Weekly Article

Getting to Know Your Nutrients

1-26-2021

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. This week has started off on a wet note but, overall, 2021 has started off with below average precipitation. According to the National Weather Service Center in Wilmington Ohio, the southwestern portion of the state has received on average 1.49 inches of rainfall since January 1st, normal average rainfall amount is around 2.15 inches. With this mind, farmers should keep a watchful eye on precipitation amounts not only locally but on a national level too. Weather events and issues can be a major factor in both row crop and livestock markets.

Commodity markets have many factors that can have a major effect on movement either in a high or low direction. Many of those factors are completely out of the producer's control. Weather is of course out of the farmer's hands and COVID-19 was an historically unforeseen factor. Political policies can have a dramatic effect and world events and speculation can make for very volatile markets. But there is something a producer can do no matter if he/she is raising corn or finishing market hogs, producing the highest quality product with as little input cost as possible. Today I want to talk about nutrients and how they effect the growth of the plant. Farmers have been accustomed to getting in the routine of buying fertilizer because that is what the crops need, right? Some producers go the extra step and have their soil tested to know the exact quantities of nutrients in the soil. Knowing the role that nutrients play in the plant and the reason why you spend thousands of dollars every year to make sure your crop produces the highest yield possible. There are 17 essential nutrients plants need to survive and thrive, they are categorized as macro essential and micro essential.

Macro Nutrients get the most attention due to being required by the plant in large quantities, these nutrients are also referred to as primary nutrients and consist of Nitrogen, Phosphorus, and Potassium N, P, and K. In the fertilizer analysis Nitrogen is the first number, Phosphorus is the second, and third is Potassium.

 Nitrogen is used to form amino acids and proteins in the plant having a direct effect on photosynthesis and plant cell development. For livestock producers feeding grain or forage with proper amounts of nitrogen equals higher protein feed.

- Phosphorus is used in development of plant genetics and cell wall formation. The more phosphorus available to plants means stronger and healthier stalks resistant to lodging.
- Potassium plays a critical role in movement of starches and sugars throughout the plant. Plants with adequate amounts of potassium will have stronger roots and show greater drought resistance.

Some other details to go over:

- The OSU Extension Office is open by appointment only. If you need assistance you can contact us at (937) 544-2339
- 2021 Tobacco GAP Training will be offered in person February 23rd 10:00 am-12:00pm located at Raines Farm and Greenhouse 2667 Nichols Ridge Road Seaman Ohio 45679 Please call the office to pre-register (937) 544 -2339 (Seats will be limited to 20).
- 2021 Fertilizer/Pesticide Private Applicators in person course is planned for March 9th at the Cherry Fork Community Center (gym) 5:00pm 9:00pm. If you need recertified, you should get an invitation in the mail. (due to Covid-19 the date is tentative and susceptible to change)
- OSU Extension Department of Agricultural, Environmental, and Development Economics will be presenting the 2021 Climate and Grain Market Outlook January 22nd from 3:00pm to 4:00pm, February 19th 10:00am-11:30am. Go to https://osu.zoom.us/webinar/register/WN_WIi8sVbSR5i3yqTqtBrj6A to register for the virtual event.
- February 15th, 22nd, and March 1st OSU will be hosting a three-part workshop on Farm Succession Planning. This workshop will be offered virtually 6:30pm to 8:30pm. The course fee is \$40 per farm family. The deadline to register is February 10th go to go.osu.edu/farmsuccession to register
- For producer who still have not yet elected a 2021 crop safety net program
 Agriculture Risk Coverage or Price Loss Coverage webinars will be January 13th
 from 1:00 to 3:00 pm and February 25th 9:00 -11:00am. Go
 to http://go.osu.edu/arcplc2021. The deadline to sign up for this program will be
 March 15th, 2021
- February 12th General CRP signup deadline, and CRP Grasslands signup will begin March 15th,2021 and conclude April 23rd,2021 contact the farm service agency for assistance in signing up for these programs.
- OSU Extension Beef Team will have their next Cow -Calf School via Zoom on February 1st at 6:00 pm covering Forage Analysis and Forage Storage 101.Go to https://osu.zoom.us/webinar/register/WN_N_CtcKYwQB2l60Afug10aA to register.