

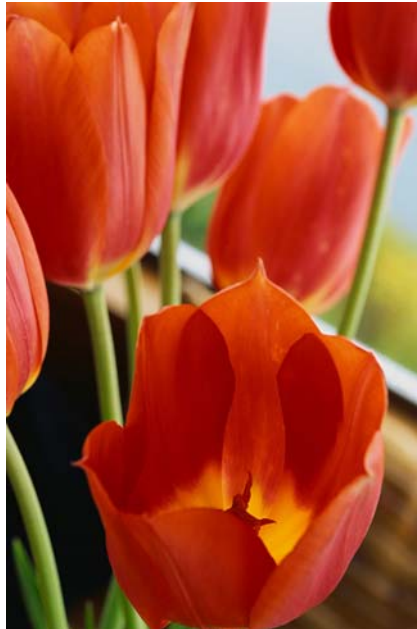
Hello Master Gardeners!

Although this has been the fifth warmest winter on record all over the United States, I'm sure everyone is still ready for sunny days of spring. It has also been one of the driest winters so hopefully the March winds will bring April showers that bring May flowers.

The theme of this newsletter is "Spring Potpourri", with articles to get us outdoors and growing or renovating our landscapes.

Spring is an excellent time to visit the garden centers to select some of the new varieties or old favorites to plant in our yards, or visit other gardeners yards and share plants that need dividing. Happy Gardening!

-Betty Hamata



Inside this issue:

From the Garden - Making Your Own Potpourri	2
Strawberry Bed Renovation	3
Repotting Houseplants	4
Clematis Propagation- Layering	5
Begonias	6
Some Thoughts On Columbine	8
The David Austin English Rose	9
Black Spot of Roses	10
Master Gardener Volunteer Activities	11

Upcoming Horticulture Programs

Spring Affair Plant Sale- April 22, 9 a.m.-4 p.m.
Agricultural Hall, State Fair Park, Lincoln, NE

Youth Complex, Room A

- 10:00 **The World of New Plants**
11:30 **Lincoln Sunken Garden: Past, Present & Future**
1:00 **On the Lookout for Plant Diseases & Pests**
2:30 **Anything & Everything: Panel Discussion with Local Experts**

Youth Complex, Room C

- 11:30 **Planting & Design Demons**
1:00 **The Spirit of Spring Affair: the People, the Plants, the Possibilities**

Free Admission! For more information, call (402) 472-2679 <http://springaffair.unl.edu>

Advanced Master Gardener Education UNL Extension In Douglas County

Date	Time	Cost
April 13	9 a.m.- Noon	Free
	An Orchid Primer for Master Gardeners	
April 27	9 a.m.- Noon	\$10.00
	Growing and Cooking with Herbs	
May 9	9 a.m.- Noon	Free
	The Top 10 Insects/ The Top 10 Diseases in Nebraska in 2005	

Location: 8015 West Center Road, Omaha
If you would like to attend for one of these programs, please contact me and I will get you signed up. Thanks!

University of Nebraska- Lincoln Extension educational programs abide with the nondiscrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.

Making Your Own Potpourri

By Bonnie Parrish

Spring is right around the corner. The seeds are ordered and planting plans are beginning to take shape.

Before starting the garden, most of us think of spring house cleaning. After the chores are done, why not add a final touch to your efforts and add some fragrance? Homemade potpourri scents the air with natural aroma- and it's fun to make. It's a way of preserving garden flowers and herbs to bring a bit of outdoors in all year.

Potpourri is a French term meaning "rotten pot." Potpourri comes in a variety of scented mixtures, all of which include blends from four categories of basic ingredients: flowers, leaves, spices, and peels. They may also include fixatives such as orris root powder or an essential oil to preserve and strengthen the scent of a recipe.

Going & Growing Newsletter Contributors:

Lorraine Urban
Mary Svoboda
Bonnie Parrish
Nancy Lindblad
Betty Hamata
Marilyn Fenton
Sarah Browning
Rich Apking

One type of potpourri is the dry variety, which scents a room subtly and comes in a variety of colors and textures. The other kind is simmering moist potpourri. It releases aromatic oils quickly and can scent a whole house. Once used, simmering potpourri cannot be saved.

When planning your garden, add some aromatic flowers and plenty of herbs to use to make potpourri.

Do It Yourself Garden Blends

You will need to gather ingredients from the following categories.

