Martin-Gatton
College of Agriculture,
Food and Environment

Cooperative Extension Service
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Summer 2024 Agriculture Newsletter

Wayne Kirby,
ANR Agent

Important Dates

- **May 21st @ 7:00 p.m. - Knox County Cattlemen's (Glenn Williams will be presenting educational program.)**
- **June 18th @ 11:00 a.m. – 1:00 p.m. - FSA and NRCS Open House**

Cooperative Extension Service

BASICS OF BACKYARD CHICKENS

Make sure you check your local city and county ordinances to ensure you're able to have a backyard flock.

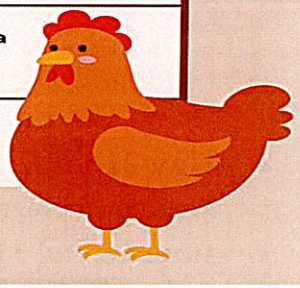
Chickens require daily care. You must feed them, provide clean water and collect eggs every single day.

Birds get sick and it may be difficult to find a veterinarian to provide care for them.

Cleanliness and sanitation are critical elements in caring for a small flock. Everyone must wash their hands before and after handling the birds.

Chickens stop producing eggs at some point and may live a long time beyond their egg-laying years.

Know how to get chicks. You will most likely want to raise your hens from chicks.



Source: Jacquie Jacob, Extension poultry project manager
An Equal Opportunity Organization.

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Keep your home pest free!

To address pest infestations, some may use pesticides to restore order to their gardens, landscapes, and indoor spaces.

Here are several strategies to keep in mind:

- **Select the appropriate pesticide**
- **Follow the pesticide label instructions**
- **Avoid combining pesticides with household items**
- **Wear protective clothing**
- **Keep away from children and pets**
- **Thoroughly clean after applying the pesticide**
- **Store pesticides safely**

For more information on managing insect pests and pesticide use, contact your local county extension office!

Source: Ric Bessin, UK Extension Entomologist
An Equal Opportunity Organization.

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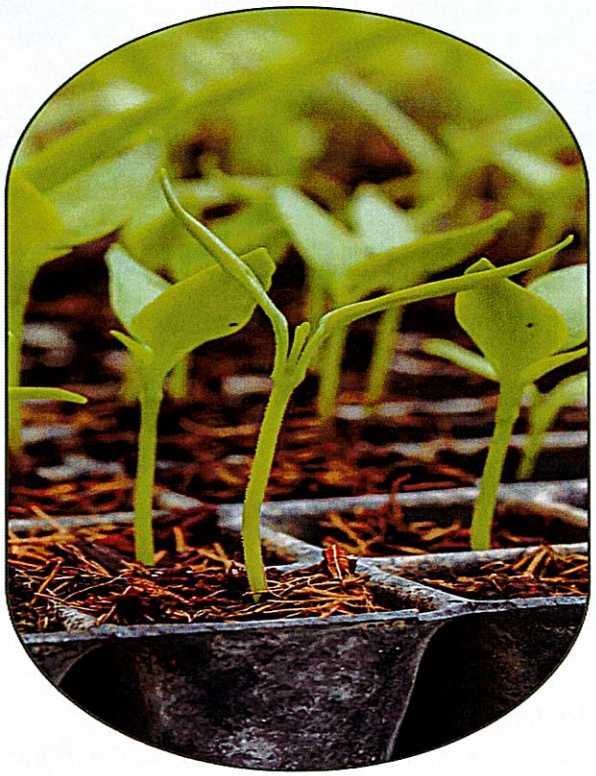
Moving Transplants to the Garden



Whether you buy plants or grow your own, the time comes to plant them outside.

Follow these eight steps:

1. Transplant on a shady day to prevent wilting
2. Soak transplants' roots thoroughly before transplanting.
3. Handle the plants carefully.
4. Dig a hole large enough to hold the roots.
5. Pour 1 cup of starter solution around the plant.
6. Leave a slight depression for water to collect.
7. Shade the plants for a few days after transplanting by putting newspapers or cardboard on their south sides.
8. Water the plants once or twice during the next week.

Learn more by checking out Home Vegetable Gardening in Kentucky (ID-128).

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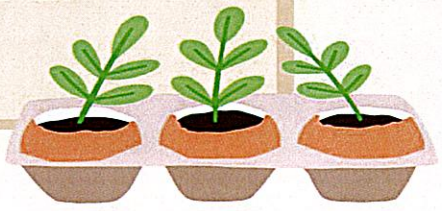
Effective strategies to prevent plant diseases in your garden

- Select the right location for your garden. Opt for a sunny, well-drained area.
- Choose disease-resistant plant varieties.
- Crop rotation can help prevent the buildup of soil-borne diseases.
- Maintain a weed-free garden throughout the growing season.
- Avoiding mechanical injury to plants can prevent openings for pathogens.



