



Horticulture

1998 Perennial Plant of the Year

The purple coneflower (*Echinacea purpurea*) is a native prairie wildflower. Plants grow 2 to 4 feet tall and produce 3 inch diameter flowers in summer. The flower consists of a bronze-colored, dome-shaped center surrounded by white to pink to reddish-purple, downward curving petals.

Purple coneflowers are upright-growing, clump-forming, coarse-textured perennials.

Echinacea purpurea 'Magnus' has been selected as the "Perennial Plant of the Year" for 1998 by the Perennial Plant Association. The Perennial Plant Association is a national organization of growers, landscape designers, educators and researchers. The goals of the organization are to promote high nursery production standards and the planting of perennials. The "Perennial Plant of the Year" is chosen by its members. 'Magnus' was selected for its distinctive flower color and shape, long bloom season and ease of culture. The petals of 'Magnus' are more horizontal than the species. Their color is deep rose or carmine. Plants are often in bloom for up to 6 weeks. 'Magnus' grows about 3 feet tall. The variety was discovered by Klaus Jelitto at the nursery of Magnus Nilsson in Sweden.

Purple coneflowers are easy to grow. They perform best in well-drained soils and partial to full sun. Plants are drought tolerant and have few insect and disease problems. Because of its stiff, coarse growth habit, the purple coneflower is an excellent plant for naturalized areas. It also does well in perennial borders. For those individuals interested in butterfly gardening, the purple coneflower attracts several species of butterflies. (MJM)

Soap or oil—that is the question

Now is the time to become familiar with two products for pest control this next growing season. Insecticidal soaps are made from the salts of fatty acids. Soaps kill insects by breaking down cell membranes and disrupting cell metabolism. Mammalian toxicity is very low. Insecticidal soaps are very similar to soaps or detergents used in the home, according to a South Dakota State University publication.

Soaps are active against many soft-bodied pests that include aphids, scales, mealybugs, whiteflies and mites. Insecticidal soaps have no residual effect, so coverage of the pest is extremely important.

However, soaps may also have a toxic effect in some plants. Check the label for a list of sensitive plants. The likelihood of phytotoxicity may be reduced by rinsing the plant shortly after application.

Dormant oils have long been used to control over-wintering stages of certain scales and mites. Although dormant oils are still an important management tool, use of superior oils for summer application is also an option for some pest-plant combinations. Superior oils have a higher purity than dormant oils, which increase plant safety. However, superior oils still have restrictions, so consult the label before applying to particular plant species. Never apply oils to plants that are under water stress. Very hot, humid conditions often will increase likelihood of phytotoxicity.

Superior oils are effective against a wide range of insects and mites, similar to the insecticidal soaps. Oil kills insects by interfering with the respiration and cell membrane function. (DJ)

Terrariums

Terrariums aren't as maintenance-free as some people think. Plants tend to outgrow their containers, soil is depleted of nutrients, mold grows on the soil and the container, and plants do die. Even in a well-put-together terrarium, there isn't much chance for excess water to get away. In a closed container, it can't even escape by evaporating.

A rule of thumb is that if there's water vapor on the inside of the container, the terrarium needs drying out, not watering. Open it up so some of the moisture can escape, and don't water until the soil is dry.

Also, avoid placing the terrarium where it will be hit by direct sun. A glass container gets very hot inside when the sun shines through it. Plants subjected to high heat in the humid atmosphere wilt and die. (Think of what happens to fresh vegetables in a steamer.) The plants need light to grow, of course. Place the container where it will get indirect sunlight or bright artificial light rather than direct sun.

The plants you put into the terrarium may also be a problem. Plants that need humid air do very nicely in terrariums. In fact, that may be the only way to grow some of them in the home. Plants that prefer dry conditions will not thrive in a terrarium. The moist soil and humid air will combine to do them in. (DJ)

Basil for everyone

Basil is one of the most popular herbs grown in the world. It is native to Asia and can be found growing wild in tropical and subtropical regions of the world.

Basil has many uses, the most common of which is its culinary use. As a fresh herb, it is used to flavor foods such as vegetables, poultry and fish. Basil can also be used dried. The flowers of basil are edible and can be an attractive addition to salads and other dishes.