- Flowers for Scent- carnation, jasmine, violet and hyacinth
- Flowers for Color- borage, calendula, cornflower, sage, tansy and zinnia
- Leaves- lemon balm, lemon verbena, mint, basil and rosemary
- Spices, Peels & Woodchips- anise seed, cinnamon, clove, juniper and cedar. Use these in small amounts- approximately one tablespoon per four cups of flowers and leaves.
- Fixatives- orris root powder, cornstarch and gum benzoin
- Essential Oils- a few drops to enhance scent

Soothing Blend

2 cups dried lemon verbena
2 cups dried rose petals
1 cup dried lavender flowers
1 cup dried calendula petals
1 cup dried chamomile flowers
2 T orris root powder

Simmering Potpourri

4 whole nutmeg
1/2 cup star anise
1/2 cup cardamom pods
1/2 cup allspice berries
1/2 cup dried orange peel

Optional-

2-3 drops essential oil of orange

Mix together in a large bowl. Pour into an airtight container for storage or place in a glass jar.

To use, add 1/4 cup of potpourri to 4 cups water. Heat gently on low heat but do not boil. Add more water if needed.

Mixture will scent the air for several hours. Discard after use.

Closet Sachets

1/2 cup cedar shavings
1/2 cup dried lavender flowers

Mix together and fill small muslin tea bags or tie up into bundles using cotton or cheesecloth squares. Hang in closets or place in drawers. Change the sack yearly.

Strawberry Bed Renovation

By Merry Fenton

Few will argue that it's worth finding room in your home garden for a strawberry bed. The intoxicating smell of the berries ripening on a hot June afternoon is unrivaled as fragrances go and they'll never find a way to bottle it.

But space isn't your only commitment – strawberries need attention through the years to stay productive. Plants are their most productive in their first fruiting year and decline in production each year after, eventually just taking up space with only negligible fruit production.

Luckily, strawberries are easy to propagate so encouraging replacement plants is a breeze. The question becomes, what's the easiest way to put this to work in your garden.

Renovation is the annual process that starts immediately after the plants have finished fruiting. The University of Nebraska's recommended method is to mow the leaves 1 inch above the crown and remove the debris. This will leave only the new leaves that form after fruiting is over. Then it's culling time.

The traditional method of planting strawberries is the wide bed design with 3-4 foot rows spaced with 1 foot walking rows. The time-honored method of thinning wide row plants is to till each side of the row, leaving a 10-15 inch strip of plants in the middle.

The remaining plants should be thinned to the 3 strongest plants per

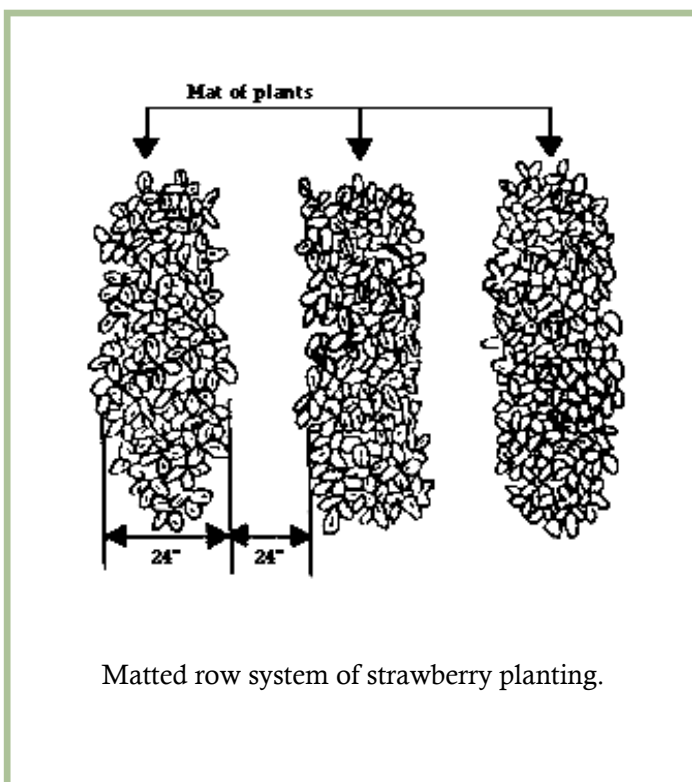
square foot. The tilled edges can then be amended and fertilized so that runners from the remaining plants have fertile ground to root in. The only problem is keeping the beds weeded while the runners take hold, after which you can mulch to keep the weeds out.

But many home gardeners don't have enough plants to merit the wide row planting method. Just having a small patch of berries makes it a bit harder to keep track of which plants are old and which are new.

But years ago, I found a tip in a Rodale booklet called *Secrets of Master Gardeners* (how apropos) that sounds intriguing. If your vegetable bed is the regulation large plot of tilled soil, this method could work for you.

It uses the same concept of encouraging runners to form new plants, but with a twist. This gardener planted his strawberries in a row in his vegetable bed. Once they were done fruiting, he amended the soil immediately to one side of the plants and moved all the runners so they headed toward the amended soil.