Source: Rick Durham, extension professor, Department of Horticulture

Watch for Thrips in High Tunnels

There have been several reports of thrips on high tunnel vegetables this past week. As thrips feed on developing tissues in the bud of the seedlings, infested plants often display distorted new growth emerging from the growing point. Ideally, producers should be scouting for the signs of thrips and other insect pests at least once a week in their high tunnels.

Damage & Scouting

Thrips are extremely small and difficult to see (Figure 1) even when on the surface of the leaf, but in the case of vegetable transplants, they are often hidden in the buds. As thrips feed in the bud with their piercing-sucking mouthparts, they damage the tissue. As a result, the new leaves emerging from the bud can be severely distorted (Figure 2)

Figure 1. Thrips damage and their waste material (tar spots) on leaves (Photo: Ric Bessin, UK).

Figure 2. *Thrips damage buds, causing irregular new growth (Photo: Annette Heisdorffer).*

So, when scouting for thrips, examine plants and look for the evidence of their feeding damage (distorted tissues) rather than for the tiny thrips themselves. Once you find the damage, examine the area to see if thrips are still active since the damage remains long after the thrips may have disappeared. To do this, tap a few plants over an index card to dislodge thrips; they are easier to see as the move on the card (Figure 3).

Figure 3. *Tapping plant parts over an index card to dislodge tiny thrips is a simple scouting tool (Ric Bessin, UK)*

Management

In terms of sprays for thrips for vegetables and vegetable transplants, page 102 of *Vegetable Production Guide for Commercial Growers* (ID-36) breaks out the insecticides for thrips that can be used on fruiting vegetables in the greenhouse or high tunnel. For crops grown in the greenhouse or high tunnel, producers need to select a product with a pre-harvest (PHI) interval that fits their picking schedule. PHIs for high tunnel tomato miticides range from 0 to 7 days.

Ric Bessin, Entomology Extension Specialist

OFF THE HOOF

Martin-Gatton College of Agriculture, Food and Environment

KENTUCKY BEEF CATTLE NEWSLETTER MAY 1, 2024

Cooperative Extension Service
University of Kentucky

Each article is peer-reviewed by UK Beef IRM Team and edited by Dr. Les Anderson, Beef Extensio
Department of Animal & Food Science, University of Kentucky

Beef IRM Team

Timely Tips

Dr. Les Anderson, Beef Extension Professor, University of Kentucky

Spring Calving Cow Herd

- Continue supplying a high magnesium mineral until daytime temperatures are consistently above 60 degrees F.
- Improve or maintain body condition (BCS 5) of cows before breeding season starts. If necessary, increase energy intake even on pasture.
- Bulls should have a breeding soundness evaluation (BSE) well before the breeding season (at least 30 days). Contact your local veterinarian to schedule a BSE for your herd sires. They should also receive their annual booster vaccinations and be dewormed. I often get questions regarding deworming and reduced fertility in bulls. Dr. Phil Prater at MSU and I examined this and found no effect of deworming on bull fertility.
- Schedule spring "turn-out "working in late-April or early-May, i.e. at the end of calving season and before the start of breeding season. Consult with your veterinarian about vaccines and health products for your herd.
  "Turn-out" working for the cow herd *may* include:
  - Prebreeding vaccinations
  - Deworming
  - Replacing lost identification tags
  - Sort cows into breeding groups, if using more than one bull
  - Insecticide eartags (best to wait until fly population builds up)

  "Turn-out" working of calves may include:
  - Vaccinate for IBR-PI3, Clostridial diseases and Pinkeye
  - Dehorn, if needed (can be done with electric dehorner and fly repellent during fly season)
  - Castrate and implant male feeder calves (if not done at birth)
  - Deworm
  - Insecticide eartags
- Consider breeding yearling replacement heifers one heat cycle (about 21 days) earlier than cows for "head-start" calving. Mate to known calving-ease bulls.
- Record identification of all cows and bulls in each breeding group.
- Begin breeding cows no later than mid-May, especially if they are on high endophyte fescue. Cows should be in good condition so that conception occurs prior to periods of extreme heat.
- Consider synchronizing estrus in all cows. Exposing late-calving cows and first-calf heifers to a progestin (MGA feed or CIDR device) for 7 days before bull turn out increases pregnancy rates and shortens the next calving season.
- Choose the best pastures for grazing during the breeding season. Select those with the best stand of clover and the lowest level of the fescue endophyte, if known. Keep these pastures vegetative by grazing or clipping. *High quality pastures are important for a successful breeding season.*

- If using **artificial insemination:**
  - Use an experienced inseminator.
  - Make positive identification of cows and semen used. This will permit accurate records on date bred, return to heat, calving date, and sire.
  - Good handling facilities and gentle working of the cows are essential.
  - Choose AI sires that will meet <u>your</u> goals and resist the temptation to get your cows bigger. Using sires with higher accuracy EPDs will reduce risk.
- Observe breeding pastures often to see if bulls are working. Records cows' heat dates and then check 18-21 days later, for return to heat.

