

Certified Gardener Projects

*Saint John of God School
Glassboro Library Garden
Glassboro Senior Center Garden
Veterans' Cemetery
Clayton Donation Garden
Certified Gardener Butterfly House
Whitall Historic Gardens
Red Bank Battlefield Donation Garden
Certified Gardener Demonstration Garden
Mullica Hill Library Garden
The Olde Stone House Garden
Certified Gardener Greenhouse
Shady Lane Nursing Home
Camp Salute
Certified Gardener Helpline
Certified Gardeners' Speakers Bureau*

Certified Gardener Events

*Home Garden School-January thru May, Clayton
Horticultural Symposium-March/April, Clayton
Plant Expo-Day before Mother's Day, Clayton
Flower Show-June, Red Bank Battlefield
Butterfly Festival-July, Red Bank Battlefield*

The County of Gloucester complies with all state and federal rules and regulations and does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex in admission to, access to, or operations of its programs, services, activities or in its employment practices. In addition, Gloucester County encourages the participation of people with disabilities in its programs and activities and offers special services to all County residents 60 years of age and older. Inquiries regarding compliance may be directed to the EEO office at (856) 384-6903 or through the County's ADA Coordinator at (856) 384-6842/New Jersey Relay Service 711



Certified Gardeners

Hints from the Gardeners Helpline

Certified Gardener Office: 856-307-6456

Certified Gardener Helpline-856-307-6464

Helpline Email: gardener@co.gloucester.nj.us

Offices of Government Services

1200 N. Delsea Dr., Bldg. E

Clayton, NJ 8312



Gloucester County Board of Chosen Freeholders

Robert M. Damming, Freeholder Director

Frank J. DiMarco, Deputy Freeholder Director

James Lavendar Ed.D., Freeholder Liaison

Spring Cleanup

Spring cleanup of debris, and removal of dead branches, is the best thing that can be done to improve your home garden. It will help strengthen the plants by providing better air circulation and help eliminate possible pathogens.

Light Requirements

Plant labels usually give light requirements—here's a rule of thumb

- Full Sun—6 hours or more per day
- Part Sun—4 to 6 hours per day
- Shade—less than 4 hours of sun per day

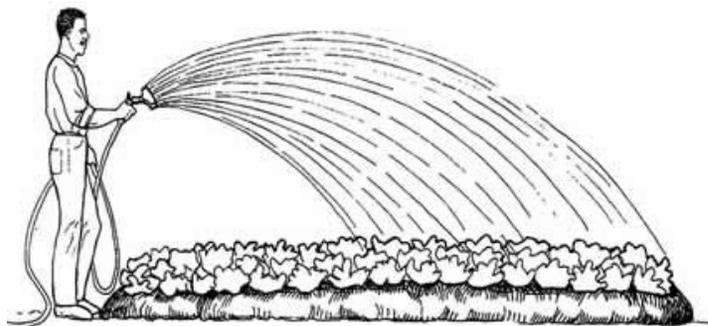
Water Damage Vs Disease

Shallow-rooted evergreens such as azaleas, rhododendrons, boxwood and mountain laurel can be susceptible to leaf scorch due to winds and low temperatures. Plants at their northern limit of hardiness such as camellia and southern magnolia can also show leaf curl, browning and drooping.

Management:

- ◆ Avoid late summer fertilization
- ◆ Deep water to encourage deep rooting
- ◆ Prune dead or damaged branches

Water requirements are different for each plant. Research needs. Rule of thumb—water when soil starts to feel dry to



Trace Nutrients (continued)

Nickel

- Function: Enzyme production
- Deficiency Symptoms: Yellow leaves
- Solution: Greensand

Sodium

- Function: Aids water regulation and photosynthesis
- Deficiency Symptoms: Plants wilt
- Solutions: Kelp, Garden Manure, Bone Meal, Greensand

Zinc

- Function: Enzyme & growth hormone production
- Deficiency Symptoms: Yellow leaves, and rosetted (clustered) leaves
- Solutions: Garden Manure, Greensand, Cottonseed Meal

Compost

Think about returning nutrients to the soil. Save uncooked vegetable kitchen scraps, eggshells and coffee grounds. Turn untreated grass clippings and fall leaves into rich compost by adding to the pile. See Extension publications for more information. Use compost to amend beds in the spring, or when planting



Trace Nutrients

Boron

- Function: Increases flowering and fruit development
- Deficiency Symptoms: Terminal buds die, fewer flowers & fruit develop
- Solutions: Garden Manure, Bone Meal

Chlorine

- Function: Helps control water loss and moisture stress
- Deficiency Symptoms: Plants wilt and have yellow leaves
- Solutions: Garden Manure, Greensand

