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Washington County Cooperative Extension Service

The Hoe Truth Newsletter

Helping You Grow

HORTICULTURE

April 2024

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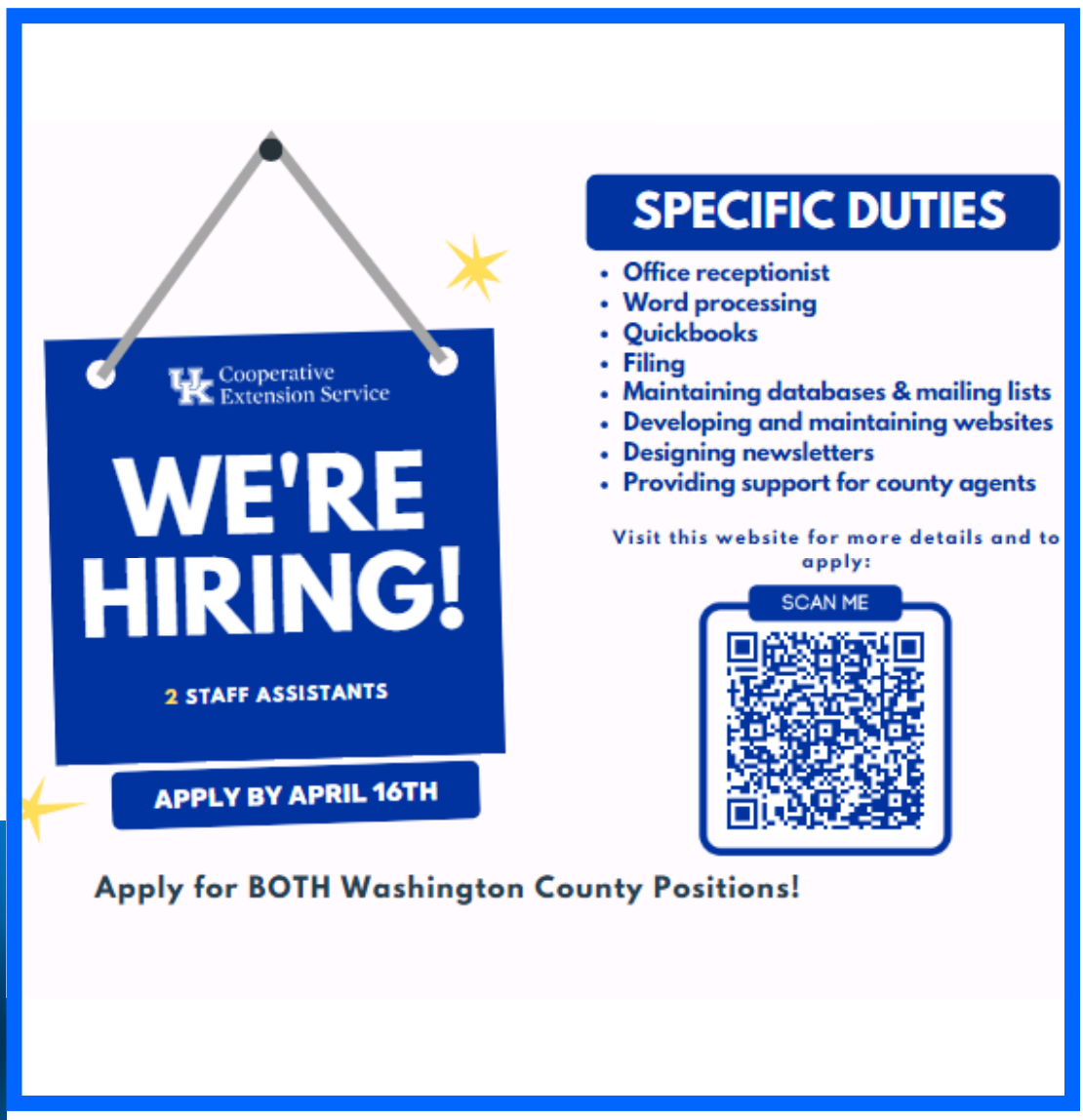

