

VC Peanut News – Spring/Summer 2017

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“Mirror, mirror on the wall, will 2017 be the fairest year of all?” Now I don’t know about y’all, but the mirrors I’ve seen don’t do too much talking. In any event, if 2017 is anything like its ancestors, there is a good chance we will see some new things, and a good chance we will see some familiar things.

One of the newer fungicide names growers might see is Mazinga. Mazinga is a fungicide mixture from Sipcam Agro that combines chlorothalonil and tetraconazole. Chlorothalonil is the active ingredient in the familiar Bravo Weather Stik, whereas tetraconazole is the active ingredient in Eminent VP. As similar as it may sound, tetraconazole has an important difference when compared to its sister compound tebuconazole (the workhorse of Folicur 3.6 F). Namely, tetraconazole (and Mazinga as a whole for that matter) does not have activity against soil diseases of peanut, whereas the tebuconazole in Folicur does have activity against such soil diseases as stem rot (AKA white mold) and *Rhizoctonia* limb rot. This being said, Mazinga can be used as-is as an early season (~45 DAP) leaf spot option to replace the European Union-outlaw TiltBravo. If used any time later than 45 DAP, Mazinga would need a mixing partner like Convoy, Quash or Folicur in the spray tank to help with soil diseases.

In some of our more southern counties, velvetbean caterpillar can be a common pest late into September and October. If they go on a peanut field trip without a chaperone, they can quickly defoliate a crop that may be nearing maturity. Fortunately, velvetbean caterpillars are easy to control. This can be done preventatively with Dimilin, or established populations can be managed with several different insecticide products, including pyrethroids, Intrepid Edge, Radiant, Besiege, Blackhawk, Coragen and Prevathon. While the inexpensive cost of pyrethroids can be attractive, pyrethroid use deserves cautious consideration during the growing season. In most cases when velvetbean caterpillars come in, it is usually late enough in the growing season that the risk of flaring spider mites is a minimal concern. Even so, it helps us all to have as many tools as possible to choose from, especially when having a “normal year” seems to sometimes be less common. Diamond 0.83EC has in the recent past been approved for use on peanuts, and velvetbean caterpillar is one of the insects included on the label. It is important to note that while Diamond is more target-specific than a broad spectrum pyrethroid is, Diamond has a pre-harvest interval (28 days) that is four times longer than something like Mustang Maxx (7 days). There’s a place for everything, and if velvetbean caterpillar gets into a peanut field with more than 4 weeks to go until harvest, a pyrethroid-alternative product may be a better option, particularly if environmental (hot and dry) and field conditions are conducive to twospotted spider mites becoming a problem. The results in Table 1 come from a trial comparing different products for velvetbean caterpillar and twospotted spider mite control. While the spider mite data is not included here, we can see their damaging effect on yield in the plots treated with Lorsban. Besiege, Diamond, Dimilin and Prevathon all kept defoliation levels less than 3%, with this

being significantly lower than the untreated check. Worm pressure was fairly modest in this test, as the check had only 16% defoliation, which wasn't enough to significantly impact yield. Some differences could be seen in the velvetbean caterpillar counts, with the one application of Prevathon (~1 per foot) having significantly more worms than three applications of Diamond (0.5 per 3 ft). While Besiege, Diamond, Dimilin and Prevathon all had statistically similar yields, Prevathon was numerically greatest in this trial. While these may not be the most dramatic results, it is always good to have options, and it is good to see additional products making their way through the development pipeline.

Table 1. Velvetbean caterpillar insecticide trial results.

Treatment	Timing	Defoliation %	Velvetbean caterpillars (no. per three feet)	Yield (lb/A)
Besiege	53 DAP	2.6 C	2.1 BCD	4860 A
Check	n/a	16.2 A	6.3 A	4916 A
Diamond	53, 65 and 82 DAP	0.8 C	0.5 D	4914 A
Dimilin	53, 65 and 82 DAP	1.1 C	1.1 CD	4685 A
Lorsban	53 DAP	11 B	4.4 AB	3818 B
Lorsban	53 DAP			
+ Comite	93 and 99 DAP	15 AB	6.3 A	3724 B
Prevathon	53 DAP	1.9 C	2.9 BC	5108 A

County meetings this year seem to have come and gone pretty quick, and one of the parts I like the most is the questions. Sometimes late season rains can make it all but impossible to get into the field on time, either to put on the last fungicide application or to harvest the peanut crop. One of the questions that came up in this year's county meetings was wondering if it would help to tighten our fungicide spray intervals as we near the end of the season so that if we do get a rain that prevents us from getting in the field, the peanuts would be protected for the extra time it might take until we can get in and harvest them, for example. This is a great question, and each situation might be a little different. Let's first look at the far end of the spectrum in terms of harvesting. To start to answer this, we must first ask another question: How long do we have until we think we can harvest? This probably isn't the first time, and it likely isn't the last time you might hear the phrase "The label is the law". Most peanut fungicides have a 14-day pre-harvest interval, making it illegal to apply them within two weeks of harvest. If we pod blast peanuts from a field one week and based on the maturity profile determine we would like to dig them the following week, but rains prevent us from getting into the field on time, we wouldn't want to force ourselves to wait an additional two weeks to harvest, particularly if the bulk of the crop shares the same maturity. If we are dealing with a split crop (half at optimum maturity being black/dark brown and half immature being more blonde/white/orange) like we might see in a year with drought stress, the decision should also take into consideration the condition of the canopy. If the peanut canopy is healthy and has little if any late leaf spot or spider mites, and there is enough quality growing season to improve the less mature portion of the crop, that gives us some flexibility to put on another fungicide application and wait for the crop to mature if this fits with the entire farm's operation. On the other hand, if 20% of the leaves are defoliated due to late leaf spot and half the crop is at or near optimum maturity, time is less of a luxury and we would likely do better to harvest as soon as we could, which might be delayed due to rains.

Before we add more ifs here, let's take a step back from being so close to harvest. What about towards the latter part of the season where we might still have another fungicide application to go? Does tightening up our schedules to 10 days give us some elbow room in case untimely rains prevent us from putting out that last application on time? Generally speaking, this can help, and it helps more when there is already established leaf spot infections (at least 5%) and when rains would delay applications by more than a few days. We rarely know exactly what the weather will do, and so our best bet is to manage according to what we do know. An important part of knowing what we do know is routine scouting. This helps ground truth how effective our disease management plan has been. Getting an established late leaf spot epidemic under control is no small task, but identifying a growing epidemic can help indicate whether we need to modify our current management, by either switching chemistries or tightening up intervals. Bringing this back to the original question, if we see an epidemic becoming established and or growing, tightening our intervals can help buffer us from rains that might delay managing the crop on schedule. This may have taken the scenic route responding to the question, but sometimes half the fun is in enjoying the journey ahead of the destination. I hope this year's destination includes great weather and an even greater peanut crop.