Cobalt

- Function: Improves growth and transpiration
- Deficiency Symptoms: Reduced growth and yellowing foliage
- Solutions: Greensand, Kep, Cottonseed Meal

Copper

- Function: Helps Produce Chlorophyll
- Deficiency Symptoms: Yellow, wilted leaves; lack of flowering
- Solutions: Garden Manure, Greensand

Iron

- Function: Promotes dark green leaves
- Deficiency Symptoms: Yellow leaves
- Solutions: Greensand, Garden Manure, Cottonseed Meal

Manganese

- Function: Helps produce chlorophyll
- Deficiency Symptoms: Interveinous chlorosis in younger leaves (yellowing of the leaf tissue)
- Solutions: Garden Manure, Greensand

Molybdenum

- Function: Essential in some enzyme systems
- Deficiency Symptoms: Pale green, rolled, or cupped leaves
- Solutions: Greensand, Lime (makes it more available to the plant)

Lawn Care Tips

- Water early in the morning
- Water deeply, i.e. the time it takes to accumulate 1" of water
- Keep mower blades sharp
- Don't cut grass shorter than 3 to 3-1/2"
- Use a mulching mower to return nutrition to the soil
- Lawns prefer a pH between 6 and 7. Lime will raise the pH. Sulphur will lower it. It is not necessary to lime every year, so check the pH first.

For weeds in pavement, sidewalks or driveway, mix 1 gallon of 5% vinegar, 1 cup of salt, and 1 tablespoon of dishsoap. Eliminate the salt if near plantings. Test paver stones for colorfastness.

Soil Tests & Plant Nutrition

Air and water supply carbon, hydrogen and oxygen needed for growth. Other nutrients are supplied by soil, but need to be at the proper pH for the plants to make use of the nutrients.

pH-Free testing is available. pH measures the acidity (below 7.0) or alkalinity (above 7.0) of soil. Every plant has a preferred pH range. Some nutrients can become "tied up" and unavailable if the soil is too acidic or too alkaline, so it is important to know this before starting a fertilization or planting program.

Macronutrients

Nitrogen (N),-Promotes Leaf Growth

Phosphorus (P) -Promotes Root Growth

Potassium (K)-Promotes hardiness, disease resistance, seed and fruit production

Soil test kits are available for a fee from the Rutgers Diagnostic Lab. Visit their website:
<https://njaes.rutgers.edu/soil-testing-lab/kits.php>

UNDERSTANDING PLANT NUTRITION

Nineteen elements are considered essential for plant growth. Carbon, hydrogen, and oxygen are primarily supplied by air and water. Plant roots absorb the remaining 16 elements from the surrounding soil. These elements are divided into three groups based on their relative abundance in plants: Primary Nutrients (or Major Nutrients), Secondary Nutrients (or Minor Nutrients), and Trace Nutrients (or Micronutrients). Although the Major Nutrients are needed in the greatest quantities, a deficiency of any one nutrient can prevent plant growth, or reduce it to unsatisfactory levels. Even though some soils may already contain these nutrients, they may not be in a form available for plant growth. The best way to ensure that all of the nutrients are available in the soil is through regular applications of plant foods.

The next pages list more information on each nutrient, its deficiency symptoms, and possible plant foods to cure the deficiency.



Need to know what's bugging your plants, lawn, garden?

Call the
Gloucester County Home & Garden Helpline!
856-307-6464
gardener@co.gloucester.nj.us
Monday - Friday 9 a.m. - 12:00 p.m.

Robert M. Damming, Freeholder Director
Frank J. DiMarco, Freeholder Liaison
Gloucester County is an ADA/Equal Opportunity Employer

Primary Nutrients

Nitrogen

- Function: Vigorous Growth and Dark Green Color
- Deficiency Symptoms: Light Green Leaves, Stunted Growth
- Solutions: Dried Blood, Garden Manure, Cottonseed Meal, Urea

Phosphorus

- Function: Root development and flowering
- Deficiency Symptoms: Smaller yields of seeds & fruit; purplish leaves, stems & branches
- Solutions: Rock Phosphate, Bone Meal, Single Super Phosphate, Triple Super Phosphate

Potassium

- Function: Overall hardiness and disease resistance
- Deficiency Symptoms: Reduced yields, spotted or curled leaves, weak root systems

Secondary Nutrients

Calcium

- Function: Plant vigor, aids in uptake of nutrients
- Deficiency Symptoms: Deformed terminal leaves, poor root growth
- Solutions: Garden Lime, Garden Gypsum

Magnesium

- Function: Essential part of chlorophyll, dark green color, seed production
- Deficiency Symptoms: Yellowing of leaves, stunted and spindly growth
- Solutions: Garden Lime, garden sulfur, gypsum