Besides its edibility, basil is an aromatic herb and is often used in potpourri and sachets. As an ornamental in the flower garden, basil has attractive foliage and flowers.

Basil is a tender perennial grown as an annual. It can be grown easily from seed. Start seed indoors 4 or 5 weeks before the last frost date. It likes warm temperatures (about 75° F) for germination. Seed can also be sown directly in the ground outdoors after it has warmed in the spring. Plant basil outdoors after all danger of frost is past. Basil does not tolerate cold temperatures. Plant in full sun.

Water regularly with an inch of water a week. Basil can also be propagated vegetatively through tip cuttings or root cuttings in moist potting soil.

To harvest, remove terminal growth whenever four sets of true leaves can be left on the plant. This encourages bushier growth and increased yield. For best foliage flavor, cut before flowering. After cutting, wash and pat leaves dry. Use immediately or store in perforated plastic bags in the refrigerator. When drying the leaves, harvest early in the day but after dew has dried. Spread leaves on screens or loosely bundle and air dry.

Basil is a member of the mint family which is characterized by square stems. They belong in the genus *Ocimum*. Over 150 species and varieties are available. These are some of the more common types of basil.



Sweet Basil

Most common type grown. White flowers. Bright green leaves, 2 to 3 inch long. Upright habit. Clove-like scent.

Purple Basil

Grown for its ornamental foliage as well as culinary use. Light lavender flowers. Same size leaf as sweet basil. 'Opal,' 'Red Rubin' and 'Purple Ruffles' are excellent selections.

Lettuce Leaf Basil

Large, wide leaves. Flavor is less pronounced

than other green basil. Common varieties include 'Mammoth' and 'Green Ruffles.'

Lemon Basil

Lemon scent. White flowers and small green leaves. Great for tea and potpourri.

Cinnamon Basil

Cinnamon scent. Pink flowers, green leaves with purple stem. (MJM)

Winter care of houseplants

Winter weather adversely affects growing conditions for house-plants.

Proper care during the winter months can help insure the health of houseplants. Most houseplants grow well with daytime temperatures of 65 to 75° F and night temperatures of 60 to 65° F. Temperatures below 50° F or rapid temperature fluctua-



tions may damage some plants. Keep houseplants away from cold drafts and hot air vents.

Also make sure houseplant foliage doesn't touch cold windows.

Many houseplants prefer a humidity level of 40 to 50%. Unfortunately, the relative humidity found in many homes during the winter months may be only 10 to 20%, a level

too low for many houseplants. Humidifiers are an excellent way to increase the relative humidity in a single room or throughout the entire home. Simple cultural procedures can also increase the relative humidity around houseplants. Group plants together. The water evaporating from the potting soil, plus water lost through the plant foliage or transpiration, will increase the relative humidity in the immediate vicinity of the houseplants. Another method is to place the houseplants on trays or saucers

continued on page 11



Be A Better Gardener

Ages 5-19

5 steps to be a better gardener:

- 1 Sign up for Be A Better Gardener 4-H Youth Program.**
Sign up for 4-H Horticulture Project area.
Everyone A Gardener or The World of Flowers
- 2 Be A Better Gardener participants can pick up notebook, information package and free seeds on or after April 8, 1998 at the Lancaster County Extension Office.**
- 3 Attend optional workshops:**
Container gardens: June 4, 1998; or Horticulture contest practice: July 7, 1998
- 4 Raise a garden.**
Choose what kind of garden you would like to grow—vegetable, perennial flower, annual flower, container, herb, fruit, butterfly or combination.
- 5 Keep a journal of your garden.**
Keep weekly records of your garden's progress. Take pictures of your garden. Evaluate your garden plants. Enter your journal as an exhibit at the county fair.

This program is available to youth enrolled in the Lancaster County 4-H Program, ages 5-19.

Be A Better Gardener Preregistration

PREREGISTRATION DEADLINE: MARCH 30, 1998

Name _____ Age _____
 Address _____
 City _____ State _____ Zip _____
 Phone Number _____

I would like Flower seeds _____ or Vegetable seeds _____ (check one)

Send to: Lancaster County Extension Office, Attn: Mary Jane
 444 Cherrycreek Road, Lincoln, NE 68528-1507

