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OHIO STATE UNIVERSITY EXTENSION

Guernsey County Agriculture News

Winter 2022

Hello Guernsey County! It has been a long and cold winter, but it is beginning to feel a bit like Spring. I hope you and your family are doing well! Despite the cold weather inside you will find locally important dates, programs, and information. If there is anything I can do for you, please call.

Sincerely,

Clif Little

OSU Extension to Host 2022 East Ohio Women in Agriculture Conference

Ohio State University (OSU) Extension will host the 7th Annual East Ohio Women in Agriculture Conference. The conference is planned for Friday, March 25 from 9:00 a.m. – 3:30 p.m. at Ohio FFA Camp Muskingum, 3266 Dyewood Road SW, Carrollton, OH 44615. All women and young women (high school age) who are interested, involved in, or want to become involved with food, agricultural, or natural resources production or small business are encouraged to attend. The conference program features a networking fair and sixteen breakout sessions presented by OSU Extension educators, producers, and partner agencies. See the Sessions this year are focused around four themes: Natural Resources, Plants & Animals, Home & Family, and Special Interest (includes break-out with Ohio FFA State Officers). The conference keynote will be led by Bridget Britton, OSU Extension Behavioral Health Field Specialist. She and her team will lead participants through "Stoic or Stressed? Talking through difficult topics in a safe space." Registered participants, community organizations, or businesses interested in sponsorship can contact 740- 461-6136. Interested individuals can register for the conference online at go.osu.edu/eowia2022. Cost of the conference is $55 for adult participants and $30 for students. Conference fee includes conference participation, breakfast, lunch, and conference handouts. Deadline for registration is Friday, March 11. For additional information, please contact Emily Marrison, OSU Extension Coshocton County at 740-622-2265. Stay connected with the Ohio Women in Agriculture Learning Network on Facebook @OHwomeninag or subscribe to the Ohio Women in Agriculture blogsite at u.osu.edu/ohwomeninag

Source: https://u.osu.edu/ohioagmanager/2022/02/05/extension-to-host-2022-east-ohio-women-inagriculture-conference/

Fertilizer Value of Manure

By: Clif little
Ohio State University Extension, Guernsey County

What is the value of organic fertilizers, such as manure? While it can be difficult to quantify the true value of manure, the value of nitrogen (N), phosphorus (P_2O_5) and potassium (K_2O) the three major components can be calculated relatively easily. Rely on laboratory analysis when utilizing manure as a crop nutrient. This analysis provides us with the best means of determining the product's true value. Local OSU Extension offices can help you find laboratories capable of providing manure analysis.

Consider the following hypothetical broiler litter analysis (analysis is on an as is basis):

The analysis reads:		
	Moisture	615.2 lbs/ton
	Mineral Matter	416.5 lbs/ton
	(Org M+)	968.2 lbs/ton
	Total Kjeldahl nitrogen (TKN)	52.91 lbs/ton
	Ammonia -N (NH_2-N)	3.36 lbs/ton
	Nitrate -N (NO_3-N)	0 lbs/ton
	Phos. as (P_2O_5)	91.3 lbs/ton
	Potassium as (K_2O)	60.49 lbs/ton

The actual analysis of manure will vary based on storage, digestion method, bedding, animal diet, as well as other factors. Therefore, it is a good idea to have the analysis performed near the time of application. Laboratories providing this service also provide sampling instructions.

(**Establish price of nutrients in manure based on commercial fertilizer values.**)
Check with local fertilizer dealers for prices as these can vary based on region, fertilizer type, and quantity. For purposes of illustrating one method of value determination we will use the following prices for Nitrogen (N), Phosphate (P_2O_5), and Potash (K_2O). Use the formulas and plug in your price for nutrients.

0-0-60 at \$900/ton, 2000 lbs X .60 = 1200 lbs K_2O per ton of fertilizer. \$900/ton / 1200 lbs
Price of K_2O. in this example is = .75¢/lb.

