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Update on Alfalfa Weevil and Aphids - March 20, 2020

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With temperatures approaching 80 °F just a couple of weeks ago, degree-day numbers have exceeded 400 in the south-central part of the state (Table 1.). Based on scouting information, alfalfa weevil, *Hypera postica* (Gyllenhal) activity is on the increase (Fig 1.). Decisions on management or applications for alfalfa weevil control were initiated last week in many southern counties close the Texas border. Cool and rainy conditions have helped to delay activity in the northern part of the state. Scouting in (Payne County), near Perkins



Figure 1. Alfalfa Weevil Larva

Last week, producers in Tillman and Grady counties were beginning to make management decisions based on levels of (60 larvae/30 stems) (Fig. 2.). While most larvae are still small (1st or 2nd instar), alfalfa just starting spring green up is still relatively short (<6 inches) and cannot accommodate much more than .5 larvae/stem before defoliation becomes an issue. In addition, as temperatures rise, weevil populations can increase quickly. So far, I have seen minimal aphid activity in the fields I have scouted. However, early season aphid populations (predominately pea aphids and blue alfalfa aphids) at the South Central Research Station, Chickasha, Ok, prompted an early application for control in late February. Small plants, less than 3 inches tall were already showing signs of stunting, shriveling, and curling of leaves. Since then, an additional weevil application was made on (3-11-2020). Weevil numbers, even if appearing low, can create a significant threat to short alfalfa growth just out of dormancy (Fig. 3&4). As early season populations of weevil continue to grow, growers attempting to make management decisions based on increasing weevil and potentially aphid populations might consider a tank mix of some type of pyrethroid in combination with Lorsban. If alfalfa weevil larvae are small and protected within plant terminals, as noted in some of the fields we have scouted, a second application may be required before harvest.



Figure 2. Various Instars (1-4) of Alfalfa Weevil.

If conditions warrant another application, keep in mind the decision to make another application of insecticide must be carefully considered due to availability of registered products for that commodity, maximum rates allowed per cutting and harvest restrictions even at lower rates. It is a violation of Federal Law to use products in a manner that is inconsistent with its labeling.

For example: Depending on the rate, Lorsban® (Chlorpyrifos) at 8oz/acre has a 7-day pre-harvest restriction (PHI) and up 21 days PHI when applied at 1 pint or more per acre. In addition, Lorsban® can only be applied once per cutting (at any rate). Likewise, many of the products that can be used on alfalfa for weevil control may contain mixtures of different active ingredients, and one of those ingredients may be a product already used. If weevil numbers remain relatively light, a second application may NOT be needed for weevil. However, with early season application (early to mid-March) the chance of needing at least one more application is increased. Thorough scouting on each field will be the best means of determining the status and the decisions to be made.





Figure 3 & 4. Alfalfa starting spring green up, ((< 6 inches growth).

Table 1. Degree Days for various areas of the state through March 19, 2020 are presented in the last column.

County	Degree Days
	2020
Alfalfa	246
Major	272
Payne	334
Kingfisher	305
Canadian	319
Kiowa	333
Blaine	267
Pottawatomie	370
Garvin	450
Grady	374

Disease and Insect Diagnostic Laboratory

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