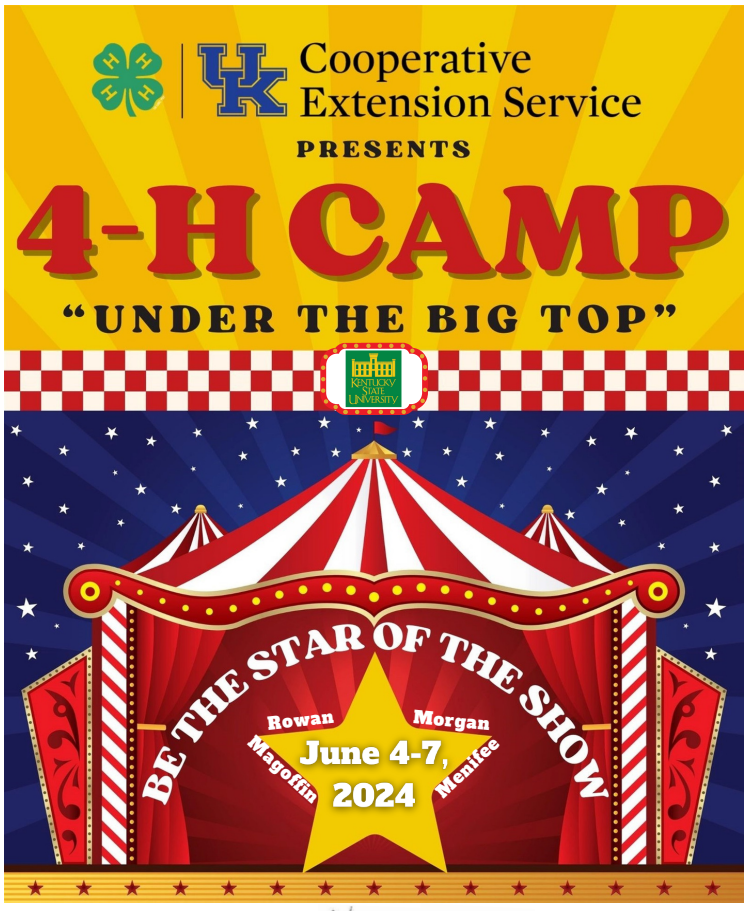
Martin-Gatton College of Agriculture, Food and Environment

MARCH 2024

Agriculture & Natural Resources Newsletter

Magoffin County
15 Rockhouse Fork Rd
Salyersville, KY 41465
(606) 349-1236
magoffin.ca.uky.edu



Kristen Stumbo
County Extension Agent for Agriculture & Natural Resources

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MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

Lexington, KY 40506

Growing Your Own Transplants

Source: ID-128: Home Vegetable Gardening in Kentucky

Why Grow Your Own Transplants?

Having the varieties you want when you want to plant them—that's the great advantage of growing your own transplants. The flip side of that coin is quality. If you can't provide good growing conditions, particularly plenty of bright light for growing seedlings, the quality of your homegrown plants may not be all you desire. The big advantage of growing transplants yourself is the wide choice of varieties available in seed. People who produce transplants commercially tend to concentrate on a few popular varieties of each crop. Seed catalogs offer a much wider selection. If you plant the seeds at the appropriate time and the seedlings grow well for you, you can have transplants that are just the right size for planting in the garden at just the right time (Table 20.6). You can have cool-weather crops like broccoli and kohlrabi to plant early in the spring and again in midsummer for a fall crop. And you can have warm-weather crops like tomatoes for planting after the danger of frost is past.

Materials

You can successfully grow vegetable transplants indoors or outdoors if you use a suitable growing structure. While a greenhouse is not essential, being able to control temperature, light, moisture and ventilation is crucial. Day temperatures should be between 60° to 65°F for warm-season crops. Keep the soil moist but not soggy. You can buy all the materials you need for starting transplants under different brand names from local garden supply centers or through seed and garden supply catalogs. Plant starting kits containing all the necessary equipment are also available. Some have the seed already planted; you only need to add water and put them in a suitable growing area. Fertilize the plants when the second true leaves appear. Use a liquid fertilizer, such as 20-20-20 or liquid fish emulsion, at rates recommended on the package. Fertilize again in another week or two. Pots made of peat are good for growing transplants, because plant roots can easily grow through the sides. Do not remove the peat pot when you transplant, and it will gradually decompose. Keeping the plants in the same container reduces transplant shock and helps produce crops a few days earlier than scheduled. You can use egg cartons and paper cups, but be sure to punch holes in the bottoms for good water drainage. Also, cut away these containers before transplanting. Put individual pots in plastic, metal or wooden trays for growing and for convenience when you water and handle them.

