

Controlling Bagworms

Bagworm eggs hatch in June and young worms will begin to feed on junipers, cedars and arborvitae in eastern Nebraska. Bagworms also occur on various deciduous trees such as flowering crabs, plums, linden and cotoneaster. The large bags attached to the trees now are those left over from last year and are empty, except for the remaining egg masses that will finish hatching. The worms are very tiny, probably 3/8-inch in length or less, and each is contained inside a small protective sack or bag which they construct of silk and plant material. At this stage, the larvae are susceptible to insecticides but after 6 weeks, they will be more difficult to control. Suggested materials are carbaryl (Sevin), permethrin (Eight) and various



Bagworm bags at completion of larval development.

formulations of "Bt", *Bacillus thuringiensis*, (Dipel, Thuricide). Follow label directions and be sure to spray trees and shrubs thoroughly to penetrate foliage. Good coverage is essential if control is to be effective. (MJF)



Things to do this month

For hanging baskets in cool, shady locations, use tuberous begonias, ferns, impatiens or fibrous rooted begonias in combination with trailing plants, such as English ivy.

Remove old flower heads from annual bedding plants to keep them blooming.

Disbud chrysanthemum flowers to secure large, beautiful blooms on straight, strong stems. To disbud, remove the small side buds along the stems which form in the angles of the leaves. This will allow all of the food reserves to be used for one large flower rather than many smaller ones.

Plant annual flowers in tubs or large containers for the porch or terrace. Make sure there are holes in the container's bottom to provide good drainage.

Remove foliage from spring bulbs after it turns yellow and begins to dry. Set out bedding plants to cover the bare spots using care not to damage the bulbs.

Watch for and control blackspot and powdery mildew on rose foliage.

Use bark mulch around young trees to protect them from lawn mower damage.

Spring flowering shrubs such as spirea, viburnum, lilac and forsythia should be pruned as soon as they are done blooming.

Mid to late June is an excellent time to take softwood cuttings of shrubs to start new plants. Some shrubs which can be propagated in this way are spirea, lilac and viburnum.

When you buy container grown nursery stock, check the root ball and make sure it is not bound too tightly. A mass of circling roots will stay that way even after it is planted in the ground.

If you do not have much room to landscape, consider using some of the many dwarf varieties available. These are plants that have slow growth and stay small, so there is little pruning maintenance. There are numerous dwarf evergreens, flowering trees and shrubs from which to choose.

Keep a close eye on the quality of your spring crops. Hot weather causes lettuce to bolt and become bitter. Plant a warm-season crop as soon as the spring vegetables are harvested.

In most cases, blossom-end rot on tomatoes, peppers, squash and watermelons can be prevented. Do this by maintaining uniform soil moisture by mulching and watering correctly, planting in well-drained soil and not cultivating deeper than one inch within one foot of the plant. Also avoid the use of high nitrogen fertilizers.

Continue planting warm-season vegetable crops such as beans, squash and cucumbers.

The best time to harvest most herbs is just before flowering, when the leaves contain the maximum essential oils.

Before pouring gasoline into the fuel tank of your lawn mower, garden tiller or other garden equipment, be sure to turn off the engine and allow it to cool for at least five minutes.

Identify garden pests before you attempt to control them. If you decide to use chemical control, read the label carefully.

Bats can be an effective way to control insects. One big brown bat can eat 3,000 to 7,000 insects each night. Attract bats by building and placing bat houses in your yard.

Leftover vegetable and flower seeds may be stored in a cool dry location to be saved for planting next year.

Start a gardening notebook. Pay special attention to those plants which withstand drought conditions.

During the hot summer months, mulch can be especially useful for conserving water. For vegetable gardens, shredded leaves or grass clippings are good mulch material. For ornamentals, pine needles or wood bark do the best job.

Weed removal is important for a number of reasons. It conserves moisture, conserves nutrients in the soil and helps prevent the spread of disease and insects. (MJF)

Propagation of Shrubs from Softwood Cuttings

Many ornamental shrubs in the home landscape may be propagated by softwood cuttings. Softwood cuttings are taken in late May through early July from the current season's growth. Cutting material should be flexible but mature enough to snap when sharply bent. Lilac, forsythia, weigela, barberry, potentilla and viburnum are some of the shrubs that may be propagated from softwood cuttings.

A proper rooting medium is needed to successfully root softwood cuttings. The rooting medium must not only retain moisture, but also drain well and provide physical support. Coarse sand, perlite and vermiculite are good rooting materials.

The container holding the rooting medium must have holes in the bottom for drainage. If only a few cuttings are taken, a large clay or plastic pot should be adequate. A wooden or plastic flat may be used if larger quantities are rooted. Once the container has been filled, the medium should be watered and allowed to drain before the cuttings are inserted.

