An Herb Society of America Essential Guide

Roses

2012 Herb of the Year

International Herb Association

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Table of Contents

Knowledge

6 *Rosa*
by: Art Tucker

28 Classes of Roses
by: Henry Flowers

37 Growing Roses Sustainably
by: Holly Shimizu

44 Rose Etymology
by: Rexford Talbert

46 Roses Throughout History
by: Lorraine Kiefer

52 The Sweet Scent of Roses
by: Jane Cole

Use

69 Rose Elixirs, Tinctures and Vinegars
by: Gayle Engels

61 Rose Beads
by: Susan Belsinger

74 Recipes Section
by: Susan Belsinger, Debbie Boutelier, Kathleen Gips, Mary Versfelt

Delight

86 Roses of Calais
by: Caroline Holmes

91 Hunting the Musk Rose
by: Jo Sellers

95 Rose Garden at Elizabeth Park
by: Susan Schuman-Skehan

Resources

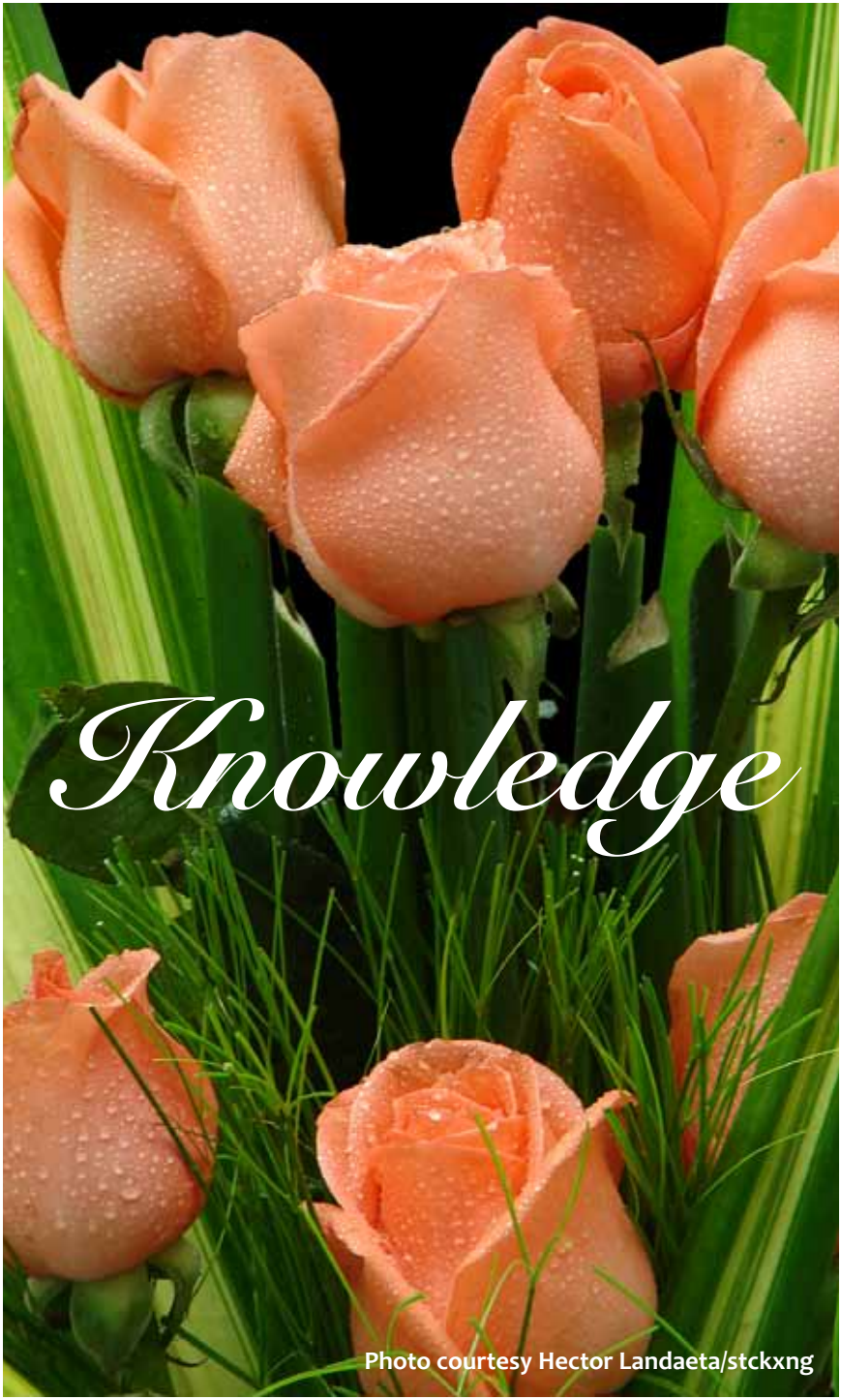

Photo courtesy Hector Landaeta/stckxng

Rosa

By Art Tucker

Rosaceae Family

Growth form: **Shrubs, 2 to 30 feet (61 cm to 9 m)**

Hardiness: **Many routinely hardy to Zone 6**

Light: **Full sun**

Water: **Moist but not constantly wet**

Soil: **Well-drained garden loam**

Propagation: **Cuttings or grafts**

Culinary use: **Salads, desserts**

Craft use: **Potpourri, sachets, beads**

Landscape use: **Shrubbery or rear of herb border**

Photo Robin Siktberg/HSA

Gertrude Stein's "A rose is a rose is a rose" strikes us as pitifully naive when you consider that the genus *Rosa* includes about 100 species from temperate regions to tropical mountains and thousands of different named cultivars. The genus *Rosa* derives its name from the Latin, *rosa*, in turn from the Greek, *rhodon*, which, in turn, was derived from the original Indo-European root-word, *ward*, still retained in the Arabic.

As implied from such an ancient Indo-European origin of the name, roses have been cultivated since ancient times; we find, for example, the depiction of what may be *Rosa gallica* in the House of Frescoes at Knossos dated to around 1400 B.C. Roses have enthralled humans for their beauty of form and scent down through the ages, and today we use rose petals for perfumes, cosmetics, and even salads, while the fruits, known as hips, are high in Vitamin C with a tomato-like taste. Roses have long symbolized romance, and we find special pleasure and meaning in being able to grow, touch, and inhale the fragrance of the same rose that grandmother grew in West Virginia or Napoleon's Josephine grew at Malmaison.

How to Choose a Rose

