



Pest e-alerts



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Alfalfa Weevil Egg Populations 2018

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As we end the first month of the New Year and winter presses on for a while longer, warmer days with temperatures in the 60's tell us spring green-up will be upon us before we know it. In an ongoing effort to identify alfalfa weevil and aphid populations over the upcoming season, we continue to look at weather as well as other factors that could contribute to increased or decreased populations of these pests. In the first few weeks of 2018, we've experienced a few cold weather events with temperatures in some areas slipping into the single digits. With enough warm days, increasing temperatures have pushed some of the far southern counties of the state to reach 100 degree days or more (Table 1.).

Remember, in regard to alfalfa weevil populations, 150 degree-days represent the level that serves as an indicator for growers and consultants to begin scouting for larvae. In most years, an early egg hatch would mean a relatively quick demise for larvae and continued suppression of aphid pressure since extremely cold temperatures, with the addition of ice/snow or cold rains can usually still be expected throughout February. While we have seen some cold (single digit to almost zero) temperatures that could affect egg mortality, to this point, we have not seen the moisture that could further assist in insect suppression.

Looking at the current Mesonet forecast, models indicate Oklahoma may be in for somewhat average temperatures along with normal to below normal precipitation for the next month. If that trend develops, temperatures remain somewhat seasonal, and minimal degree day accumulation occurs we could see a more traditional set up as far as alfalfa weevil egg hatch, development, and subsequent threshold levels that are pushed into March.



However, if temperatures climb consistently into the sixties or above we could see an increase in degree days pretty quickly as we have already observed in a couple of the southern counties. This could trigger an earlier than normal threshold level. As always this time of year, weather plays an important role in insect development. The best way to keep informed of what is going on in your area is to remain diligent about monitoring Mesonet degree day information, entomology *Pest e-Alerts*, contact your local extension educator, and certainly continue scouting.

We will be on the road in the next week to collect egg samples from around the state. Once the samples are collected and back to the lab, it will take about a week to process and check for viabilities. While the data we collect can't conclusively predict the severity of the upcoming season, this information can help give a snapshot of the current activity in areas of collection throughout the state. As an example, last year's incredibly low numbers of alfalfa weevil eggs in all locations did indeed result in fewer sprays and/or complaints from applicators trying to control this pest. We'll continue to monitor the weather, provide egg population/viability data, field conditions, and future information as it becomes available.

Table 1.
Degree Day accumulations for 11 counties throughout the state as of 1-30-2018.

<u>County:</u>	<u>Degree Days:</u>
Alfalfa	72
Major	80
Kingfisher	72
Kiowa	88
Tillman	112
Jefferson	112
Comanche	84
Payne	78
Rogers	57
Garvin	90
Pottawatomie	73

Plant Disease and Insect Diagnostic Laboratory

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