Growing Transplants Indoors

For indoor growing, sow seeds in a plant tray containing an artificial growing medium of peat moss and perlite available at garden centers. Adding compost to the potting media at up to 25% of total volume can reduce the need for fertilizers later and potentially encourage seed germination. Enclose the seeded trays in a plastic bag and keep them at room temperature until seedlings begin to emerge. Then, remove the plastic and transfer the trays to suitable growing areas.

Growing Your Own Transplants Continued…

The average windowsill is one location for growing plants, but it usually does not get enough light. So, you have to use artificial light to supplement. Use cool white fluorescent lamps alone, a mixture of cool white and warm white fluorescent lamps, or a mixture of cool white and plant growth fluorescent lamps. Locate the lamps 5 to 10 inches from the foliage and operate them 12 to 18 hours/day. Be sure to keep seedlings cool enough (60° to 65°F) for strong, sturdy growth after they germinate.

Plants should be "hardened off " about two weeks before planting them in the garden. That is, you toughen the plants so that they can withstand the outside environment. To do so, begin exposing them to lower temperatures. One way is to take your transplants outside in the daytime and bring them in at night. However, don't let them get caught in a frost. Reduce your watering and fertilizing of transplants to help "hardening off " about one week before transplanting. Do not let them dry out and wilt, however.

Table 20.6. Transplant production data.

Crop	Weeks from Seeding to Transplanting[4]	Average Seedling Date	Seed Depth (in)	Seed Spacing		Soil Temp. (°F) Needed for Seeds to Germinate	Average Days to Emerge	Satisfactory Growth Temp.	
				Seeds/ in	Rows Apart (in)			Day (°F)	Night (°F)
Cool Season[1]									
Broccoli[2]	5-7	Feb 5, July 1	¼	8	2	80	4-6	65	60
Brussels Sprouts	5-7	Feb. 5, July 1	¼	8	2	80	4-6	65	60
Cabbage	5-7	Jan. 20, July 1	¼	10	2	85	3-5	55	50
Cauliflower[2]	5-7	Jan. 25, July 1	¼	8	2	80	4-6	65	60
Lettuce	5-7		¼	--	2	75	2-3	60	50
Onion	10-12		¼	--	2	75	4-5	65	55
Warm Season									
Cucumber[3]	3-4	April 1	1	2 seeds per 4" x 4" pot, thinned to 1		95	3-6	75	70
Muskmelon[3]	3-4	April 1	1			90	4-6	75	70
Squash[3]	3-4	April 1	1			95	5-7	75	70
Watermelon[3] (seeded)	4-6	Mar. 25	1			85	4-6	75	70
Watermelon[3] (seedless)	4-6	Mar. 25	1			90	4-6	75	70
Tomato	4-7	Mar. 15	½	10	2	80	7-9	70	60
Eggplant	6-8	Mar. 10	¼	10	3	80	7-9	75	70
Pepper	6-8	Mar. 10	¼	10	2	80	8-10	70	65

[1] Cool-season crops are frost tolerant and can be set in the garden before the last frost. Warm-season crops are susceptible to frost and should not be set until the danger of the last frost is past.
[2] Do not allow broccoli or cauliflower to become deficient in nitrogen or water or exposed to cold temperatures when they are small.
[3] Seed into individual containers (peat) that may be placed directly into the soil, because these crops will not tolerate root disturbance.
[4] Allow an extra two weeks growing time if grown in plant beds.

Moving Transplants to the Garden

Whether you buy plants or grow your own, the time comes to plant them outside. Transplanting gives a plant more space to develop, but it will temporarily check growth, not stimulate it. Therefore, for successful transplanting, try to interrupt plant growth as little as possible. In doing so, peat pots give you an advantage, even though they are expensive, because they do not have to be removed. Follow these eight steps when transplanting:

1. Transplant on a shady day in late afternoon or in early evening to prevent wilting.
2. Soak transplants' roots thoroughly an hour or two before setting them in the garden.
3. Handle the plants carefully. Avoid disturbing the roots.
4. Dig a hole large enough to hold the roots. Set the plants to the lowest leaf at recommended spacings. Press soil firmly around the roots.
5. Pour 1 cup of starter solution in the hole around the plant. Starter solutions are high analysis fertilizer solutions for rapid transplant root development. To prepare, mix plant food with 15-30-15, 10-53-17 or 20-20-20 analysis at the rate of 2 Tbs/gallon of water. Any liquid organic fertilizer, like fish emulsion, can also be used as a started solution by following the recommendations on the package.
6. Put more soil around each plant, but leave a slight depression for water to collect. Break off any exposed parts of peat pots so that they will not act as wicks and pull water out of the soil.
7. Shade the plants for a few days after transplanting on a very hot day by putting newspapers or cardboard on their south sides.
8. Water the plants once or twice during the next week.