The choice of a rose cultivar for its beauty and usefulness is an individual choice, but the nursery's methods of producing roses should be an important consideration as well. Roses sold today in North America and Europe are usually budded upon one of three different rootstocks, *R. canina*, *R. multiflora* Thunb., or 'Dr. Huey,' but some companies sell plants grown on their own roots ("own-root roses"). There are advantages and disadvantages to both methods. Generally, most heritage roses perform better with their own roots, but modern hybrids such as teas and floribundas, whose own roots tend to be weak, do better grafted to a more vigorous rootstock.

Some own-root roses often produce shoots from their own roots called suckers, especially if they have *R. gallica* ancestry; these suckers can be as troublesome as spreading mints and as difficult to manage. 'Dr. Huey' rootstock is fine for the sandy, alkaline soils of California and Texas, but for the acid soils of the northeastern United States, either *R. canina* or *R. multiflora* is preferred. For Florida and other subtropical areas, *R.* ×*fortuniana* Lindl. is a must as a rootstock because of the combination

of heat and nematodes. The choice of the rootstock is almost as important as the grafted scion, and if the commercial company which sells the rose you desire does not give that information in their catalog, write or call them.

Also look for grading of the budded roses and buy only grade 1 to 1 ½; these are the top grades awarded to plants with more canes and higher quality. An indication of a really good company is authentication that their budwood and rootstock have been indexed as virus-free. Expect, even with the best of companies, some misidentification, and if the company does not admit fault or refer you to a source for authentication, you may wish to look for another source.

Shed with climbing roses. Photo courtesy Wikimedia Commons

A rose is a rose is a rose.
-Gertrude Stein

Cultivating & Growing Roses

Most roses do best on deep, fertile, moist but well-drained soils with a pH of 5.5 to 6.5; a position that provides full sun and good air circulation helps reduce disease and insects. The choice of species or cultivar (as well as your climate) will dictate spacing. If rooting of the scion is desired, plant the bud union about 2 to 3 inches (5 to 8 cm) below the soil level; otherwise, be sure that the bud union sets above the soil level. Some gardeners prefer fall-planting to give the roots extra time to establish themselves, but we have found that in Zone 7 and north, some winters will be so cold that the fall-planted roses will not survive.