Then once the new plants were established, he tilled the old plants com-



pletely in the fall when he did his end of season garden clean up. This left him with second year plants (first year for fruit) every year, providing a bumper crop of berries.

It also has built in crop rotation, because it would take 5 or 6 years for the row to make it from one end of the garden to the other and then he'd just start working in the other direction.

So, whichever method appeals to you, save time in your end of June schedule to give your strawberry bed some attention. You'll be rewarded next year with a better crop of strawberries and who doesn't love that!



Nursery Notes

By Lorraine Urban

If you enjoy an afternoon drive, or if you like shopping in low-traffic areas, a trip to Prairie Rose Farm should be on your agenda. This is the 4th year for this nursery and greenhouse that is located in rural Saunders County.

Sherie and Ray Sinons moved from Colorado to be near their daughter Kimberly Morsett and her family, who also help with the nursery. The business that started in their basement now has perennial and cutting beds as well as a greenhouse nursery. The Sinons grow most of their own plants from seed, and Kimberly was transplanting seedlings when I stopped to see them.

The nursery offers a wide variety of

bedding plants (both annuals and perennials), herbs (including horehound and weld-and-woad), grasses, and vegetables. If you're looking for potted plants, they have some at Prairie Rose Farm, or you can bring in your own pots for filling.

The Sinons also sell cut flowers and dried flowers at the farm and at the Haymarket in Lincoln during the Farmer's Market on Saturday mornings.

The address for Prairie Rose Farm is 2236 Co. Rd. H. You can get there by taking Hwy. 92 west of Wahoo to the Malmo turn (about 5 miles). Turn south for 3 miles to Co. Rd. H. Then go west ½ mile.

The greenhouse is very visible from

the road and there's a sign when you come to the entrance. The phone number is (402) 642-3674, but this is not a business phone.

The nursery hours are very "customer friendly"- from quite early until pretty late every day of the week starting the last week in April (if the weather is conducive to gardening).

Watch for an ad in you local paper (Wahoo, David City, or Fremont) announcing the nursery's Mother's Day sale. Come dressed in garden clothes; there are no fancy sidewalks from the driveway to the greenhouse.

The Sinons are enthusiastic about their business and always looking for ways to do things better. I know they'd like to see you.

Repotting Houseplants

By Betty Hamata

Just like little kids that outgrow their clothes, plants can outgrow their containers and need repotting. Repotting is required if the plant has become potbound, with roots circling thickly around the soil ball, or if roots are growing out the container's drainage holes, or if the plant looks too big for its pot.

Begin by selecting a new container only one to two inches larger in diameter than the old one. Do not use a very large container hoping the plant will grow into its new home. This can cause overwatering because the surrounding soil will retain more moisture than the plant can use quickly and you may be tempted to

water based on pot size, not plant size.

Make sure the new container has drainage holes.

Next moisten the soil in the original container so the root ball will slip out easily. Turn the pot over and tap the container's edge until the soil ball slides out.

If the roots are circling and clinging tightly to the soil ball, remove some of the soil and untangle some of the outermost roots on the sides and bottom of the soil ball.

Cover the new container's drainage holes with broken clay pot shards or large stones. Add enough soil in the

bottom of the container so that the soil ball will be at the same height in the new container. Add soil and gently firm soil around the edges.

DO NOT put a large amount of soil on top of the old root ball. Raise the level of the plant in it's new container by adding soil to bottom only.

Keep the final soil level at least 1/2 inch below the rim of the container to allow for watering.

When finished, water the plant thoroughly and then allow the pot to drain.

Spring is also an excellent time to clean houseplants by thoroughly

(Continued on page 5)

Clematis Propagation– Layering

By Lorraine Urban

Let's say it's the first week in June and your neighbor, a friendly one, comes over and admires your beautiful 'Nelly Moser' clematis, which is gloriously blooming on its trellis. She/he says, "I'd love to have one of those. Can I get some of the seeds and grow one of my own?"

You can explain to your neighbor that this cultivar is not protected by Plant Breeders Rights, which would prohibit you or anyone else without a license from propagating these plants in any way.

So, "yes," your neighbor could have some of your seeds, but they may not produce a plant that looks just like yours because there's a wide assortment of possible genetic combinations. And hybrids, which include all of the large flowered varieties, like 'Nelly Moser', seldom come true from seed.

"But," you tell your neighbor, "I've been wanting to try a simpler and more reliable method of propagation, and we don't have to wait until the seeds form to get started. If all goes well, we'll have a 'Nelly Moser' Clematis for your yard. This is what I'll do...."

(Continued from page 4)

washing the leaves. If plants are large, taking them into the shower or outside and use a hose them to clean the leaves. At the same time, check for insects or diseases.

