

Plant Disease and Insect Advisory



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Oklahoma State University
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Expanded Label for Dimilin 2L May Provide Relief from Grasshoppers in Improved Pasture and Pecans

**Tom Royer, Extension Entomologist and
Phil Mulder, Extension Entomologist**

Dimilin 2L insecticide has a newly expanded label that allows for its use to control grasshoppers in improved pastures, grasslands and non-crop areas, as well as the traditional rangeland. It also has a label for use in pecans and peaches. Research trials conducted in Oklahoma over the last few years have shown that when applied at the correct time, Dimilin 2L is an inexpensive, effective method for controlling grasshoppers in rangeland and pasture.



This product works as a molting inhibitor, or Insect Growth Regulator (IGR). As such, it takes several days to work, and the application must be timed properly to be most effective (For grasshoppers, when they are in 2nd and 3rd instar). It is relatively safe to non-target organisms, but it can cause problems with aquatic invertebrates, so it must not be applied directly to bodies of water, or be allowed to drain into waterways.

Dimilin 2L can be applied on improved pasture at a rate of 1-2 fluid ounces per acre. Higher rates should be used when foliage is dense or grasshoppers are beyond the 3rd instar. The label states that there should be at least 1 day wait after the application before cutting grass for hay. I would suggest that it be applied several days before cutting, to allow the grasshoppers to get a good dose of the material.

Previously, grasshopper management in pecan was a difficult issue to address, primarily because of restrictions associated with grazing the orchard floor after application. This problem is no longer an issue with the use of Dimilin 2L, which has no such restriction. Growers making applications to the orchard floor; however, should treat the area when the hoppers are young and use the grassland rate (1.0 to 2.0 oz/acre). If grasshoppers become a problem with the tree canopy

this likely means that they were not controlled adequately when they were young instars and any efforts to control them with Dimilin 2L late in the season would be futile.



Control of other insects in pecan should be carefully considered on the basis of efficacy. In studies conducted in Oklahoma on the efficacy of Dimilin 2L on pecan nut casebearer, compared to treatment with other standards, Dimilin 2L did not provide comparable control. In other states, good control was obtained, but only after two applications of Dimilin 2L. This approach would not be cost-effective or worth the hassle, particularly in light of the residual capacity associated with products such as Confirm or Intrepid. These latter products can provide

excellent control of casebearer even when applied slightly before thresholds. In addition, their residual capacity has provided subsequent control of first generation fall webworm, which begin to occur typically a few weeks after first generation pecan nut casebearer.

Time to Treat for Pecan Nut Casebearer

Phil Mulder, Extension Entomologist

Pecan nut casebearer populations have increased over the last week. Damage is already evident in some southern locations and eggs were found in the Depew area. In the Depew, OK area on May 26, 2003 we recovered 2 white eggs and 2 pink eggs. Although the casebearer model suggests that this is too early for entries (in Depew) it is fairly close and pecan nut casebearer never pay attention to things like models.



With our recent storms and more on the horizon, growers should probably wait until the weather subsides and prepare to treat immediately after the storms. Most likely this will occur around the first week of June. Provided in the table below are some representative sites across the state showing the degree days through midnight May 28. Keep in mind when you read the table and use one of these numbers for your orchard, that 1831 degree days marks the time of predicted first significant entry. Obviously, we may be a little earlier in some locations.



Growers should carefully choose their insecticides according to efficacy and whether they are allowing cattle to graze the orchards. The safest two choices for the applicator and for beneficial organisms are Confirm® (cannot be grazed) and Javelin® (can be grazed). Another interesting choice available this year is the compound Spintor®. This product is a fermentation by-product that does an excellent job on pecan nut casebearer; however, the expense is about \$550.00 per gallon. This cost would make per acre costs about \$17-20 per acre

depending on rate. Confirm and Javelin can both be purchased for considerably less and perform equally as well.

Location	Degree day Total (5-28-03)	First significant entry total
Burneyville	1809	1831
Bristow	1460	1831
Duncan	1750	1831
Guthrie	1444	1831
Idabell	1820	1831
Tulsa	1541	1831

Dr. Richard Grantham
Director, Plant Disease and Insect Diagnostic Laboratory

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