<u>Fall Calving Cow Herd</u>

- Contact your veterinarian and pregnancy diagnose the cow herd. If a large animal veterinarian is not available in your area, consider taking blood samples for pregnancy diagnosis. Remove open cows at weaning time.
- Plan marketing program for calves. Consider various options, such as maintaining ownership and backgrounding in a grazing program, or precondition and sell in a CPH-45 feeder calf sale.
- Initiate fly control for the cows when fly populations build up.
- Calves may be weaned anytime now but you can take advantage of the spring grass by leaving them on the cow a while or weaning and grazing.

<u>Stockers</u>

- Keep calves on good pasture and rotate pastures rapidly during periods of lush growth. Manage to keep pastures vegetative for best performance.
- Provide mineral mix with an ionophore.
- Implant as needed.
- Control internal and external parasites.

<u>General</u>

- Harvest hay. *Work around the weather and cut early before plants become too mature. Harvesting forage early is the key to nutritional quality.* Replenish your hay supply!
- Rotate pastures as needed to keep them vegetative.
- Clip pastures to prevent seedhead formation on fescue and to control weeds.
- Seed warm season grasses this month.

Small Ruminant Boot Camp & FAMACHA/SRQA Certification

Register at https://www.kysheepandgoat.org/product-page/small-ruminant-boot-camp-and-famacha-srqa-certification

Price: $25– includes 1 FAMACHA & SRQA Certifications

June 1, 2024

Wolfe County Extension Office

Registration Deadline: May 27th

Hosted By:

KENTUCKY AGVETS
Connecting Kentucky Veterans with Agriculture Opportunities

Kentucky SHEEP & GOAT DEVELOPMENT OFFICE

Kentucky SHEEP & WOOL PRODUCERS ASSOCIATION

KENTUCKY GOAT PRODUCERS ASSOCIATION

Online
Participants will receive links to six video lectures prior to the in-person clinic (**videos must be completed prior to June 1st**):

- Parasitology 101 & Intro to Quality Assurance– May 13
- Dewormers and Treatment Strategies & Proper Use of Medications and Antibiotics– May 20
- Rotational Grazing for Parasite Resistance & Record Keeping, Biosecurity, and Animal Welfare– May 27

In-person Clinic, 9:15am-12:15pm, June 1, 2024
Wolfe County Extension Office, 20 Washington St, Campton, KY 41301

Check-in
SRQA Test
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United Producers, Inc. Bowling Green, KY

Early blight, gray leaf mold, gray leaf spot, Septoria leaf spot. Management of foliar diseases begins with disease-free transplants. A sound foliar fungicide program is essential for control of these diseases during wet years. Varieties with some resistance or tolerance will reduce, but not eliminate, the need for fungicides. In general, *early maturing varieties are more susceptible to early blight than later maturing ones.* It is possible to lengthen spray intervals from seven days to 10 days for early blight control with resistant varieties such as Mountain Fresh Plus—see variety table—assuming *Septoria* is not also active. Rotate away from solanaceous crops for two or more years, and control weeds during the rotation. Strobilurins (Quadris, Cabrio) are excellent materials for control of these diseases. See tables for rates, timings, and other instructions. Rotation with protectant fungicides (chlorothalonil, mancozeb, or Ziram) is a must. During wet seasons or with fall crops, start sprays within three days of transplanting and repeat at seven- to 10-day intervals; closer intervals are needed during wet seasons or with high disease pressure. During dry seasons, it is possible to wait until first symptoms before starting sprays; however, applications should be started by mid- to late June for spring plantings, regardless of weather conditions. Maintain rapid growth through proper fertilization to minimize disease. Crop rotations used for other diseases are an aid to control.

Fusarium wilt, verticillium wilt. Plant varieties with "VF" resistance (see variety table). Avoid fields with a history of Verticillium wilt. Preplant soil fumigation is economical only with high-value, fresh-market tomatoes (see "Soil Fumigants for Control of Nematodes and Soilborne Diseases" on page 16). If wilt disease occurs in a resistant variety, have it correctly diagnosed by the UK Diagnostic Lab.

