

# Sevin<sup>®</sup> XLR PLUS

Carbaryl Insecticide



## For Control of California Red Scale in California Citrus

For many years, SEVIN XLR (Extra Long Residual) PLUS carbaryl insecticide has aided California growers in the control of important citrus pests such as California red scale. (See complete list of pests controlled on reverse side.)

Red scale populations developed significant resistance to insecticides during the 1990s in various areas of the San Joaquin Valley. Control of red scale relies upon a combination of biological control, insect growth regulators and oil applications, in addition to a rotation of insecticides with different modes of action. SEVIN XLR PLUS is a GROUP 1A insecticide (acetylcholinesterase inhibitors) and provides a different mode of action versus other insecticides used in citrus, such as: Imidacloprid (GROUP 4A), Movento<sup>®</sup> (GROUP 23), Applaud<sup>®</sup> (GROUP 16), or Esteem<sup>®</sup> (GROUP 7C). SEVIN XLR PLUS provides growers and advisors an effective additional IPM tool to use when planning a pest control program.

The SEVIN XLR PLUS formulation provides longer residual control and is easier to handle, mix and apply versus the older discontinued WP formulation.

### CALIFORNIA RED SCALE

Use SEVIN XLR PLUS to control red scale when populations reach economic threshold levels. Proper application timing and rotation with alternative insecticides will help decrease the potential of resistance occurring.



### Tips for Successful Red Scale Control:

- Monitor pest and apply at second generation crawler stage; generally, early July timing.
- Always buffer the SEVIN XLR PLUS spray solution to a pH below 7.0.
- Coverage is essential. Use slow tractor speed and sufficient water volumes to achieve thorough wetting of the exterior and interior of the tree canopy (foliage, fruit, twigs, branches, and trunk).
- Rate: 5-12 quarts per acre (qt/ac).

**General Recommendation:** For best results use SEVIN XLR PLUS at 12 qt/ac plus 0.3% to 0.5% Narrow Range 415 Spray Oil in 750-1,500 gallons per acre (gpa) or more depending on tree size and architecture. Do not apply more than once per season and do not apply as a rescue treatment. Do not use on fruit grown for export to Korea.

**Table 1: California Red Scale Commercial Demonstration Trials, 2014**

Location	Treatment (application volume)	Applied	Evaluated	% infested	#scale per fruit
Site 1 Kern Co.	1. SEVIN 8 qt/ac + 415 Oil 4.5 gpa (900 gpa)	6/27/2014	11/16/2014	11.5	3
	2. SEVIN 12 qt/ac + 415 Oil 4.5 gpa (900 gpa)			6.5	1.8
	3. Movento 10 fl oz/ac + 415 Oil 1.5 gpa (150 gpa)			4.8	0.6
Site 2 Tulare Co.	1. SEVIN 12 qt/ac + 415 Oil 3 gpa (750 gpa)	8/29/2014	11/13/2014	4.5	1.2
	2. Vulcan@ 6 qt/ac (750 gpa)			12.5	3.8
Site 3 Tulare Co.	1. SEVIN 12 qt/ac + 415 Oil 3 gpa (750 gpa)	8/29/2014	11/13/2014	1	0.3
	2. Vulcan@ 6 qt/ac (750 gpa)			7.5	3.5
Site 4 Tulare Co.	1. SEVIN 12 qt/ac + 415 Oil 3 gpa (750 gpa)	9/12/2014	11/13/2014	0	0
	2. Lorsban@ 6 qt/ac + Admire@ Pro 7 fl oz/ac (750 gpa)			0	0
Site 5 Fresno Co.	1. SEVIN 6 qt/ac + 415 Oil 3 gpa (750 gpa)	9/12/2014	11/25/2014	0	0
	2. Lorsban 6 qt/ac (750 gpa)			1	0.2

400 fruit were sampled from 40 different trees in each treatment

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# Citrus: Red Scale

## Citrus Fruits:

Pest		Quarts of SEVIN per acre	Specific Directions
Avocado leafroller California orangedog Citrus cutworm Fruittree leafroller	Orange Tortrix Western tussock moth	2 to 3	<b>Observe bee caution.</b> Repeat applications as necessary up to a total of 8 times per year but not more often than once every 14 days.  For scale, apply when crawlers are present.  For best results with Eriophyid mites including citrus rust mite, apply when pest populations are low.
Citrus rust mite Eriophyid mite	Plant bugs Scale insects [Black scale, Brown soft scale, California red scale (except in California), Citrus snow scale, Yellow scale (except in California)]	3 to 5	
Apopka weevil (adult) Citrus root weevil (adult)	Fuller Rose Beetle Little leaf notcher (adult)	5	
<b>California only</b> California red scale Yellow scale		5 to 12	Do not make more than 1 application per crop per year for California red scale. Apply when crawlers are present.

## Restrictions: Citrus Fruits

- Do not apply within 5 days of harvest.
- Do not apply more than 20 quarts per acre per crop year.
- Restricted Entry Interval (REI) = 12 hours.
- CA Restricted Entry Interval (REI) = 3 days for application rates > 5 quarts per acre
- Maximum Use Rate per Application: CA = 12 quarts; consult label for all other states
- **BEE CAUTION** – Do not apply this product to target crop in bloom. Mowing weed cover or cover crop prior to applying this product will reduce hazard to bees.

Applicators using airblast equipment for application to citrus in California must use an enclosed cab that meets the definition in the Workers Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, such applicators must:

- Wear long-sleeved shirt, long pants, shoes and socks.
- Either wear a NIOSH-approved dust/mist filtering respirator with NIOSH/MSHA approval number prefix TC-21C or a NIOSH-approved respirator with any N, P, R, or HE filter or use an enclosed cab that is declared in writing by the manufacturer or by a government agency to provide at least as much respiratory protection as this type of respirator.
- Be provided, have immediately available for use, and wear in an emergency when they must exit the cab in the treated area: coveralls, chemical-resistant gloves, chemical-resistant footwear, and chemical-resistant headgear (if overhead exposure) plus – if not already using one – the respirator specified above. Take off any PPE that was worn in the treated area before re-entering the cab.
- Store all such PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination inside of the cab.

**Important: Always read the label before buying and follow label instructions when using this product.**

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