When taking cuttings, remove plant material with a sharp knife. Softwood cuttings should be approximately 4 to 6 inches long. Pinch off the leaves

on the lower half of the cutting. Also remove any flowers. Make a fresh cut just below the point where one or two leaves are attached to the stem (node), then dip the base (cut end) of the cutting in a root-promoting compound. Tap off any surplus material.

Cuttings from some shrubs root easily, but others are more difficult. Root-promoting substances increase the percentage of cuttings that root, shorten the period needed for rooting and increase the number of roots per cutting. Root-promoting materials are often available in garden centers and mail-order companies. Most products are in powder form.

To avoid brushing off the powder when inserting the cuttings, make holes in the rooting medium with your finger or a pencil. Insert the cuttings approximately 2 inches deep into the rooting medium. After all the cuttings are inserted, carefully water the medium and let it drain.

Water is critical to the survival of the cuttings. A cutting has no root system to absorb water, yet continues to lose water through its leaves. The cutting will wilt and die if it loses a large quantity of water. Water loss can be reduced by placing a clear plastic bag over

the cuttings and container.

Once covered, place the cuttings in bright light, but not direct sunlight. Inspect the cuttings daily. Water the rooting medium if it begins to dry. Rooting of most deciduous shrubs should occur in 6 to 8 weeks.

Examine a few cuttings after 4 or 5 weeks. Carefully dig up several cuttings to check on root development. If rooting is poor, place the cuttings back in the medium, water them in, then cover again with a plastic bag. When the cuttings have a well-developed root system, they should be hardened off in preparation for transplanting. Remove the covering but don't allow the cuttings to wilt. Keep the rooting medium moist. After several days, carefully remove the cuttings and transplant them into individual pots with a good potting mix. The young plants can be planted into the ground in a few weeks. Home gardeners may want to grow them in the garden for 1 or 2 years before moving the small shrubs to their permanent site in the landscape.

It takes several years for rooted cuttings to become nice-sized plants. However, many gardeners find rooting cuttings and growing the small shrubs to be fun and rewarding. (MJF)

2004 Perennial Plant of the Year

The Perennial Plant Association has named *Athyrium niponicum* 'Pictum' the 2004 Perennial Plant of the Year. This perennial low-maintenance Japanese painted fern is one of the showiest ferns for shade gardens. It is popular due to its hardiness nearly everywhere in the United States, except in the desert and northernmost areas in zone 3. 'Pictum' grows 18-inches tall and as it multiplies can make a clump that is more than two feet wide. 'Pictum' produces 12- to 18-inch fronds that are a soft shade of metallic silver-gray with hints of red and blue. This lovely fern, which prefers partial to full shade, makes an outstanding combination plant for adding color, texture and habit to landscape beds and containers.

Landscape Uses: The magnificent texture and color of the fronds electrify shady areas of the garden and make the fern a wonderful companion for a variety of shade plants. Japanese painted fern provides a nice contrast to other shade-loving perennials such as hosta, bleeding heart, columbine, astilbe



Athyrium niponicum 'Pictum'
(Japanese painted fern)

and coral bells.

Cultivation: This fern needs a well-drained, compost-rich soil and flourishes where moisture and humidity abound. 'Pictum' grows best in part- to full shade. The best frond color results in light shade. The colors are more intense in the spring or in cooler temperatures or in cooler climates. Add two to three inches of compost or peat moss to the beds each spring or fall. This fern is extremely reliable when grown in the

proper environmental conditions. Its colorful foliage should be vibrant from early spring until frost, when it will go dormant and re-emerge with its excellent foliage the next spring.

Propagation: Propagation can be done by spring or fall divisions. It is easy for a homeowner to buy the more colorful and uniform plants in the quantity needed or buy a few and divide the clumps yearly as needed. A well-grown plant can be separated in early spring into three to four divisions and replanted. Fertilize at one-half the rate of other perennials with an organic or time-release fertilizer.

Hardiness: Grows in USDA Hardiness Zones 3-8

Light: Part to full shade. The best frond color results in light shade.

Soil: Japanese painted fern needs well-drained, compost-rich soil.

Uses: The Japanese painted fern makes an outstanding combination plant for adding color, texture and habit to the shade garden. (DJ)

Brighten Your Outdoor Area With Hanging Baskets

Hanging baskets can add color and floral fragrance to many locations. The most common location to find a hanging basket is under an eave on the house or on a porch or balcony. But they can and should be used in many other locations. Baskets can be hung from lamp posts, grape arbors, trees and

glider swings.

Most any bedding plant can be used in a hanging basket. Be sure that the sunlight requirements of the plant that is used be the same as the final location of the hanging basket. A basket of sun loving plants put in a shady location will not do very well. Baskets made up with fuchsia,

verbena, petunias, begonias, impatiens, sweet potato vine, lobelia, lantana, sweet alyssum or geraniums are commonly seen.

Hanging baskets require frequent watering. Depending on the weather, the basket will need to be watered once or sometimes twice a day. (MJF)