



Gone with the Wind?

Flexible Spray Timing Ensures Insecticide Effectiveness

Pome growers in Hood River, Oregon, face the same challenges as growers in other areas, plus high winds due to their proximity to the Columbia River Gorge. The timing of spray treatments can be tricky, as apple growers, Sue Gay and her son Jordan Struck, the owners of Riverside Farms, discovered in 2016.

That year, Gay and Struck attempted to convert approximately 14 acres of granny smith, fuji and gala apples to organic production. Facing heavy pest pressure, especially from codling moth, they needed to spray organic insect control products every five to seven days, yet were often unable to spray due to windy conditions. Delaying treatments allowed pests to wreak havoc, resulting in crop losses of 40-50 percent.

In 2017, they were determined to reduce the farm's losses and returned to effective insecticide control methods. To better understand the available insecticide options, they set up two 7-acre test plots of apples. The two plots compared Cormoran® (novaluron+acetamiprid) to Assail® 70WP (acetamiprid). Relying on the novaluron component of Cormoran to extend its residual effect, Cormoran was applied at petal fall (early May in Oregon) and Assail was applied at the same time.



Starting on Day 1, Gay and Struck worked with agronomist Holly Boob to evaluate the effectiveness of both treatments. They found that, as expected, the Assail acres looked good (averaging just one moth per pheromone lure trap) for approximately 21 days after treatment, and then at 21-28 days, codling moth populations spiked, indicating it was time for another treatment. Having had little experience with Cormoran, however, they were surprised to see that the Cormoran-treated acres looked even better. The product's dual modes of action provided excellent control, and its long residual allowed the flexibility to spray early and maintain that control for about a month.

Pheromone Trap Counts of Codling Moth in Apples

Hood River, Oregon • 2017

	Avg. for Days 1-19	Avg. for Days 20-34	Population Spike
Cormoran	<1 moth	1.2 moths	28-31 days post-treatment
Assail	<1 moth	1.5 moths	21-28 days post-treatment

Following this comparison trial between Assail and Cormoran treatments, they applied Altacor®, an insecticide with a different mode of action, to keep infestation levels low. Rotating different chemistries helps prevent the insects from developing insecticide resistance, preserving the effectiveness of all insecticides for future use.

Conclusion

Insect pressure plagues pome growers in all areas every year for various reasons, including difficult spraying conditions, insecticide resistance, weather patterns, neighbors' spray practices, etc. Due to its unique chemistry, dual modes of action and long residual, Cormoran allows flexible application timing and repeat applications. When high insect pressure is anticipated, Cormoran can play a critical role as part of an insecticide rotation.



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