

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

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February 3, 2024 Six Basic Considerations for Selecting Plants for the Landscape

So many plants to choose from, but what fits in my garden? For a small garden with room for only one more plant to a large garden with growing space for many plants, the considerations for deciding what to choose are the same. The basic considerations when selecting a plant include the plant hardiness zone, growing conditions, color scheme, health of the plant, and proper time to plant.

To start, decide the location in the landscape for the plant to determine the growing conditions. Matching the plant to the site helps eliminate many problems and creates less work for you.

How much sunlight will the plant receive? Observe if the area is in full sun, partial shade, or full shade. Some plants may grow in the morning sun and afternoon shade.

How well does the soil drain at the planting site? The soil should ideally drain at a rate of 2 inches per hour during a percolation test. Information on how to conduct a test is available in the publication "Soil Percolation: A Key to Survival of Landscape Plants" (ID-237) https://www2.ca.uky.edu/agcomm/pubs/ID/ID237/ID237.pdf.

Decide the color scheme for the site or landscape bed. The plant selected may be limited by the color of flowers or foliage wanted.

Consider the plant size. Is a low-growing or tall plant needed? How far can the plant spread? Some pruning may be required, but if the plant grows too big for the site quickly, it may have to be removed.

Be sure to look on the plant tag or in the description of the plant for the USDA Plant Hardiness Zone number. The new map released in 2023 shows our area in Zone 7a, instead of 6b. The average coldest temperature measured over the past 30 years ranges from 0 to 5 degrees Fahrenheit. It does not tell us the coldest temperature to expect. So, if a plant is hardy in Zone 7, then damage could occur to it if the temperatures dip below 0 F. If a plant is hardy in Zone 8, then it is treated as an annual here because it will not live through the winter unless protected. When growing perennials, plants that live from year to year in our area, look for Plant Hardiness Zones of 5, 6, or 7.

On some tags of perennials, shrubs, and trees, a plant Heat Zone number is included. Some species of plants tolerate heat better than others. The USDA Heat Zone map is based on the average number of days above 86 degrees F. Above 86 degrees F, some plants begin to suffer damage. Our heat Zone is 7 with 60 to 90 days above 86 degrees F during the growing season. Since the Heat Zone numbers are lower in the south and higher in the north, select plants for heat Zone 7 and above.

Purchase healthy plants to avoid bringing problems to your landscape. This spring select

annuals and perennials with foliage that is healthy and green. Avoid plants with yellowing or spotted leaves. Yellow leaves may indicate a lack of fertilizer, crowded growing conditions, the beginning of a disease problem, and/or the presence of insects. However, some plants have leaves that are light green, yellow-green, bronze, or green and white, so the foliage color should be typical for that specific type of plant.

Check the plant carefully for insect problems. Don't buy plants with insect pests such as white flies, spider mites, aphids, and mealy bugs. These insects are a challenge to manage in the home landscape.

Purchase plants with good growth habits typical for that plant. Long, leggy growth indicates a problem with crowded growing conditions. Trees and shrubs should have a balanced shape. Lopsided trees and shrubs are almost impossible to shape properly.

Thoroughly check plants at bargain prices before buying them. Poorly shaped, rootbound, overgrown, and poor-quality plants are not a bargain. These plants have problems; many of which are not correctable.

Wait to set out plants sensitive to cool temperatures until after the average frost-free date of around April 20 to avoid cold injury. You may have to protect plants after April 20 in case of a late frost.

For information about a plant, ask for help from the nursery and garden center professionals. Look for QR codes that enable smartphones to access more information about the plant. Online resources are available as well through the Cooperative Extension Service.

For more information about purchasing plants, contact the Daviess County Cooperative Extension Service at 270-685-8480.

Annette's Tip:

Knowing the percent germination of seeds indicates approximately how many seedlings will emerge. To determine the germination percentage of seed kept from previous years, take 10 to 20 seeds and spread them out on top of several layers of moistened paper towels. Roll up the paper towels with the seed and place it into a plastic bag. Place the bag in a warm area. Check the seeds in a few days. Continue to check them daily until it has been about one week after the last seeds have a root or seed leaves emerging from the seed. Calculate the germination percentage by dividing the number of seeds germinated by the number of seeds placed on the towel times 100.

Upcoming Event:

The Basics: What to Consider When Planting Fruit Trees in the Backyard will be presented at 1:00 and 6:00 p.m. on Monday, February 12 at the Daviess County Cooperative Extension Office. Discussed will be required growing conditions, recommended fruit trees and varieties for Kentucky, and major diseases and insect pests.

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