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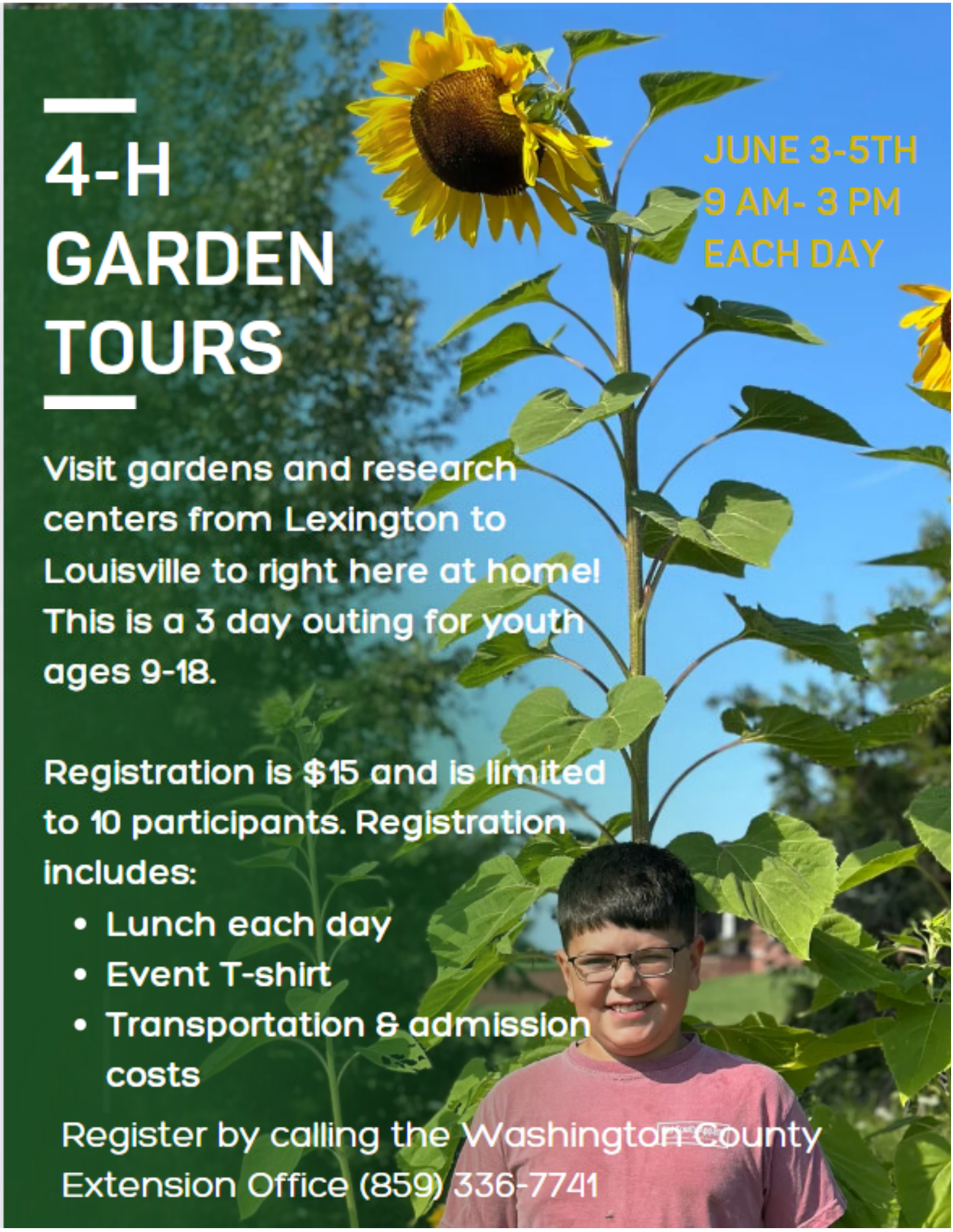
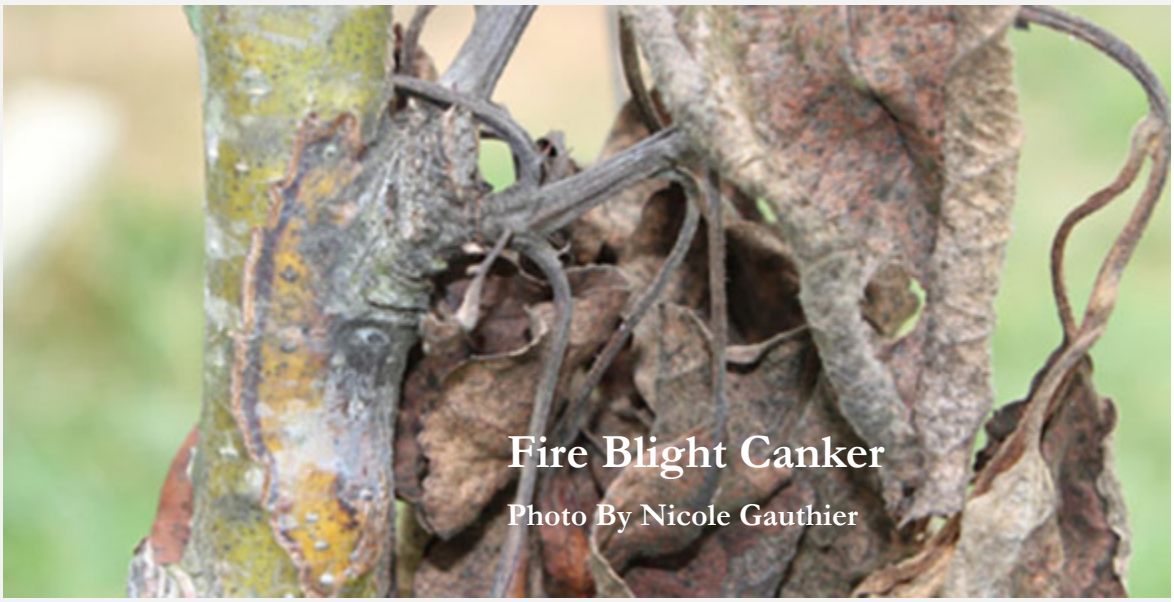

