are fully out.

\*Refer to Section 2(ee) label Crop: Messina Peaches Location: Biglerville, PA Source: Pennsylvania State University



### How To Use

Rate	4–5 oz/A		
Timing	See Timing Flexibility. Do not use more than two <i>Esteem</i> applications per season.		
Method	Ground air blast equipment		
Spray Volume	Higher water volumes can improve coverage, which may improve insect control		
Adjuvant	Horticultural mineral oil at 1–2% for applications made later than delayed-dormant		



## **Timing Flexibility**

Because of its unique activity, mode of action and pest spectrum, *Esteem* provides flexible application timing. Depending on the crop, *Esteem* can be used at any two of the following four application timing choices.

Timing	Crop	Pests	Special Instructions
No. 1 Delayed- Dormant-Pink	Apples	Leafminers	Apply at peak moth flight for control of 1st or 2nd generation. This usually occurs at pre-pink to pink apple stage for 1st generation and 2nd cover for 2nd generation.
	Apples	Rosy Apple Aphid	Apply at ½-inch green apple growth stage.
	Apples Pears Stone Fruit	San Jose Scale	Thorough coverage is critical to control. Use with horticultural mineral oil for added control.
No. 2 Petal-Fall and In-Season	Apples Pears	Coding Moth	Apply at Biofix plus 100 degree days.
	Apples Pears	Leafrollers	For suppression of summer generation, target 4th–6th instar larvae or about 550–650 pandemis leafroller degree days or 250–300 obliquebanded leafroller degree days.
	Apples Pears Stone Fruit	San Jose Scale White Peach Scale	Thorough coverage is critical to control. For control inseason, time sprays when scale crawlers first emerge.  Use with a horticultural mineral oil for added control.
No. 3 (West of the Rockies)	Apples Pears	Codling Moth	Biofix plus 350 codling moth degree days. This is the timing for the delayed first cover if an ovicide is used at Biofix plus 50–150 degree days ( <i>Esteem</i> ) or at Biofix plus 200 degree days (1% oil). This strategy calls for a tank mix of an ovicide ( <i>Esteem</i> ) plus a larvicide.
No. 3 (East of the Rockies)	Apples Pears	Codling Moth	To control 1st generation, apply at Biofix plus 100 degree days and 2nd application 14–21 days later.
No. 4 Pre- and Post Bloom	Pears	Pear Psylla	Esteem has ovicidal activity against pear psylla eggs. For optimum results, two applications bracketing bloom (clusterbud and petal-fall) are recommended. Esteem should be applied just prior to peak viable egg lay. Delayed-dormant applications of oil and/or Surround® will improve the ovicidal activity of Esteem by both delaying and synchronizing psylla egg lay. There must be at least 14 days between Esteem applications.