As new growth resumes, fertilizer should be restarted after repotting the plant and continued until fall.

Propagation by Layering

1. Dig a shallow trench (about 3" deep) near the clematis you wish to propagate.
2. Mix some organic compost or peat and some sand with the soil in the trench.
3. Choose a piece of the vine that will easily drape down to the ground. It should have 1, 2, or 3 leaf nodes that will lie along the ground without straining the stem. Trim off the leaves.
4. On the underside of the vine, with a sharp knife, make a small oblique (v-shaped) cut toward each node and remove a sliver of wood just a little deeper than the bark.
5. Dust the cut(s) and the leaf node (s) with hormone rooting powder.
6. Place the prepared vine into the trench; secure each node with U-shaped pieces of wire and fill in the trench.
7. Be sure to water the trench regularly and make sure the parent plant doesn't suffer from drought either.

8. Label the plant.

If you don't want to pot up the new plant(s), you can bury a 4" compost-filled pot into the trench under each node, being sure to peg each node in. The new plants will grow right into the pot and there will be less disturbance of the root system when its time to give my neighbor the plant.

Newer, but not "green" wood is best started in the late spring or early summer. Woody, more mature wood produces best results when started in the fall.

Hopefully, your neighbor won't complain because it takes 12 - 18 months for this type of propagation to be complete. You can always remind her/him that it's "free."

Nebraska Statewide Arboretum Rare & Native Plant Sale

NSA Greenhouse on East
Campus in Lincoln, NE
Saturday, June 10th



Begonias

By Mary Svoboda

This is one of the great groups of cultivated plants of which there are numerous hybrids and variations. Very diverse, many are grown for foliage, others for splendid blooms.

The first begonia was introduced into England in 1777. Since then, thousands of variations display the most gorgeous colors in flowers and leaves. These show-stoppers are indigenous to Mexico, Central and South America, Asia and Africa.

If you have a shady area or are looking for a brilliant accent for a patio or balcony, begonias provide a spectacular display from June through October, in shades of white, pink, red, yellow, orange, salmon as well as bi-colors.

Classification

Rex begonias are considered kings of the begonia world, hence the name. This is a rhizomatous begonia, usu-

ally grown indoors, with a height of 6 to 18 inches. Their stunning foliage includes green, purple, silver and/or gray in an amazing array of patterns. Leaves are lustrous, highly colored, luminous or even metallic.

Star-leaf begonia has leaves with pointed lobes, suggestive of stars and pink flowers.

They are propagated from stem or leaf cuttings in properly moist soil. They prefer temperatures of 55 to 75° F degrees. They love bright indirect light, letting the soil dry moderately between waterings, and having their spent leaves removed.

Like all begonias, they are vulnerable to powdery mildew, which can be controlled with fungicides. In spring and summer, Rex begonias can be fertilized with a balanced formula or timed-release fertilizer. If the rhizome grows too large, it can be pruned back.

Another old-fashioned relative of the Rex begonia is the beefsteak or pond lily variety, not to be confused with the 'Omaha Beefsteak' Rex begonia. It is semi-upright plant with five inch wide round green leaves which are red on the underside. It produces sprays of pinkish white flowers, and if it likes its home, it will grow amazingly fast. Clearly a plant from a tropical forest, it thrives under fluorescent lightly.

Cane or angel wing begonia is the giant of the family, growing up to 10 feet. There are several canes of varying sizes, but they all have

in common tough stems that have a bamboo appearance, which gives them the cane handle. Prominent basal leaf lobes suggest angel wings, hence the name. There are small pink to coral red flowers.

Wax begonias, also called *B. semperflorens* or fibrous begonias, are annuals frequently seen in flower beds. They are easy to grow, with small, lobed and profuse flowers in colors of red, pink, white and bi-colors, with shiny green or bronze leaves.

Tuberous begonias are the most spectacular of the family, growing up to 12 inches tall, and having rose or camellia shaped double blooms up to 6 inches wide. The F1 hybrids called "non-stop" begonias bloom earlier in spring and become dormant later in the fall than regular tuberous begonias. If moved indoors where they can receive supplemental light during part of the night, they will bloom all winter- nonstop.

Their flowers are not as large or fancy as those of the giant hybrids. Blooms are red, yellow, orange, salmon, pink, single or double, plain, ruffled, or toothed. The petals may have margins, crests or blotches of contrasting color.

They bloom throughout the summer, prefer shady spots and are often used as container plants on patios and porches, hanging baskets and as bedding plants. Tuberous begonias are native to South American and southern Africa.

(Continued on page 7)



Angelwing Begonia

Trailing begonia is the hanging type of begonia, perfect for hanging baskets. The botanical name is *B. tuberhybrida* 'Pendula', making this a form of tuberous begonia. Their eye-catching flowers bloom in glorious masses during the summer and into fall in a palette of colors.

