

#### <u>The Periodical Cicadas Aren't</u> <u>Coming...Here</u>

You may have heard about 13-year Brood XIX and the 17-year Brood XIII emerging this year. Neither of these cicada broods is present in Washington County, but Brood XIX will be seen in other parts of Tennessee.



#### **Should I Prune Flowers Off My Vegetable Transplants?**



Sometimes when we buy vegetable transplants we can find that they are flowering and in the extreme case fruiting. Should you prune off flowers and fruit, or leave them for a quicker first harvest? The thing to keep in mind is that like any system, plants have limited resources available to compete all necessary functions such as growth and reproduction. For this question, the primary limitation of interest is energy produced from photosynthesis. The energy used to create flowers & subsequent fruit is not available for growing roots, stems, and leaves during establishment, that means we are limiting the ultimate size of that plant and constraining the total potential yield for the season. The tradeoff is that the first harvest happens sooner.

Personally, I'd rather have the plant put its energy into establishing a larger plant with greater yield potential as opposed to quick first harvest that will diminisfuture harvests. There isn't a right or wrong choice, so long as you understand the consequences of the management choice you make.

#### Can I Plant Tomatoes yet? Yes!

A lot of gardeners like to push the envelope on early planting when it comes to tomatoes. And old rule of thumb is to wait until Mother's Day-May 12<sup>th</sup> this year-before planting out warm season vegetables such as tomatoes. Keep in mind that it's not just air temperature, but also soil temperature that is important. Looking at our current soil temperatures we are getting above 60°F and if the long-range weather forecast is correct, that soil should keep warming in addition to our air temperatures.

#### Do I Need To Use Fertilizer If I'm Using Compost In My Garden Or Landscape?

First, compost is not equivalent to fertilizer. Don't get me wrong, compost is great in the garden and landscape, but its value specifically as a fertilizer is limited. If you look at compost products, most will show a fertilizer content of 0.5-0.5-0.5 to 1-1-1, meaning that for every 100 lbs of compost applied you are applying  $\frac{1}{2}$  -1 lb of plant available N-P2O5-K2O. The reason for this is because those macro nutrients are primarily in a form that is not immediately available to plants. Those nutrients can become available as the organic matter is broken down by soil microbiology.

I prefer to think of compost as a soil amendment because it improves a number of physical, chemical, and biological soil attributes (air and water holding capacity, nutrient retention, etc.) while offering some slow



#### The Trusty Trowel-May 2024

release fertility over time. Fertilizers, in contrast, provide plant available nutrients rapidly. Fertilizers don't generally have any soil amendment characteristics; that's not a slight on these products as it's not their job.

There is an argument that using both types of products is a beneficial strategy. When soil temperatures are cooler, the microbiological community may not release nutrients at a rate that is sufficient for a rapidly growing plant. Providing immediately available nutrients from fertilizers at this time can prevent nutrient availability from limiting early growth and establishment.

The unasked question that is posed by this query, is what levels of soil fertility already exists in the soil and do I need to use either? The primary way we assess that is through a soil test. If we have very high levels of phosphorous and potassium in the soil already then there is little reason to add more of those nutrients whether in the form of compost or fertilizer.

If our goal is to add organic matter to a highly fertile soil, without over applying phosphorous and potassium, we can consider cover cropping or mulching with organic materials rather than adding

#### **Too Much of a Good Thing?**

Additional compost applications to soils already very high in phosphorous and potassium can be a problem. Excess phosphorus can create issues with plant uptake of zinc and iron, as well as be a danger to surface waters if it experiences runoff.

manures or composts. Likewise, we may limit our fertilizer applications to nitrogen only if we have sufficient levels of phosphorous and potassium. We don't often test for nitrogen in our soils as its difficult to get a meaningful result that we can use to determine application rates. Nitrogen fertilizer rates are prescriptive and based on the expected needs of the plant. Take a look at <u>Getting The Most Out Of Your Home Vegetable</u> <u>Garden Soil Test Report</u>.

Soil Testing is available through our office for \$20 per sample. A good vegetable garden sample consists of multiple smaller individual samples across the entire garden area. We are interested in the top six inches of soil; don't include mulches, plant materials, etc. in the soil sample. Those smaller samples are mixed together in a bucket and the final sample is pulled from the bucket; this sample should represent the average conditions over the entire garden.

### May Lunch & Learn Home Food Crops Webinar Series

Join the UTHort Team for a brand-new webinar series all about home vegetables!

**Register HERE!** Tuesdays in May 12:30 ET to 1:30 ET

May 7 | 💸 Site Preparation/ Corn and Beans May 14 | 问 Small Space Gardens/ Tomatoes and Peppers May 21 | 🌭 Garden Nutrition and Fertilization/ Cucurbi



May 21 | **b** Garden Nutrition and Fertilization/ Cucurbits (Squash, Cucumbers, and Melons) May 28 | **b** Garden Management- Cultural Practices/ Insects and Diseases



## **It's Farmers Market Season!**





Visit the Johnson City Farmers Market (JCFM) at

the Pavilion in Downtown Johnson City, TN!

Saturdays, 8:00am to 1:00pm May 4th to October 26th\*

\*Every Saturday <u>except</u> June 29 in 2024 is in the Founders Park

# Did you miss one of gardening classes? You can find the recording on our YouTube Channel:



For questions about your home and garden please feel free to contact me, Adam Watson, Agriculture Extension Agent <u>watson@utk.edu</u>.

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