



Extension Gardener

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Empowering gardeners. Providing garden solutions.

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Beautiful food gardens

If your backyard is too shady to grow your own food, but you're concerned that a vegetable garden in the front yard would be messy and unattractive, take heart. With proper planning and effort, you can grow seasonal vegetables that will enhance the entrance to your home—and your dinner plate. Keep in mind three key components: edging, evergreens, and upkeep.



Jeana Myers

First, pay attention to bed edges and keep them clean. Defined bed edges make the garden appear more managed and contained. You can create a clean garden edge with a heavy layer of mulch at the lawn line or by using stone, brick, or wood. Once the edge is defined, a regular run-through with a weed eater will keep that neat appearance.

Another way to define the edges is to garden in raised beds constructed of wood or stone that complement your home in color or form. Blend raised beds into the landscape by planting perennials or small shrubs on the side facing the street. Vegetables can also be grown in attractive pots, but remember that bigger is better for growing vegetables, and containers will likely need daily watering.

Evergreens are the second component to an attractive edible landscape. Because vegetables grow to maturity quickly, die, and are then replaced, there will be times when beds are empty or

plants are past their peak. Having evergreen plants and shrubs in place around the garden will hold the structure through the growing season. Rosemary and bay laurel are excellent evergreens for this purpose—and both are edible, too! Adding perennial flowers will tie the whole image together, especially when color, plant height, and flowering time coordinate beautifully with the vegetables.

The final important component of successful front yard gardens is upkeep. Because the vegetables are visible to you and your neighbors, keep dead leaves picked, old plants pulled, and gangly plants staked. A two-inch layer of mulch will keep weeds at bay and reduce your labor. If you grow vining vegetables or tall tomatoes, choose trellises that are sturdy and match the style of your home.

With neat garden edges, supporting evergreen structures, and regular upkeep, you can grow a beautiful food garden in the most public part of your landscape. Share the bounty with your neighbors and it won't be long before they have fresh vegetables gracing their entrances too!

— Jeana Myers



Jeana Myers

Extension Showcase

The Southern Ideal Home Show

Each year, Extension Master Gardener volunteers help thousands of North Carolina gardeners solve their garden problems. An opportunity for you to ask an Extension Master Gardener is coming up at the Southern Ideal Home Show in Raleigh. During the show, Extension horticulture agents, along with Extension Master Gardeners, work together to staff the Successful Gardener Learning Center, where guests can get answers to their gardening questions. You can also bring samples or pictures of weeds, insects, or diseases to the learning center for identification and control recommendations.

The show takes place twice each year, in the spring and fall, at the N.C. State Fairgrounds, 1025 Blue Ridge Road, Raleigh, NC. The spring show is April 5–7; Friday hours are noon–8:00 p.m., Saturday hours are 10:00 a.m.–8:00 p.m. and Sunday hours are 11:00 a.m.–5:00 p.m. Admission is \$9.00. Admission is free for children 14 and under accompanied by an adult. Friday is 55+ day: for those 55 and older admission is \$7.00 To find out more about the show and access money saving coupons, visit www.southernshows.com/hr. To learn about more opportunities to ask an Extension Master Gardener, contact your local Extension office.

— Shawn Banks

Smart Gardening — Sanitation: An important garden chore

Sanitation is an often-overlooked gardening chore that is especially important for greenhouses and indoor seed-starting areas. Maintaining a clean growing area will help prevent many serious disease problems. If you didn't do so at the end of last year's growing season, be sure to wash all dirt and debris off your gardening equipment before using it this year. Keep in mind that even if visible dirt is gone, invisible fungi, bacteria, and viruses can still remain on tools, flats, and pots, leading to infection in the upcoming crop.

A thorough cleaning is critical because soil and plant residues can prevent sanitizers from reaching disease-causing organisms. Apply sanitizers after equipment is washed. Most products will require swiping with a sanitizing wipe or dipping into a solution, followed by air-drying or rinsing. Some products are more corrosive than others and can damage metal if not rinsed sufficiently after treatment. A complete chart of treatments used for sanitizing tools, equipment, and pots is available online at <http://tinyurl.com/cbme2ex>.

Alternatives to chemical disinfectants include steam and solarization. Solarization involves placing gardening tools and equipment

on a clean, solid surface and covering tightly with clear plastic. Extension specialist Dr. Kelly Ivors advises that temperatures exceeding 140°F for four to eight hours per day over the course of seven days should kill most pathogens.

Other simple practices that will help reduce the spread of diseases include:

- Store tools and equipment off the ground when not in use.
- Prevent hose ends and watering wands from coming in contact with soil.
- Hang all watering equipment on walls or from suspended hooks when not in use.
- Remove diseased plant material from your garden immediately.
- Wash your hands frequently to avoid transmitting disease organisms.
- Use sanitizing wipes on pruners after each cut when disease is suspected.