Propagation

Begonias may be planted from seed, a leaf placed in water until it roots, leaf cuttings, stem cuttings or tuber division.

Wax begonia is usually propagated by seed or stem cuttings, but not usually by leaf cuttings.

Rex, angel wing, and other large-leaved begonias with large veins may be propagated by leaf cuttings. The cutting is prepared as a leaf-petiole cutting, wherein the cut petiole end is placed in water or soil. This leaf petiole cutting forms roots and then forms a small plant bud that grows into a new plant. There may be several new plants formed at the cut end of the petiole.

It is also possible to increase the number of some begonias from a single leaf by cutting through the large midrib and other major veins before placing the leaf cutting on the soil or sphagnum moss.

If the petiole is left attached it may be placed into or on the surface of the potting soil as well. New plants will be produced from the end of the petiole as well as from each place that a vein was cut.

It is important to provide sufficient humidity and keep the soil slightly damp at all times. Once the new plants are large enough to handle

safely, they may be separated from the parent leaf and potted independently.

Tuberous begonias may be propagated from seed. At a constant temperature of 70° F, germination can take from 10 to 21 days. Slower germination can be expected if the soil temperature is below 70° F. Bright light is helpful for germination.

Using a glass cloche or clear plastic tray cover will help to increase humidity around the seeds and young plants. Leave the cover on for two days after germination, then remove it. Thin the seedlings to 2 inches apart.

For tuber propagation, place each tuber with the hollow side up in a container of soil so that the tuber is just below the soil surface. The tuber should have no more than 1/2 inch of light soil covering it, as they easily rot if too deep. Place them in a warm, bright spot where the temperature is never below 60° F.

Water the tubers well and cover with newspaper or plastic to maintain moisture and promote growth. Expect to see shoots in 5 to 6 weeks. Remove the cover when growth appears, but don't water again until the soil dries. If kept too wet the tubers can easily rot. Once the shoots are growing, do not allow the soil to dry out.

Provide as many hours as possible of bright, indirect light— not direct sun. Make a half strength fertilizer solution for the first time when the leaves are about 3 inches tall. Wait two weeks, then start a regular fertilization schedule.

New plants must be properly hardened off before planting outside.

General Care

When transplanting begonias, do it carefully. The delicate stems and leaves are easily bent or broken.

Tuberous begonias thrive in partial to full shade and need well-drained soil. They hate wind and hot sun.

When growing begonias in containers, select a container that will hold sufficient soil and provide adequate drainage. Good choices are plastic or non-porous materials that can be easily hung. Hanging baskets can be lined with sphagnum moss or coconut liners.

Soil-less, soil mixes are excellent for begonias because they provide good drainage and aeration, while still having good moisture retention.

Water generously, especially in hot weather, keeping the soil moist but not soggy. The tubers will rot if they are too wet.

Once the plants start blooming, fertilize every two weeks.

Remove spent blooms and leaves. Pinch off extra long stems as the plants are developing, keeping the strongest stems and pinching off others. Large flowered begonias look best with fewer, larger flowers. Don't allow them to get too leggy or they may require staking.

If growing pendant types encourage branching early (when the plant is approximately two inches tall) by pinching out the primary growing tip. This will ensure the development of

Some Thoughts On Columbine

By Nancy Lindblad

Columbine, *Aquilegia sp.*, is a rather old fashioned perennial and many gardeners have planted various cultivars in their flower beds for their delightful colors and forms.

There are dwarf columbine 12" tall or shorter that tuck into rock gardens or troughs, there are the bold and beautiful, 30" tall 'McKana Giants' that create a rainbow of color in late spring.

The flowers grow at the tip of the plants, some remaining upright and others with nodding blossoms. The petals have spurs that project behind the flower and the colorful sepals, that appear petal-like, are often a contrasting color.

Early in my gardening years I brought home some seeds from my mother-in-law's garden in Minnesota. I had no idea what a treat it would be a couple of years later when the columbine bloomed. A veritable rainbow of star-like blossoms danced in the breeze.

It turned out the seeds were 'McKana Giants' and it was my good fortune to have gotten a wide range of color combinations. These beauties reseed themselves and so new plants are coming all the time. There is always enough seed to give away also.

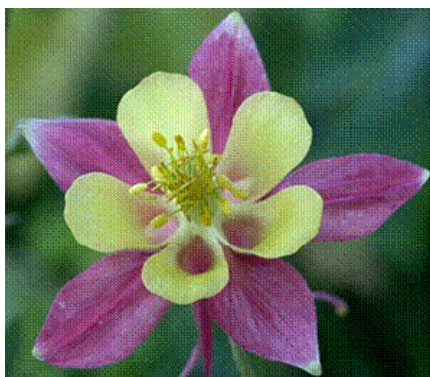
Columbine grow best in part sun/part shade so they are excellent candidates for a border planted with *Hostas*, *Lupines*, *Brunneras* and *Heucheras*.