4-H
GARDEN
TOURS
JUNE 3-5TH
9 AM- 3 PM
EACH DAY
Visit gardens and research centers from Lexington to Louisville to right here at home! This is a 3 day outing for youth ages 9-18.
Registration is $15 and is limited to 10 participants. Registration includes:
• Lunch each day
• Event T-shirt
• Transportation & admission costs
Register by calling the Washington County Extension Office (859) 336-7741

Fire Blight

By Nicole Gauthier and Cheryl A. Kaiser

Fire blight is a highly destructive disease of apple and pear that can occur in commercial orchards and home plantings. Many landscape trees and shrubs in the rose family are also susceptible to this disease. Fire blight can cause severe damage in a very short period of time. Because precise conditions are needed for infection, disease appearance is erratic from year to year.

The earliest disease symptoms are observed on infected spurs when the bases of individual flowers or pedicels (flower stems) wilt and darken. As blooms collapse, infection spreads rapidly into other flowers in the cluster, causing the entire spur to wilt suddenly and die. Diseased tissues usually remain attached to the tree.



Fire Blight Canker

Photo By Nicole Gauthier

Infections frequently spread from blossoms to supporting spurs and branches, resulting in stem lesions or cankers. Fire blight cankers appear shrunken with a dark brown to purple color. As cankers increase in size, they can girdle stems or branches; as a result, tissues above these infection sites die.

Bacterial cells can build up during the blossom and spur blight phases of fire blight and infect rapidly-growing shoots. Blighted shoots wilt from the tip and develop a crook or bend at the growing point, commonly referred to as a 'shepherd's crook.' This phase occurs after bloom.

