

Weekly Ag Report
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Morning, this is Tom Getts down at the Cooperative Extension Office with the latest edition of your Weekly Ag Report.

Well, I think the Indian summer is finally over. After the cold snap we had earlier in the season, it warmed up again to give us a long warm fall. However, colder temperatures have returned and with them the rains have started to fall. Looking at the rainfall data from the closest CIMIS stations, we had a good system move through in mid-October, and multiple systems move through the region during early November. I don't need to tell you this, but, living in a geographically diverse region, precipitation totals can change dramatically from one valley to the next, or even within a valley depending on the storm cell rolling through.

Since October 17th according to the CIMIS stations, McArthur has seen 2.16 inches of precipitation, Alturas has gotten 1.6 inches, where down here in the Honey Lake Valley we have been the driest with the Buntingville station only recording 1.01 inches.

Winter rain can be an important factor for those choosing to plant a winter wheat crop. While many growers choose spring grains as a rotational crop, others utilize winter wheat varieties. There are pros and cons to winter wheat. One advantage is winter wheat can take advantage of winter moisture, and can have higher yields than spring wheat varieties. One of the largest risks with winter wheat is that our variable weather leads to early green up and frost injury, or even winter kill in certain circumstances.

The major difference between spring wheat and winter wheat varieties is vernalization. Vernalization is the need for a plant to experience a certain amount of cold temperature in order to go through the physiological process required to promote flowering. Winter wheat, unlike spring wheat, needs to experience a certain amount of cold temperature after germination, otherwise the plants will not flower and produce grain.

Back in 2014 and 2015, research was conducted by Steve Orloff up in Tulelake at the Intermountain Research Education Center to investigate various planting dates for a variety of winter wheat cultivars. In both 2014 and 2015, various winter wheat cultivars were planted at four planting dates – one in September, October, November and February. While irrigation would be needed for germination in September planting, it was hypothesized these plants would be at a larger growth stage going into the winter and yield would be higher. Likewise, it was hypothesized that waiting until February to plant winter wheat could be risky. One of these hypotheses turned out to be correct.

While there was variability in-between cultivars and across the two trial years, the bottom line is that an October planting resulted in the highest average yields. In 2014, February plantings had the second highest yields. However, in 2015, the February planting resulted in the lowest winter wheat yields out of the four timings. This is because springtime temperatures in 2015 were too warm, and the vernalization required for successful flower and seed formation were not sufficient. September plantings in both years yielded lower than November plantings.

While October has come and gone, and we sit here in the middle of November, if you still have a field you would like to plant in winter wheat, it may be less risky to plant it sooner rather than risking a late planting in February where the vernalization requirements of the crop may not be met. Another option would be to wait until April and plant a crop of spring wheat.

If you would like more information such as specifics on the yield data for particular varieties, summaries of Steve Orloff's trials can be found on the Intermountain Research Education Center web page. I will also post electronic links to the trial results on the Lassen County Cooperative Extension Weekly Ag Report web site.

I know it is over a week away, but hope you all have a Happy Turkey day!

Links to Study Information:

<http://irec.ucanr.edu/files/229926.pdf>

<http://irec.ucanr.edu/files/213663.pdf>