Column Name – The Heartland Minute

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"Composting 101 – Part 2"

Time to pick up where "Composting 101 – Part 1" left off! As we talked about before, your starter compost pile should have alternating layers of brown and green material. If you do not have enough green material, you can add 1-2 cups per square yard of commercial garden fertilizer or an inch or two of manure. This will allow microorganisms to get needed nutrients in your compost. Apply water after each layer has been added to the pile. As a note, if you run short on brown material you can start collecting leaves in bags in the fall to add to your compost, as you need it. When your pile reaches that 3-5 feet mark, make a dish shape on the top, so it can collect water. During drought years like that of which we are currently in, you will want to water your compost pile frequently. Over time, your pile will reach a temperature of 150-160 degrees F before it cools down. This is so that materials can be broken down and create a usable compost. Once this cycle has happened, turn the pile over and start the cycle again. This process will take 4-6 months from the start of the pile until it can be used in your garden. Signs that the process has gone well are shrinkage in the first 2-3 weeks. If it has not, turn the pile over and make sure it is moist. You may get an ammonia smell if it is too moist, or when you are composting a lot of fresh, green plant material, especially grass clippings. When 4-5 weeks have gone by from the start of the turnover cycle, it should be at its hottest. To test for this, push a wire or stick deep into the pile, pulling it out and touching it to check temperature. The pile should be half its original height 3-4 months from the start of the pile. Your completed and ready to use compost will be dark, moist, and crumbly and should smell like moldy leaves with a rich, earthy odor.

One way to utilize your compost is for fertilization and soil improvement. Compost can act as both a way to loosen up heavy, tight clay soils or as a sponge to hold water and nutrients in sandy soils. Your new compost contains nutrients that plants require. The suggested application rate is 50-100 pounds per 100 square feet, which is about ¼ inch of material spread over the entire garden. To get the best results, apply your compost in spring or fall just before tillage to incorporate the compost throughout the root zone.

Another way of using your compost is to apply it at planting. You can apply a band of compost at the bottom of a row trench or add several shovels full to the bottom of planting holes. Garden plants like tomatoes, perennial flowers, trees, and shrubs benefit from the slow release of nutrients through the early growth period. If you wish to use it as a substitute for soluble fertilizer or starter solution, you can do this when mixed with equal parts of water. Leftover compost can be added to garden soil later.

Another method of use is to screen your compost for large particles, mix it with soil or sand in approximate equal parts, and use it as a growing medium for potting seedlings. The compost should be well deteriorated and free of harmful disease organisms and insects to ensure healthy

seedlings. One final use is as a compost for your lawn. For this method, apply compost liberally before planting. It can be used yearly as a fertilizer by adding a thin layer of top dressing.

With all its uses, you should still be cautious when using compost. It will not fix all your soil problems. You can over compost. With too much application, it can lead to rapid lush growth in your garden that sacrifices fruit production. Compost that has not been allowed to finish can remove or tie up soil nutrients until excess decomposition slows. This particularly concerns applications in the spring. Compost application creates a dark, cool environment at the soil surface, providing favorable conditions for sowbugs, squash bugs, and other insects. In addition, some compost will pack into a dense layer almost impervious to water when applied to the soil surface. This is a good indicator that your compost was not ready for application. In this case, you can mix the compost with more soil before applying. Happy composting!

As a reminder, Greenwood County and the Rolling Prairie District will be hosting a Drought Program to be held at the Severy Community Center on October 11th at 6pm. The meeting is free to attend with a meal provided by Sowder Seed Co & Ranchland Feeds "*Your ADM Feed Dealer for the Flint Hills*." Topics to be covered at the meeting will include feedstuffs and projecting forage inventory needs; management strategies to avoid nitrate and prussic acid poisoning; considerations for feeding cows and backgrounded calves with limited forages and health concerns.

Information from article from KSRE Making Compost: A Beginner's Guide Article.

For more information regarding Agriculture and Natural Resources, 4-H Youth Development, or K-State Research and Extension call the office at 620-583-7455, email me, Ben Sims, at benjam63@ksu.edu, or stop by the office which is located inside the courthouse. Be sure to follow K-State Research and Extension- Greenwood County on Facebook for the most up-to-date information on Extension education programs and the Greenwood County 4-H program.