Trunk and rootstock infections can occur from the internal movement of the fire blight bacterium through water conducting-tissue or from infected water sprouts.

The fire blight organism, Erwinia amylovora, survives from one year to the next at the margins of previously formed branch and trunk cankers. In most years, fire blight begins during the bloom period and, as long as the environment is favorable, it will continue through petal fall and/or until shoot elongation stops.

Fire blight is generally favored by:

High relative humidity or rainy conditions.

Temperatures between 65°F and 70°F.

Under favorable conditions, bacterial populations can build-up rapidly. At 70°F, numbers of bacterial cells double every 20 minutes; one cell can become one billion cells overnight, each capable of causing a new infection.

The key to fire blight management is preventing the infection of flowers. Once flowers become infected, they serve as a source of inoculum for the rest of the tree. Management of fire blight requires an integrated approach that relies primarily on cultural practices and is supported by the judicious use of bactericides.

While few cultivars of apple, pear, and the various ornamental host species are immune to fire blight, some

Fire Blight

cultivars are more resistant or tolerant than others. Whenever possible, plant resistant cultivars and resistant cultivar/rootstock combinations. For information on fire blight tolerant apple and pear cultivars, consult the Midwest Tree Fruit Pest Management Handbook, ID-93.

Implementing the following cultural practices is important in managing this disease:

- Avoid any cultural practice which stimulates rapid tree growth; young succulent tissue is susceptible to infection.
- Fertilization, especially nitrogen application, should be adequate for tree health without promoting rapid growth and prolonged succulence.
- Prune trees to improve air circulation and to promote rapid drying of foliage. Aggressive pruning will stimulate growth, so selective pruning is recommended.

Pruning can play an important role in a comprehensive fire blight management program, and when done properly, should reduce inoculum and tree damage. However, while removal of sources of the pathogen is desirable, pruning when the disease is active can further spread the pathogen. Thus, pruning out fire blight strikes during the growing season is a controversial issue. Currently UK recommends that pruning blighted twigs and cankered branches be delayed until winter.

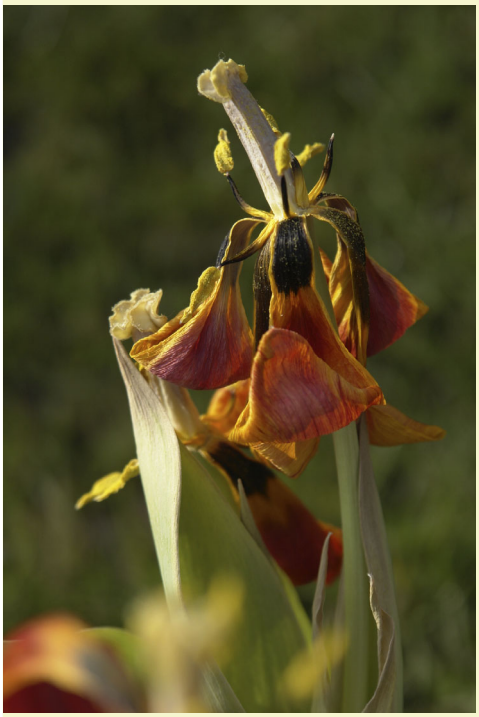
Timely chemical sprays may be used as preventative measures to control fire blight during the spring when the pathogen is at the surface of cankers and on flowers. After the bacterium has invaded tissues, bactericides are not effective. Fungicides will not control fire blight. Refer to the Midwest Tree Fruit Spray Guide (ID-92) for application rates and other details.

Pumpkin Growing Contest

This summer a new contest is coming to Washington County! We will be challenging our youth and adults to put their gardening skills to the test with a Pumpkin Growing Contest. Information and seeds will be distributed at a Pumpkin growing class before the contest begins. Save the date for June 18th and wait for more information to follow!

April To Do's

If you haven't cut your perennials back, do it before the new growth starts.



