Weekly Article

The First Frost

10-6-2020

Hello, my Name is Richard Purdin with OSU Extension, Ag and Natural Resource Educator and Community Development Educator for Adams County. I hope to better inform local producers and the public of the latest news in the world of Agriculture. On Monday morning I woke up to do my chores and as I walked the pastures to check and feed the cows, I noticed frost in lowline areas. I believe this is the first real frost of the season for this area and the way it sounds most of the state has seen some frost. Producers grazing livestock on pastures or hayfields with summer annual forages should take precaution.

Nitrate and prussic acid poisoning can become issues in frost or drought stress forages. Summer annual forages such as sorghum, sorghum sudan, pearl millet, corn, and weeds like johnsongrass create issues when grazed shortly after a frost or during drought like conditions. Nitrate toxicity occurs during periods of drought conditions. Stressed plants will accumulate nitrates in the lower portion of the plant. When grazing, maintain a grazing height of 5-6 inches to stay on the safe side. Take note of any weed species in the pasture like johnsongrass because it will accumulate nitrates also. Forage oats and other small grains can also accumulate nitrogen after a frost. Prussic acid poisoning is another risk factor to consider when grazing summer annuals. Prussic acid poisoning occurs when cyanogenic glucosides in the plant are converted to prussic acid after a heavy frost or drought conditions. If livestock consume enough forage symptoms can be excessive salvation, difficult breathing, staggering and eventually death. To avoid this from happening producers should take these steps.

- If in doubt get a forage sample tested before grazing
- Instead of grazing making silage can reduce nitrate levels by 50%.
- Avoid grazing at night when frost is expected.
- Wait 5-7 days after a killing frost to graze
- Younger growth has higher levels of prussic acid so allow forage to mature before grazing. Avoid grazing shortly after cutting for hay.

Some other details to go over is

 USDA will be providing direct assistance to farmers impacted by Corona virus for the second time this year. Producers can contact the FSA office to sign up for their second round of payments for 2020. Sign up deadline is December 11th, 2020 you should call before coming to the office. The phone number to call is (937) 544 2033.

- Adams Soil and Water Conservation District is collecting Common Milkweed Pods throughout the month of October, call (937) 544-2033 or go to adamssoilandwater.org for details.
- Check out my survey for local crop yields, I would appreciate your help in constructing a local hybrid/variety utilization spreadsheet for the growing season 2021. The survey can be found at adams.osu.edu and OSU Extension Adams County Facebook page.
- I am considering a meeting later this fall or winter based on climate change and how it is affecting your farm operation and the public. There is a survey on both our web site and Facebook page.

From the Field

In scouting field conditions for Adams County, the following is things I have noticed.

- 1. Soybean Harvest is underway, I have had yield reports of 60 bushels per acre to 75 bushels per acre.
- 2. Corn Silage harvest is wrapping up.
- 3. Grape Harvest is beginning, yields look to be lower, but quality of the fruit is looking good.
- 4. Watch for stalk quality issues in early planted corn.
- 5. Fall Roundup for feeder calves has begun and many stockyards are seeing an increase in cattle delivery.
- 6. Tomatoes are still producing but most of the garden is done producing.
- 7. Little wheat has been sown, the Hessian fly date is October 5th for southern ohio.