Columbine foliage will last all season if there is enough moisture. But dry summers can cause leaves to look rough or disappear altogether. I usually cut mine back in the late summer when they get to looking shabby and

a flush of new growth will appear before frost.

There is a leaf miner that loves columbine. The plant does not suffer but a heavy infestation makes the foliage look unattractive. Leaf miners, the larvae of a small brown fly, tunnel their way through the leaves and make curvy light patterns that are quite noticeable.

You can treat with a systemic pesticide, but an easier way is just to remove the affected leaves and discard them. If you have a really bad case, you can cut back the whole plant and new growth will start almost immediately.



'McKanna Giant'

Over the years I have had a couple of other problems with my columbine. A kind of crown rot began to affect a portion of the plants about five years ago.

The plants will grow normally and at the time they just begin to bloom, some of the stems will start to turn black at the crown. The rot seems to work its way up the stem until the whole thing wilts from lack of moisture. I dig up the affected plants and

dispose of them in the trash but each year some of the plants that come back are diseased. Still, others always grow and bloom and produce seed.

The other problem is that the wild columbine I have in my wildflower garden, some distance away from the perennial bed, will seed into the hybrid columbine. It is necessary to dig these out since it is obvious that the wild ones are very vigorous and will gradually choke out the hybrids weakened by disease.

Most columbine foliage is grey/green to blue/green, but some of the newer cultivars such as 'Lime Frost' have a lime-green-on-green foliage variation with blue, pink or white flowers that will brighten just the perfect spot in the border. 'Silver Edge' has green leaves with white and silver streaking and margins with blue and white flowers.

There are bloom shapes that are interesting including a dwarf form called 'Little-Lanterns', a bright red-orange color and delightfully spurred down-facing blossoms. There is a double-flowered columbine called 'Pretty Bonnets' that has a lovely pleated look in pink and white. And of course there is the old fashioned 'Nora Barlow' and the newer 'Black Barlow' that have no spurs and nodding flowers.

The fan columbine features a lower bushy crown of leaves with tall flower stems covered with very deep blue blossoms that hold themselves erect. These work well in a mixed border and reseed liberally.

Columbine can easily be started from seed (maybe from a friend's garden) or you can pick up many different varieties at the nursery, just the thing to give late spring color to your garden.

The David Austin English Rose

By Nancy Lindblad

Does thinking of growing roses in your garden feel like too much work? We all know how roses need pruning, fertilizer, water, systemic insecticides, mulch, winter cover, etc., and for many it seems like way too much work. However, there are new forms out on the market that require less work and give more pleasure than ever before.

The David Austin English Rose, created by David Austin back in the early 60's, is not an Old Rose, but a Modern rose bred in the style of Old Roses, combining the unique charm and fragrance of Old Roses with the wide color range and repeat flowering qualities of Modern Roses.

David Austin was particularly interested in producing well-formed shrubs which would make good garden plants, ideal for use in mixed borders. His inspiration was the traditional English cottage garden where roses mingle with scented perennials and annuals, creating a romantic, fragrant garden.

His first efforts produced varieties that only bloomed once in the early summer. From these he developed repeat-flowering varieties with similar Old Rose style blooms. He introduced this first group in 1969. However when he introduced two new English Roses at the Chelsea Flower Show in 1983, they quickly gained popularity all over the world.

David Austin roses are an entirely new breed of rose which blends the opulent, romantic beauty of Old Roses with the disease resistance and repeat flowering of Modern Roses. Their wonderful fragrances include the classic old rose, together with tea rose, fruity, myrrh and musky.

Their blooms vary from the very full cupped flowers of 'Queen of Sweden' to the single red 'Rose of Picardy', both newly released this season.

Many of these roses are very easy to shape into different sized plants to suit your garden. Simply prune, more or less heavily as needed, to obtain the desired height. Other varieties stay reliably short and are excellent for bedding or hedges.

All of them share a graceful, shrubby habit which makes them superb for use in mixed borders. Best of all for American growers is that the majority of David Austin English Roses are grafted onto 'Dr. Huey', the most widely used rootstock in the States. They obviously do well in American gardens.

Naturally, regional climate is a factor and you can find which grow well in eastern Nebraska on the website or in catalogues. The Wayside Garden catalogue has a nice selection of David Austin English Roses.