Pinch off the spent flowers from spring bulbs before they make seed heads. This will cause more food storage in the bulb and increase flower size and productivity for next year.

Don't cut spring flowering bulb foliage back until it turns completely yellow or brown.

Plant trees and shrubs now, spring rains will help them to get established before hot dry weather sets in.

Save money on fertilizer by adding organic matter to your flower and vegetable gardens.

You can plant tender bulbs such as canna, calla, and dahlia later in the month. Apply slow release fertilizer at planting.

If you haven't planted your spring vegetable garden due to the wet weather you still have time. You can plant potatoes, onions, cole crops, lettuce, peas, carrots, beets, etc. now.

If you started seedlings indoors gradually acclimate them to the outdoors. They will sun and wind burn easily. Give them 30 minutes to an hour the first day outdoors and gradually increase it in 30 minute to an hour increments for a week or so until they have toughened up.

Uncover your roses! Keep the mulch handy in case we have an extreme late cold snap like last year. Prune out any dead, damaged or diseased tissue.

Spray your lawn for broadleaf weeds. For more information stop by the Extension Office and pick up the publication AGR-78.

Don't apply nitrogen fertilizer to your lawn in the spring.

Sharpen mower blades and change the oil in you mower before making your first cut of the season.

After flowering spray fruit trees with an all purpose fruit tree spray. Never spray while in flower you will kill the bees that you desperately need for pollination.

Apply a fresh layer of mulch to your landscape beds.

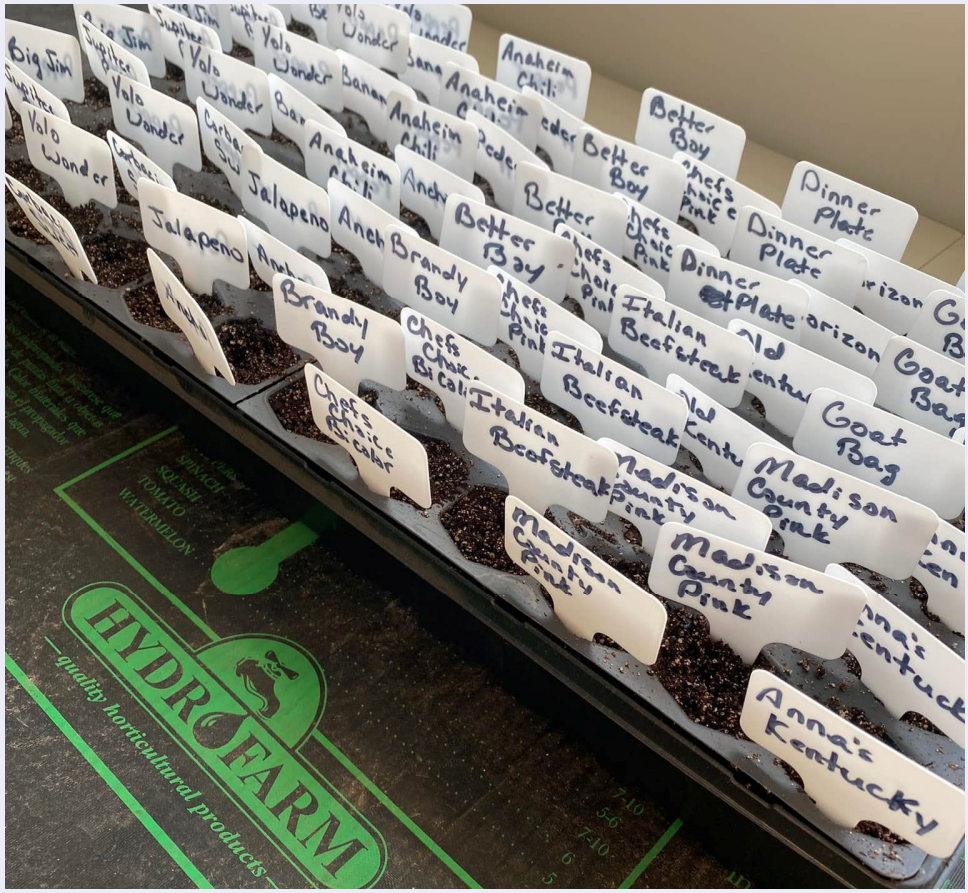
Plant your mail order or bare root plants as soon as possible.