0-46-0 at \$1000/ton, 2000 lbs X .46 = 920 lbs P_2O_5 per ton of fertilizer. \$1000/ton / 920 lbs
Price of P_2O_5 in this example is 1.08 \$/lb.

46-0-0 at \$1000/ton, 2000 lbs X .46 = 920 lbs N per ton of fertilizer. \$1000/ton / 920 lbs
Price of N in this example is 1.08 \$/lb

Calculating the nitrogen value for manure first, we must determine plant available nitrogen (PAN) in this manure sample. The amount of plant available nitrogen (PAN) in a manure sample varies with temperature, method of application, soil pH, and method of treatment or processing. Manure may contain up to three types of nitrogen each varying in their plant availability. Microorganisms (mineralization) break down the organic nitrogen found in manure over time. Mineralization rates are adjusted according to digestion process, time of application and days until incorporation. Typically, 30 to 33 percent of the organic nitrogen applied is available to the plant in the year of application. Ammonium nitrogen found in manure may vary in availability from 15 to 75 percent. The table utilized to estimate nitrogen availability is found in Ohio State University Extension Bulletin 604 and available for purchase from local OSU Extension offices. Utilizing the resources mentioned above we calculated that in this hypothetical example there is **18.03 lbs/ton of Plant Available Nitrogen**.

We have 18.03 lbs/ton of nitrogen available for growing plants in the initial year of application. The remaining organic nitrogen will be broken down and some N will be available next year. Next we add in the phosphorus and potassium quantity and price and sum as below.

Nitrogen	18.03 lbs/ton	x	$1.08/lb =	$ 19.47
Phosphorus	91.30 lbs/ton	x	$1.08/lb =	$ 98.60
Potassium	60.49 lbs/ton	x	$.75/lb =	$ 45.37
	Total Potential value			**$161.84/ton as is**

Manure can be a substantial source of crop nutrients if utilized correctly. There is also a value in the organic matter and mineral content of manure if the soil test calls for these nutrients. Consider manure nutrients when planning a fertility program. The calculations have shown,
the use of manure can be profitable when a current soil test recommends these nutrients.

On-Line Fruit Pruning Clinic

The Ohio State University South Centers is hosting an expanded, three-part Online Fruit Pruning School on Tuesday, March 1, 2022, and Tuesday, March 8, 2022. This is a **FREE** online event that will be conducted virtually via the Zoom communications platform. **NEW** this year, we will devote an entire session to training and pruning apple trees from 9:30 – 10:45 a.m. on March 1.

Parts 2 and 3 will be held March 8, beginning with grapes at 9:30 a.m. and continuing with raspberries at 11 a.m. Anyone wishing to attend should register no later than Monday, February 28, 2022. Simply visit the link below and fill out the registration form. Registering once will get you links to all the sessions, simply attend as many or as few as you would like. We plan on again offering recordings afterward, so you can access the event on-demand, as we know this fits some people's schedules better.

Be sure to include a working email address so we can mail you the link to join the event closer to the date. Register here: http://go.osu.edu/pruningschool

Upcoming Events:

Should you acquire that old Clinton Well? OSU Extension and Farm Bureau will hold an educational program on considerations when acquiring your old oil and gas well. The program will be on Thursday, March 17th at 7 PM at the MidEast Career Center. The program starts at 7 PM. To Register call the Farm Bureau office at 740-425-3681.

ODA Testing Pesticide Testing for those who would like to obtain a pesticide license is scheduled for March 23. The Ohio Department of Agriculture (ODA) will administer the exams for Private and Commercial applicators starting at 10am, March 23, 2022, at the Guernsey County Extension office located on the Guernsey County Fairgrounds in Old Washington. Pre-registrations are required and can be made on-line at the ODA website: https://agri.ohio.gov/wps/portal/gov/oda/divisions/plant-health/pesticides/exam-registration Producers can also call the ODA at 614-728-6987. Study materials can be obtained at: https://pested.osu.edu/.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

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