I planted my first two David Austins about 10 years ago and found them to be hardy and persistent bloomers. They do get black spot but it doesn't seem to slow them down much.

Our climate does not permit them to grow into huge shrubs as one in my daughter's garden in Kansas City has done, but they delight with their delicate color and cupped blossoms.

Since I love pale pink and apricot, I planted 'Ambridge Rose' and 'Tamora'. I also have a brilliant red called 'Rabelais'. I recommend them to first time rose growers and to those, like me, who are tired of worrying about hybrid teas.

Those who are really interested will be able to buy David Austin's new book "The English Roses" which was published by The Timber Press in February 2006.



Mark your calendars

Spring Affair Plant Sale

April 22
9:00 a.m.-4:00 p.m.
Nebraska State Fair Park
Lincoln, NE
402/472-2679

Sponsored By:
Nebraska Statewide Arboretum
Nebraska State Fair Park &
Arboretum
UNL Botanical Garden &
Arboretum

Black Spot of Roses

Roses are one of the most versatile and inspiring ornamentals for landscaping. There are roses adapted for any garden site and landscape purpose. Roses are not always easy to grow and may require a little more management than other ornamentals. One of the greatest challenges to successfully growing garden roses is disease control.

Cause and Distribution of Black Spot

Black spot, caused by the fungus *Diplocarpon rosae* Wolf, is the most important disease of roses worldwide. It was first recorded in the United States in 1830 and is now found throughout North America. It is by far the most troublesome disease of garden roses in Nebraska, and if not properly controlled, will severely weaken plants. This can result in increased susceptibility to winter injury or dieback due to other causes.

Infection by *D. rosae* occurs directly through the cuticle on both sides of the leaf. The fungus tolerates a wide range of temperatures, but needs high relative humidity for leaf infection to occur. It does not require free moisture to infect, but infection is greater on leaves that remain wet for six or more hours.

Leaf spots are nearly circular and black, with margins that are fringed or feathery. The dark color and feathery appearance easily distinguishes black spot from other leaf diseases of roses. Spots may vary in size. They sometimes coalesce, but more often remain as distinct spots. Leaf tissue surrounding the spots turns yellow and drops from the plant. Lower leaves are usually the first to become infected followed by middle and upper leaves. Excessive leaf drop reduces stem length and size, as well as number and quality of leaves and blossoms. It also weakens plants and increases the risk of injury from cold winter temperatures. In resistant cultivars, or during dry weather, only small spots may form without yellowing and defoliation.

Symptoms, in the form of raised purple blotches, form on immature wood of first-year canes; these later become blackened and blistered. Lesions on canes rarely kill branches, but are very important to the pathogen's survival over the winter. Infection of petioles, stipules, peduncles, fruit and sepals may result in inconspicuous, reddish-purple spots.

Conditions Favoring Black Spot

Optimum conditions for infection and disease development are 75 F to 85 F, relative humidity above 85 percent, and six or more hours of leaf wetness. Leaves are most vulnerable to infection while still expanding. The black spot fungus survives on the host throughout the year as mycelia, in fallen leaves or in infected

Fungicides for control of black spot of roses.

Captan
Chlorothalonil, Daconil 2787
Funginex
Mancozeb
Maneb
Sulfur

canes. During the growing season, spores produced on leaves and young canes are dispersed in rain water or dew and are disseminated primarily by splashing water. Infected fallen leaves blown by wind disperse the black spot fungus locally within the garden.

Plant architecture influences disease development. Roses that have a more compact form or that develop leaves near the ground are more subject to infection. Crowded plantings generally have higher humidity within the canopy which promotes disease development.

Prescription for Healthy Roses

Effective black spot control depends on

an integrated approach that uses timely application of appropriate fungicides and the implementation of good horticultural practices. These are designed to prevent severe infection, which can defoliate plants by mid-season.

Control starts with growing cultivars resistant to black spot. Most garden catalogs will identify cultivars resistant to black spot and other rose diseases. For the home gardener who wants to grow a few roses in the landscape, but does not want to be burdened with a fungicide spray program, black spot resistant roses offer a suitable solution. For those dedicated enough to follow a weekly fungicide spray program, black spot susceptible cultivars offer a challenge. Fungicide sprays should be used when conditions favor black spot, which in Nebraska is from mid-May to mid-September. Successful control requires weekly application to protect the newly emerging foliage. Apply fungicide sprays in the evening when there is less wind and temperatures are cooler. Cover both sides of the leaf when spraying.

Several fungicides can be used to control black spot. It is a good idea to use a different fungicide each season or alternate between fungicides during the growing season. Anyone using a fungicide should first carefully read the label and apply as instructed.



Rose Black Spot

2006 Master Gardener Volunteer Activities

Contact Sarah, at 727-2775 or sbrowning2@unl.edu, to sign up for the volunteer activities you would like to help with this year.