For more suggestions on how to keep your greenhouse or indoor growing area clean, see this publication by Purdue University, *Sanitation for Disease and Pest Management*, available at: <http://www.extension.purdue.edu/extmedia/HO/HO-250-W.pdf>

— Bob Filbrun

Food Production — Growing citrus in containers

Many gardeners enjoy the challenge of growing unusual plants, especially if they produce something great to eat. Citrus fruits, which include oranges, grapefruit, lemons, and mandarins, fit this challenge. According to Alan Harper, a Kinston citrus grower, there is nothing better than taking a bite and having “the juice drip from your elbows.”

Even in coastal North Carolina, citrus trees must be grown in containers and brought indoors during winter. Most young citrus trees require a container at least 15 inches wide by 15 inches deep. Remember that as trees grow, they will require repotting. The amount of fruit produced is proportional to the plant's size. Keeping trees in pots that are too small can quickly limit the tree's production.

Citrus trees fruit best in full sun. As a

subtropical fruit, citrus requires protection from frost and freezing temperatures. Temporary covers or frost blankets can be used to protect trees from light frosts, but be sure to remove them when temperatures rise. If temperatures are expected to dip below 30°F, move trees indoors.

Proper watering of citrus trees can be problematic. Variables that affect how much and how often to water include tree variety, container size, temperature, humidity, and potting media. As with most plants, allow the top inch or two of the soil to dry out before watering. More frequent watering is needed when the plant is actively growing and temperatures are warmer. A general-purpose, water-soluble fertilizer with trace amounts of magnesium, manganese, copper, zinc, and iron will help ensure proper nutrition.

Citrus trees often develop a nice shape with very little pruning, but if long shoots or water sprouts emerge from the trunk or existing branches, remove them so that they do not compete with productive branches.

— Peg Godwin



Pest Alert — Moles

If you have moles in your yard this spring, then blame it on Valentine's Day. Moles mate in February, and as they prepare for the growing family, papa's honey-do list grows. The list consists of two items—expanding the estate and finding additional food. During the winter, earthworms and white grubs, which comprise the majority of the mole's diet, dig deeper in the soil profile to keep from freezing. When moles are forced to search for their prey at a variety of depths, tunneling becomes more extensive.

When warm weather returns and worms congregate at the soil surface, moles are able to find food more easily. Simultaneously, another surge of tunneling occurs, often in April and May when the cute little baby moles leave home. They are born in March and leave home when they are only four weeks old.

Luckily, mole tunnels don't hurt the lawn or flower bed. They are primarily an aesthetic problem. They can even be an asset by aerating clay soils. Unfortunately, few good solutions



Charlotte Glen

exist for getting rid of moles. Usually the mole problem persists for three to five years, and then they disappear for another three to five years. It is suspected that the three- to five-year cycles are how mole parents keep the young moles from returning home to freeload.

For more information on moles, check out the online Missouri Extension publication *Controlling Nuisance Moles*, or contact your local Extension office.

— Gary Pierce

Carolina Lawns — Steps to success with centipedegrass

Centipedegrass is supposed to be a low-maintenance grass that is easy to grow. For some people this is true, but others have a tough time with it. So what are the steps that will lead you to success?

First, all grasses grow best in full sun. Trying to grow centipede in shade will result in slow-growing, thin, and weedy turf that is more prone to drought stress due to tree-root competition and is more susceptible to diseases.

Second, sample soil to make sure the soil pH is correct and all nutrients are at suitable levels. Sampling boxes and information sheets can be picked up from your local Extension office. The N.C. Department of Agriculture will complete the analysis. Centipede prefers a pH around 5.5. This is lower than other grasses we grow in eastern N.C., which prefer the pH to be around 6.5. Do not fertilize centipede lawns before May at the coast and June further inland. Apply 5-0-15

at a rate of 10 pounds per 1,000 square feet.

Third, centipedegrass needs good soil drainage to remain free of damaging diseases like large patch. Good soil preparation, including tilling and leveling prior to lawn planting, will ensure good drainage. Core-aerating existing lawns will improve surface drainage. Topdressing with sand following aeration can help as well.

Fourth, be careful when choosing a weed control product. Centipedegrass is sensitive to herbicides during spring green-up and can be easily damaged by many weed control products. Make sure to read the labels of herbicides and follow instructions closely for proper application.

Finally, maintain centipede lawns at 1 to 2 inches high by mowing when they reach 1.5 to 3 inches. Water when you see signs of drought stress such as leaf curling and poor color.