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YOUR COMMUNITY
ELEVATES KY LEADERS
GIVE $10 WITH EACH AG TAG AND
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HALF OF THE FUNDS FOR 4-H AND FFA COME
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INVEST DIRECTLY INTO THE
FUTURE OF KENTUCKY
AGRICULTURE. DONATIONS ARE
DIVIDED EQUALLY BETWEEN FFA,
4-H AND KENTUCKY PROUD WITH HALF
GOING DIRECTLY BACK TO YOUR COUNTY.
THANK YOU FOR YOUR SUPPORT.
JONATHAN SHELL
Commissioner of
Agriculture
KENTUCKY
4-H FOUNDATION

Upcoming Programming

March

Programs marked with ** will qualify for CAIP Education.

- March 5th- Maple Syrup Basics **
  5:30pm @ Magoffin County Extension Office

- March 7th- Safe Cattle Handling **
  5:30pm @ Magoffin County Extension Office

- March 12th- Grafting Classes **
  12:00pm @ Magoffin County Ext. Office (Lunch & Learn)
  5:00 @ Magoffin County Extension Office

- March 15th- Senior/ WIC Voucher Training (**for Farmers Market Vendors only**)
  1:00pm @ Magoffin County Extension Office

- March 21st- Beekeeping for Beginners **
  5:30pm @ Magoffin County Extension Office

- March 28th- Backyard Poultry **
  5:30pm @ Magoffin County Extension Office

Please Call the Magoffin County Extension office at 606-349-1236 to register for these classes

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

Lexington, KY 40506

Receipt No. _____

Martin-Gatton College of Agriculture, Food and Environment

2024 Plant Order Form

Cooperative Extension Service

Magoffin County
15 Rockhouse Fork Road
P.O. Box 349
Salyersville, KY 41465
(606) 349-1236

Purchaser Information:

Name: _____

Address: _____

City, State, Postal Code: _____

Telephone: _____

Email: _____

Quantity	Item	Unit Price	Total
_____ bundles	Strawberries (Allstar) (June bearing—larger berry)	$6.50 (bundle of 25)	
_____ bundles	Strawberries (Earliglow) (June bearing—smaller, sweeter berry)	$6.50 (bundle of 25)	
	Blackberries (Natchez)	$4 each	
	Blueberries (Duke) (two varieties needed for pollination)	$9 each	
	Blueberries (Chandler) (two varieties needed for pollination)	$9 each	
	Raspberries (Prelude) - bare root	$4 each	
	Jewel Black Raspberries	$4 each	
	Asparagus (Millennium)	$1 each	
_____ bundles	Onion plants (Candy)	$5 (bundle of 60)	

Pre-payment is required by Tuesday, March 12, for all plant orders.
Make checks payable to: MC ext non-tax fund

Payment Information:

Amount Paid: _____

Date: _____

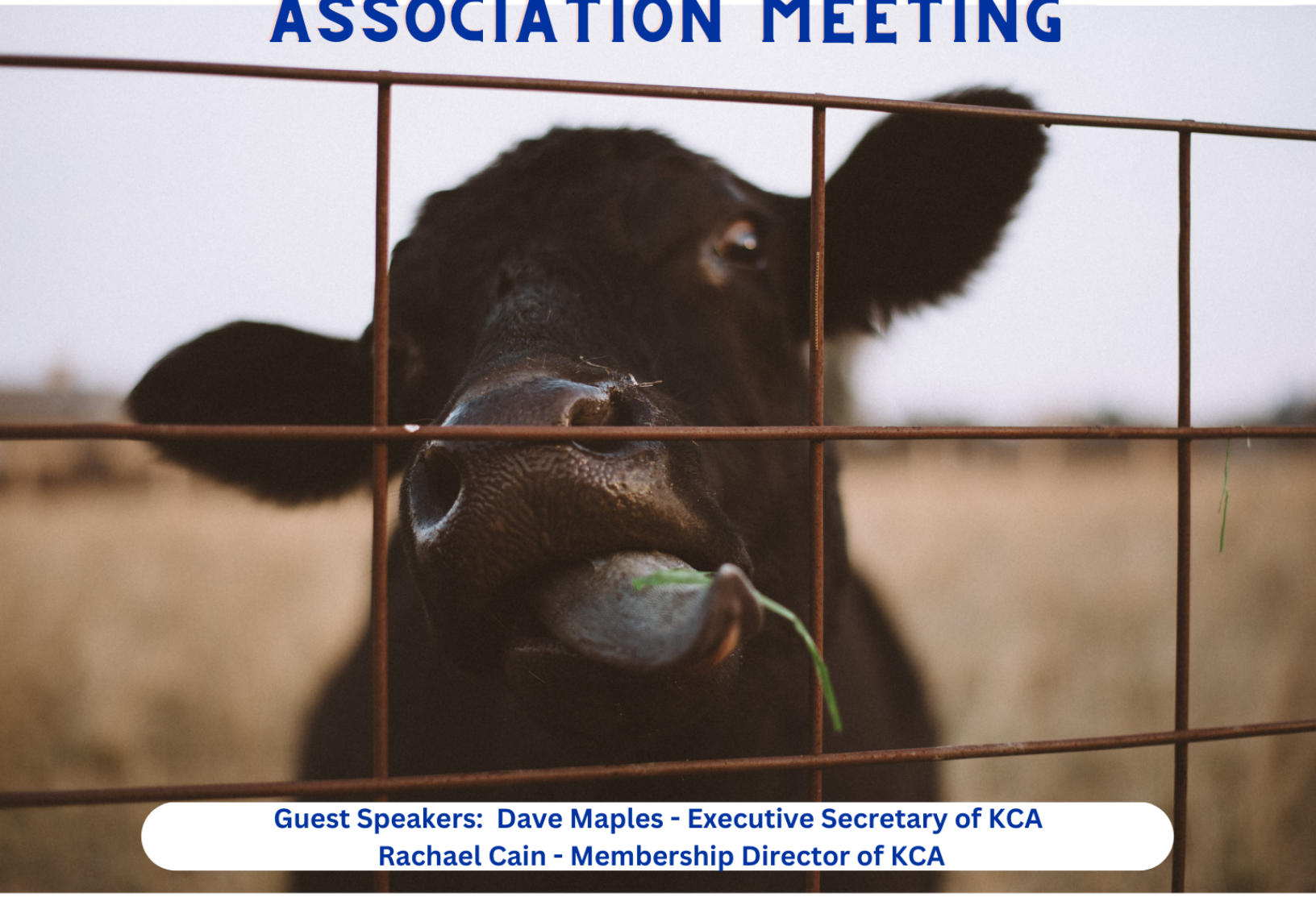
Received by: _____

Check No.: _____ or Cash _____

Plants are expected to ship from the nursery during the first full week of April. We will give you a call to let you know when the plants will be available for pickup.

Martin-Gatton
College of Agriculture,
Food and Environment

HIGHLANDS BEEF CATTLE ASSOCIATION MEETING



Guest Speakers: Dave Maples - Executive Secretary of KCA
Rachael Cain - Membership Director of KCA

Tuesday, March 19th
6 p.m.

Boyd County Extension Education Center
Franks Building
1758 Addington Road
Ashland, KY

Lyndall Harned
County Extension Agent for
Agriculture and Natural Resources.

For more information, contact your local ANR Extension Agent

- Boyd (606) 739-5184
- Floyd (606) 886-2668
- Johnson (606) 789-8108
- Lawrence (606) 673-9495
- Magoffin (606) 349-3216

Cooperative
Extension Service

Magoffin County
P.O. Box 349
Salyersville, KY 41465

Honey Raisin Muffins

½ cup + 2 tablespoons all purpose flour

½ cup + 2 tablespoons whole wheat flour

¾ teaspoon baking powder

¼ teaspoon baking soda

1 teaspoon ground cinnamon

¼ teaspoon salt

2 cups bran flake cereal with raisins

1 cup skim milk

½ cup honey

2 egg whites

3 tablespoons unsweetened applesauce

2 tablespoons canola oil

1. **Combine** flours, baking powder, baking soda, cinnamon and salt in a bowl and set aside.
2. In a large mixing bowl, **combine** cereal, milk and honey; let stand for 2 minutes to soften. **Stir** in egg whites, applesauce and oil; **mix** well.
3. **Add** dry ingredients and stir until moistened.
4. **Fill** a greased or paper-lined muffin pan ⅔ full.
5. **Bake** at 400°F for 15-18 minutes.
6. **Cool** 10 minutes before removing from pan.

Yield: 12 muffins.

Nutrition Analysis:
150 calories, 3 g fat, 0 mg cholesterol, 170 mg sodium, 30 g carbohydrate, 2 g fiber, 15 g sugar, 4 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