Phone Answering

Volunteers are urgently needed to help answer phones any weekday morning from 9 a.m.-Noon. Dates from April 1st through August 31st are available. Please call Sarah to sign up! It's fun, and you'll learn lots!

Eco-Fair

Assist with this one-day event, April 19th from 8 a.m. to 2:30 p.m. Talk with children about butterfly gardening and answer their questions about the butterfly lifecycle with the help of a butterfly display. Two hour shifts are available.

Saunders County Historical Society

Assist with pruning, weeding and maintenance of the Saunders County Museum landscape. Give landscape maintenance recommendations to other members of the Historical Society.

Saunders County- Hanson House

Assist the Hanson House committee to maintain this site's landscape throughout the summer.

Community Garden

Fremont, NE

Assist with marking of the garden plots, using string and wooden stakes. Weekly help is also needed to take produce received from the community garden to the Low Income Ministry.

Dodge County Fair

All Dates Tentative until Fair Book is Published

Assist with the 4-H Horticulture Contest

Entries

Tuesday August 1st,
6:00-8:00 p.m.

Wednesday August 2nd,
8:00-9:00 a.m.

Judging

Wednesday August 2nd,
9:30 a.m.- 4 p.m.

Open Class Entries

Wed. August 2nd, 1-9 p.m. and/or
Thurs. August 3rd, 7-8 a.m. Help in the horticulture division to get the entries into the right classes. Very fun and not hard work! Superintendent Helen Langemeier.

Dodge County Vegetable Booth

Wed. August 2nd

Help take entries and create an attractive display with the open-class county vegetable entries. Also very fun! Superintendent Dina Anderson

Newsletter Committee

Become a member of the newsletter committee. The committee meets 4 times per year, for about one hour, to brainstorm content for the next newsletter and make writing assignments.

If you need help choosing a topic we will help you and get you writing! This activity will be worth 2 hours of volunteer time per article, and one hour for each meeting attended.

Interested in writing an individual column for the Master Gardener newsletter? Please do! **Contributors are always welcome!**

Other Ideas?

If you have other projects you would like to work on as a Master Gardener volunteer, bring those ideas to me and let's discuss it!

Just remember, these must be activities for which you are not paid, and UNL Extension must be acknowledged during the program or event.

Please Join Us!

Newsletter Committee Meetings

- ◆ April 25th
- ◆ July 25th
- ◆ September 25th

All meetings are held from 7-9 pm at the UNL Extension Office, 1206 W. 23rd Street
Fremont, NE

We have fun brainstorming newsletter article ideas for our next issue of the *Going & Growing* Newsletter.

University of Nebraska- Lincoln
Extension
1206 W. 23rd St.
Fremont, NE 68025

Phone: (402) 727-2775
Email: sbrowning2@unl.edu

We're on the web, at <http://hortparadise.unl.edu>. Click on 'Master Gardener Program.'



Begonias, continued

(Continued from page 7)

many secondary branches that will hang down over the sides of the hanging basket.

Pest Control

Monitor plants and protect them from slugs and snails. High humidity and cool weather can cause powdery mildew on the foliage. To prevent mildew problems, make sure they have good air circulation. Spray with a fungicide if mildew appears.

Storage

Once the show is over in fall, dig and store your tubers for winter. Because begonias are prone to rot if left in the ground until their tips fall off, you'll want to bring them in prior to frost. Place them in a well-ventilated room and start withholding water to encourage the foliage to dieback. Remove the stems and leaves after the foliage has died.

Clean the tubers off, remove any remaining soil and cover them with dry sand, peat moss or vermiculite. Do not wash the tubers to remove soil. Store them in a cool area, 55° F. Properly stored, tuberous begonias will provide years of vibrant, eye-popping blooms to brighten up a shady garden.

2006 Upper Midwest Master Gardener Conference Celebrating Garden Diversity June 15-17, Cedar Rapids, Iowa

Join hundreds of other Master Gardeners for the Upper Midwest Master Gardener Conference June 15 - 17 hosted by the Iowa Master Gardeners at the Cedar Rapids Marriott in Cedar Rapids Iowa.

A barbecue the evening of June 14 kicks off the festivities for the conference. June 15 will be a day filled with tours including the Amana colonies, private residences, and places to bring back treasures to your own diverse garden. The tours culminate at Bruce more estate for tours of the gardens, house, and dinner.

June 16 and 17 are devoted to seminars with topics to include conifers, shade gardening, tree diseases, garden forums, peonies, invasive insects, and gardens of the world.

Registration as well as the latest updates for the conference will be on the Iowa Master Gardener website <http://mastergardener.hort.iastate.edu/>.