If you haven't cut your blackberry canes that fruited last year back do it now before the new growth begins.

Depending on the Raspberries you are growing you should cut back the canes that fruited last year. If you are growing the varieties that fruit on new and old wood cut them back to the ground if you didn't do it last fall. These will grow all summer and give you a large crop in late summer and fall.

10 Keys To Starting Seeds At Home

Have you been looking through the ton of seed catalogs that have been popping up in your mail box since late fall? Do you look through them and make notes about varieties you want and admire the new exotic looking plants? Do you think, oh, I can just buy one or two of those this spring at the garden center? Think back to last spring, were you disappointed when you went to buy those new and different varieties and the garden center had the same old petunias, geraniums, zinnias, and whatever else you can think of?



I have got the answer for you. Start your own plants at home. You can save money and get the varieties you want and it's really not that hard. You simply need to follow a few simple rules and have patience and a nurturing attitude. I am going to give you ten tips to starting plants at home.

(1.) Buy quality seed from a reputable dealer. Look on the back of the packets of seeds, somewhere usually at the bottom it will have a packed by date. It should have the current year's date which would be 2022 for this year's growing season. If you save seeds or have seeds from previous years, storage is the key to longevity. Many seeds can be viable for up to 10 years if stored properly. Contrary to popular belief the freezer is not the best place to store seeds. Actually, the refrigerator is the best place. Seeds need a cool (not cold) dark place with low humidity.

If you have old seed it's easy to do a germination test. Simply dampen a paper towel, place ten seeds on the towel, fold it and put it in a zip lock bag and place it on the top of the refrigerator. Seeds should sprout in a few days. Count the number that sprouted, if 6 out of ten germinated then you have a 60% viability rate and you should increase the number of seeds you sow accordingly.

2.) Only use a high quality germination mix. Ideally it should be fine and not clumpy or hard. This is one area where cheaper is not better. Many of the name brands such as jiffy mix etc. are good enough. If you have larger seeds such as tomato the jiffy pellets work great.

(3.) It's always a good idea to use wide flat containers for seed starting. It reduces the amount of soil you will have to use and it will be a little more forgiving if you over water. Regular trays you buy plants in are fine but be sure to wash them with a 10% bleach solution and rinse them well before using. Peat pellets will relieve some of the issues with containers but they will dry out much faster.

(4.) Firm seeds in after sowing. It is imperative that they make good contact with the soil. Dry pockets can dry out newly emerged roots quickly thus killing a seedling before it really gets started. Be sure to mist them in well. Maintain moisture but be sure not to have the media dry or soggy, just moist.

(5.) Cover trays with plastic wrap or a humidity dome sold at a large department store, you can guess which one.

10 Keys To Starting Seeds At Home

Keep in mind not to put these in direct sun and don't make it air tight. With a cover the sun can heat up the flat too much and if the wrap is sealed down it can lock in too much moisture. Just leave the corner unsealed or if you are using a humidity dome turn it to one side or the other to allow some air exchange.

(6.) Keep seed warm to encourage germination. The top of the refrigerator is a good place but remember the plants will stretch quickly upon germination, so just as soon as you see one starting to come up move the flat to light. Another way to warm the flat is to place it on a heating mat for germinating. There are several to choose from but the cheapest ones are for one flat and keeps the temperature of the flat around 70 degrees which is adequate for most seeds. Remember if you are going to place your flats somewhere to keep them warmer than the actual temperature they will dry out faster than they would otherwise.

