

September 8, 2026

Vol. 42, Issue # 26

THE BLUEBERRY BULLETIN

A Weekly Update to Growers



Visit the Blueberry Bulletin webpage: extension.rutgers.edu/blueberry-bulletin

[2026 Commercial Blueberry Pest Control Recommendations for New Jersey](#)

Pest Management

Dr. Cesar Rodriguez-Saona, Extension Specialist in Blueberry Entomology, Rutgers University

Dr. Janine Spies, IPM Agent – Fruit

Ms. Carrie Mansue, IPM Sr. Program Coordinator – Fruit

MANAGING SCALE INSECTS IN BLUEBERRIES DURING THE DORMANT SEASON

Scale insects can become persistent pests in blueberry fields when populations are allowed to build over several seasons. Because many scale species overwinter on blueberry canes, the dormant period provides an excellent opportunity to reduce populations before they become active in spring. Effective management should integrate winter pruning, properly timed dormant sprays, and monitoring for crawlers in late spring and early summer.

Why Manage Scale During Dormancy?

Scale insects are difficult to control once they have settled on the plant because their bodies are protected by a waxy or hardened covering. During the dormant period, however, overwintering scales are exposed on the canes and can be targeted before populations increase during the growing season.

In New Jersey blueberries, Putnam scale has historically been an important scale pest. Heavy infestations can weaken blueberry canes and may contribute to reduced plant vigor and productivity. Dormant-season management is therefore an important component of an integrated pest management (IPM) program.

Start With Winter Pruning

Pruning should be considered the first step in managing scale in heavily infested fields. During winter pruning, remove older, declining, or heavily infested canes and remove them from the field when practical.

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and Boards of County Commissioners. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.



Eliminating infested wood can directly reduce the overwintering population and improve spray penetration into the remaining canopy.

Good pruning also improves coverage of dormant sprays. Dense blueberry canopies can make it difficult for sprays to reach scales located on interior portions of the canes. Removing excess and heavily infested wood allows better penetration and coverage.

Dormant Oil Applications

A horticultural or superior oil application is an important tool for dormant-season scale management. Oil acts primarily by coating the insects and disrupting respiration, making good coverage essential.

For New Jersey blueberries, **Superior oil at 3 gal/A** is a commonly recommended dormant treatment. Applications should be made from leaf fall through the dormant period and into early bud development, approximately through **0.25-inch leaf opening**, according to current Rutgers recommendations.

Use sufficient water volume to thoroughly wet the blueberry canes. Spray coverage is particularly important because the oil must contact the scale insects to be effective. In commercial plantings, approximately **75–100 gal/A of water** may be appropriate to achieve good coverage, depending on equipment, plant size, and canopy density.

Adding an Insect Growth Regulator for Heavier Infestations

Where scale populations are moderate to high, a dormant oil application can be combined with an insect growth regulator. A commonly recommended program for scale management in New Jersey blueberries is **Esteem 35WP: 5 oz/A + Superior oil: 3 gal/A**

The combination provides two different modes of action against overwintering scale populations. Esteem contains pyriproxyfen, an insect growth regulator, while the oil provides contact activity against exposed scale insects.

This combination would be most appropriate for blocks with a history of significant scale pressure rather than as routine treatment in fields with little or no scale.

Timing Is Critical

Dormant sprays should be applied when plants are still dormant or only beginning to break dormancy. The objective is to target overwintering scales before substantial foliage develops and while the insects remain accessible on the canes.

For New Jersey blueberries, the recommended dormant-treatment window extends from **leaf fall through bud swell and approximately 0.25-inch leaf opening**.

Weather conditions should also be considered. Avoid applications under conditions that could result in poor drying or freezing of the spray. Do not mix oil with sulfur or sulfur-containing products – this can cause phytotoxicity to the plant. Avoid mixing or applying oil within 14 days of applying Captan.

Always follow the product label regarding temperature restrictions, application conditions, compatibility, and use rates.



Don't Forget the Crawler Stage

A successful dormant treatment does not necessarily eliminate the need for additional scale management during the growing season. Growers should scout fields in late spring/early summer for the emergence of crawlers, which are the mobile and relatively vulnerable stage of the scale life cycle. Monitor for crawler activity by wrapping black electrical tape covered with double-sided sticky tape around branches with previous scale infestations. Use a hand lens to detect crawlers on the tape.

For Putnam scale, crawler emergence generally begins around mid-May, with peak activity occurring in late May and early June. The exact timing can vary with weather and location, so monitoring is preferable to relying solely on the calendar.

Once crawlers settle on the plant and develop their protective covering, they become considerably more difficult to control. Consequently, identifying crawler emergence provides an important opportunity for targeted management.

An Integrated Approach to Scale Management

The most effective scale management program should therefore combine several tactics:

1. Scout during the growing season to identify fields with economically important scale populations.
2. Prune during winter, removing older and heavily infested canes.
3. Apply a dormant oil treatment where scale pressure warrants treatment.
4. Consider adding Esteem in blocks with moderate to heavy infestations.
5. Apply sprays with sufficient water and excellent cane coverage.
6. Monitor for crawlers in May and June and make a targeted treatment when warranted.
7. Rotate insecticide modes of action when additional treatments are required to reduce the risk of resistance.

Recommended Dormant Program

For a New Jersey blueberry field with a history of moderate to heavy scale infestation, a practical starting point would be:

Winter pruning → Esteem 35WP (5 oz/A) + Superior oil (3 gal/A) → apply from dormancy through approximately 0.25-inch leaf opening → monitor for crawlers beginning in mid-May.

For fields with low scale pressure, Superior oil alone may be sufficient, particularly when combined with good pruning and continued monitoring.

The key to successful scale management is not simply choosing an insecticide. Timing, thorough spray coverage, pruning, and monitoring of the crawler stage are equally important. A well-timed dormant-season treatment can substantially reduce the scale population entering the growing season and reduce the need for later interventions.