Late blight. This disease is an infrequent problem; however, notable outbreaks occurred in 2009 and 2010. A fungicide program designed for early blight should be adequate to manage late blight. Under very strong disease pressure, chlorothalonil will perform better than fixed coppers and mancozeb. Presidio, Ranman, Revus, Tanos, and mefenoxam (Ridomil Gold Bravo, Ridomil Gold MZ, Ridomil Gold Copper) may be needed under severe disease pressure; see tables for rates and timings. Mefenoxam-resistant (tolerant) strains of the late blight fungus have been found in Kentucky, so products containing this active ingredient are less likely to be effective than some of the other materials that are available.

Nematodes. Some root-knot-resistant varieties are available. Rotate away from tomatoes and related crops frequently; two years to tall fescue provides excellent control of root-knot. Soil samples can be submitted for quantification of nematode populations where nematode problems have been diagnosed. Submit samples to either a commercial lab or a university lab in another state, as this service is not provided by the University of Kentucky (diagnostic services only are available). Use preplant soil fumigation where nematode populations are moderate to high and where rotation is not practical. See "Soil Fumigants for Control of Nematodes and Soilborne Diseases" on page 16 for more information.

Sclerotinia stem rot (timber rot) and Botrytis fruit and stem rot. Avoid setting infected transplants into the field, and do not use fields with a history of *Sclerotinia*. Take steps to improve air movement in the planting. No fungicides are labeled for control of Sclerotinia, but several are registered for suppression of Botrytis. Endura is labeled for *Botrytis* but has significantly reduced *Sclerotinia*, too, in some tests when used soon after transplanting.

Powdery Mildew. This disease is most likely to occur in greenhouses and high tunnels, but can be found on field-grown tomatoes in drought years. Fungicide programs typically suppress powdery mildew. Use Rally 40 WSP where disease pressure is severe. See tables for products and rates.

Southern blight. Avoid fields with a history of this disease and rotate problem fields with sod crops. *Sclerotium rolfsii*, the causal agent, has a wide host range and is common in Kentucky on tobacco, soybeans, white clover, peppers, and tomatoes. Deep plow to bury sclerotia and crop debris. Remove and destroy infected plants promptly. PCNB (Terraclor) can be drenched around plants at transplanting or applied in-furrow to suppress Southern blight, and fluoxastrobin (Evito or Aftershock) is labeled as a soil-directed spray; see tables for products, rates, and instructions.

Viruses. The virus diseases commonly seen in Kentucky in tomato are tomato spotted wilt, tobacco mosaic, tomato mosaic, Potato Virus X, tobacco etch, cucumber mosaic, Potato Virus Y, and alfalfa mosaic. Viruses can be difficult to control, but the following guidelines are helpful in managing virus diseases. Produce transplants in isolation from thrips and their weed and ornamental crop hosts. Control weeds in tomato fields and maintain a weed-free zone around fields. To prevent spread of TMV, do not use tobacco products during seedling production or transplanting. Washing hands with soap and water before handling tomatoes should be mandatory. Production of heirloom tomatoes in conjunction with other fresh market cultivars increases the chances of TMV infection, since some heirloom seed sources are contaminated with TMV. Planting TMV-resistant tobaccos will greatly reduce the amount of available inoculum on farms where tomato and tobacco are grown together. Plant certified disease-free seed. Questionable seed lots should be treated with 10% trisodium phosphate (TSP) or bleach (see Appendix I). To avoid PVX in greenhouses, do not handle potatoes before working with tomato plants. Control weeds around fields or plant into sites surrounded by small grains or corn. Do not plant tomatoes near or adjacent to tobacco, potatoes, or peppers—the farther away, the better. Great disease reduction can be achieved by planting at least 200 yards away from these crops. The risk of TEV, PVY, and CMV is higher for fall plantings.

Sample Fungicide Program for Staked Tomatoes.

Refer to fungicide tables in this section for product rates; read product labels carefully before application.

Weeks After Transplanting	
1	mancozeb + copper + Actigard 50W
2	mancozeb + copper
3	strobilurin or other QoI inhibitor + Actigard 50W
4	mancozeb + copper
5	strobilurin or other QoI inhibitor + Actigard 50W
6	mancozeb + copper
7	strobilurin or other QoI inhibitor + Actigard 50W
8	mancozeb + copper
Weeks During Harvest	
9	chlorothalonil + copper
10	strobilurin or other QoI inhibitor + copper
11	chlorothalonil + copper
12	strobilurin or other QoI inhibitor + copper
13	chlorothalonil + copper
14	chlorothalonil + copper

Finish season with chlorothalonil + copper

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