— Danny Lauderdale

Tips & Tasks

Simplify Pruning with the 4-D System

If you find the art and science of pruning to be overwhelming, especially when pruning is long overdue, use the “4-D” system of pruning to simplify the process.

Remove the following first:

- **Dead:** Remove dead growth, which can harbor insect pests and allow disease to gain a foothold.
- **Diseased:** Remove weak, spindly, abnormal growth or anything with disease symptoms. Dip pruners in a solution of 10 percent bleach water to prevent reinfection at the new cuts.
- **Damaged:** Remove branches and plant parts damaged by storms, animals, kids, mowers, and any other physical damage. This damaged tissue can provide an entry point for disease and insects.
- **Deranged:** Remove “non-conformist” branches that rub against the trunk or other branches. This category also includes growth that develops in the wrong direction, crosses other branches, or grows vertically from horizontal branches or the base of the plant (such as watersprouts and suckers).

Once the four D's are gone, it is easier to determine shaping cuts. This approach will result in healthier, more attractive, natural-looking trees and shrubs. Remember to cut at the branch collar and don't leave stubs.

— Nicoloe Sanchez



J.C. Raulston Arboretum

Helping You Grow

Extension Master Gardener Conference

Everyone is invited to attend the 2013 North Carolina Extension Master Gardener Conference, taking place June 6-8 at the Union County Agricultural Services Center near Monroe.

Gardeners from across the state will come together to learn how to “Master the Garden Harvest” through workshops taught by nationally known speakers including Tony Avent from Plant Delights Nursery, Peter Hatch of Monticello, and chef and restaurateur Jim Noble.

For more information on this event, please visit mastergardenersunioncountync.org or email us at: ucmgwebsite@gmail.com

— Donna Teasley

Showstopper — ‘Aztec Fire’ anise

‘Aztec Fire’ anise (*Illicium mexicanum*) is a large-leaved evergreen shrub with handsome dark-green foliage. In addition to attractive foliage, ‘Aztec Fire’ anise produces showy burgundy spring flowers, often blooming intermittently throughout the summer and fall as well.

‘Aztec Fire’ grows best in partial shade, but give this Mexican native plenty of room. Typically this anise will reach a height of eight feet and a width of six feet, with a naturally pyramidal growth habit.

An evergreen beauty, ‘Aztec Fire’ mixes well with other shade-loving shrubs and perennials. Plants also fit nicely in naturalized landscapes. Anise shrubs grown in full sun will develop lighter green foliage than those grown in partial shade. Consider this winner for your home landscape. Hardiness zones: 7 to 9.

— John Vining

Edibles — Mesclun

Mesclun is the perfect plant to kick start the spring vegetable garden. A mix of salad greens, mesclun packs a lot of variety in one planting. Mesclun mixes include greens such as leaf lettuces, spinach, mustard, kale, arugula, radicchio, and endive.

When purchasing mesclun seed, gardeners can choose between spicy mixes and those with milder tastes. Mesclun can be sown in early spring and again in late summer. Grow mesclun as you do loose-leaf lettuce, sowing seed in a well-prepared seedbed in the garden or in a container.

Mesclun grows and tastes best under moist, well-drained conditions, so water carefully to prevent water stress. Begin harvesting with scissors when young leaves reach 2 inches tall. Cut above the growing point so the crop will continue to grow and can be harvested multiple times. Sow successive plantings every 10 to 14 days to ensure a steady supply of tender greens.

— Lisa Rayburn

Sustainability — Organic insecticides

Recently, the number of natural insect-control products available from garden centers has increased. These products, derived from plants, microorganisms, and other naturally occurring materials, can control insect pests when applied properly. Simply substituting natural products for synthetic pesticides rarely produces good results.

One of the biggest differences between natural and synthetic pesticides is how long they last after application. Generally, natural pesticides break down very quickly once applied, sometimes in less than a day. Thus,

they have to be applied more often and should be sprayed only when a pest problem has been properly identified.

Most natural pesticides are less potent than their synthetic counterparts and work best as part of an integrated plant health system. This includes improving the soil to provide good growing conditions for plants, choosing plants adapted to your site, applying water and nutrients when needed to prevent plant stress, and encouraging beneficial insects by planting a diversity of plants and flowers.

Natural insecticides that are available from most garden centers include insecticidal soaps and horticultural oils. Both control a wide range of pests but to be effective, oils and soaps must be applied directly to and thoroughly cover insect pests. Bt, a bacteria, is used to control caterpillars, while spinosad will control caterpillars, fire ants, and Colorado potato beetle. Neem oil and pyrethrins will control many common pests, but like all insecticides, work best when applied while pest populations are low.

— Charlotte Glen