(7.) The most important aspect of starting seeds indoors is light. Most people get disgusted with starting seeds indoors because their plants stretch from lack of adequate lighting. Once your plants germinate they are going to need the sunniest window you can provide and that may not be enough. You can provide additional light by hanging a fluorescent light or grow tube over them to increase wave length. Using grow lights is another way to grow plants if you don't have adequate window space or exposure. The lights should be hung as close to the plants as possible without touching them. Usually 14-16 hours a day is adequate but it won't hurt if you leave them on all the time. Plants don't need to sleep.

(8.) Another problem many people have is spindly or weak plants. While this usually is from lack of light there are a few things you can do to strength the plants. If you are growing in a window turn the plants a quarter turn each day to keep them upright. Rub your hands across the tops of the plants a couple of times per week. This will simulate wind and cause the stems to become more rigid and less likely to stretch as much. You should do this even if you are growing under grow lights.

(9.) Feed your plants. Proper nutrition is the key to developing good transplants. Most seed starting mixes contain a small amount of fertilize to get the plants started but its not enough to really get them growing well. Once the first set of true leaves emerges its time to give them half strength water soluble fertilize on a once or twice weekly basis.

(10.) How many of you started plants indoors only to watch them cook as soon as they went outdoors. Remember, if not acclimated plants will sunburn just like people. To harden off your plants place them in direct sun for a couple of hours one morning and gradually increase their exposure form 1-2 hours to 2-4 hours and so on. After about a week your plants will be hardened off and ready for the garden.

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We Are On The Web!!!

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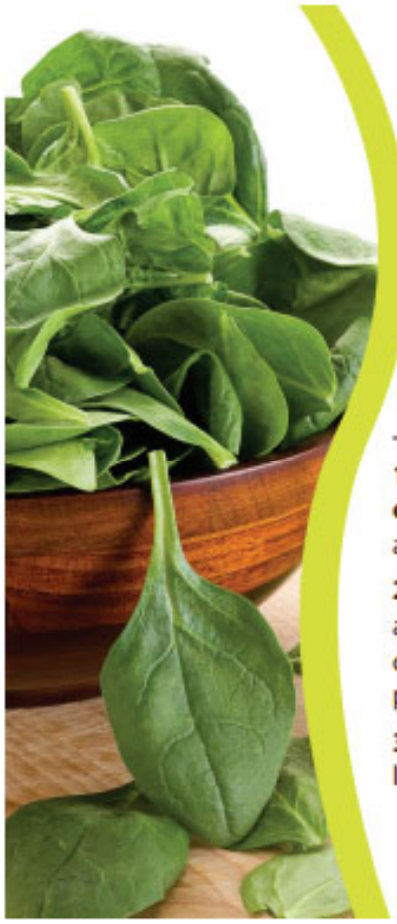
University of Kentucky
College of Agriculture, Food and Environment
Cooperative Extension Service

Dennis Morgeson

Recipe of The Month



Spinach Slaw

2 cups chopped iceberg lettuce
2 cups chopped red cabbage
2 cups chopped green cabbage
1½ cups fresh spinach
¼ cup canola mayonnaise
¼ cup hummus, original flavor
2 tablespoon local honey
½ teaspoon garlic powder
⅛ teaspoon salt
⅛ teaspoon pepper

1. Wash, quarter, and **core** lettuce, red cabbage and green cabbage.

2. Thinly slice lettuce and cabbage quarters; chop slices into small pieces.

3. Wash and tear spinach leaves into small pieces.

4. Whisk together mayonnaise, hummus, honey, garlic powder, salt and pepper until ingredients are mixed well. **Toss** dressing with vegetables until coated thoroughly. **Refrigerate** for 30 minutes before serving.

Yield: 8, 1 cup servings.

Nutritional Analysis:
70 calories, 3.5 g fat, 0 mg cholesterol, 135 mg sodium, 11 g carbohydrate, 2 g fiber, 6 g sugar, 2 g protein.

Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers' market, or roadside stand.

Plate it up! Kentucky Proud