Do not fertilize newly planted roses; wait four to six weeks for the plants to become established. Authorities do not agree on the type of fertilizer or the rate, only that roses are heavy feeders. We recommend yearly feedings of about a cupful of 5-10-5 fertilizer per established rose bush, sprinkled in a circle around the base, supplemented with monthly feedings of fish emulsion, manure tea, or other organic sources of nutrients for maximum growth. Robust roses, such as 'Gardenia,' which puts out 40-foot canes even on poor soil, require additional fertilizer.

Do not expect typical blossoms of a species or cultivar until the second year after planting. The blooms of the first year are smaller and sparser than are typical.

Propagating Roses

Many of the heritage roses are easily propagated by cuttings. Those that don't root easily from cuttings, such as the roses with heavy *R. gallica* ancestry, produce suckers, which are easily transplanted. Many people swear on pencil-sized green cuttings taken in the fall, but we have had good success with "heel" cuttings of blooming stalks. Cuttings taken at the time of flowering also guarantee proper labeling. The cleanliness, temperature, and humidity of the rooting chamber are of primary importance; rooting media that suffers from fungi contamination, high temperatures, or low humidity guarantees failure.

To prepare a spring rose cutting, choose a healthy blooming side shoot with at least three good terminal leaves. Rip the side branch off in a quick downward movement, removing some of the tissue of the main stem. Dip the cutting in rooting hormone and treat as advised in the propagation chapter.

We have found that a well-drained rooting medium of 50 percent perlite and 50 percent clay frit (baked cat litter) with clean mason jars and semi-shade work very well for small batches of rose cuttings; for larger volumes of roses, you may want to experiment with mist systems.

For budding and other methods of propagation of roses, please see the books and articles cited in the bibliography.

Pests and Diseases

The worst rose pests are thrips, leaf hoppers, rose slugs, and Japanese beetles. The first three can be controlled by spraying a dormant oil in early spring when you have twenty-four hours of above-freezing temperatures but before the buds have begun to burst. Japanese beetles can be controlled by strains of *Bacillus thuringiensis* applied to the adjacent lawns. If you use the Japanese beetle traps that have sex attractants and/or rose oil, be sure to place the trap far away from the roses and empty the traps often; placing the traps near the roses will guarantee that they are eaten.

Black spot and mildew are the most common diseases, and various claims of success have been made for sprays of baking soda (3 tablespoons per gallon of water) applied with an insecticidal soap (5 tablespoons per gallon water) or summer horticultural oil. Baking soda sprays must be reapplied after each heavy rain, and avoid overhead watering.

Harvesting Roses

Picking rose petals is extremely labor-intensive. Pickers in New Zealand do not exceed 13.2 pounds per hour (6 kg/hr), but the average is 6.6 pounds per hour (3 kg/hr). At 0.09 to 0.18 ounce per flower (2.5 to 5.0 g/flower), this represents 91 to 181 flowers per pound (200 to 400 flowers/kg). A report from New Zealand indicates that *R. damascena* 'Trigintipetala' produced 12.3 pounds (5.6 kg) of flowers per plant during the third flowering season, for a total flower yield of 4.10 tons per acre (9.2 t/ha) at a density of 668 plants per acre (1650 plants/ha).

Either yields in New Zealand are exceptional, their plants are misidentified, or the decimal has been moved because in Delaware we only found 0.57 pounds (0.26 kg) of flowers per plant for authentic

'Trigintipetala' and 0.68 pounds (0.31 kg) of flowers per plant for 'Prof. Émile Perrot.' Typically, after picking, the rose petals are spread over cool concrete floors in the shade, where the rose petals may continue to produce rose scent, until they can be distilled.

Distillation

The distillation of rose petals is unique in a number of aspects. The essential oil of most herbs can be steam-distilled by passing steam over the leaves, but rose petals "glop together" under steam to form an impenetrable mass. Hence, the best method to distill the essential oil from rose petals is water distillation; the rose petals are placed in a distillation unit, often a copper still, often with salty water, and then boiled. The heating drives off the steam and the volatile components that are condensed by a cold-water condenser.

The resulting product in most other plants is an oil, but in the case of rose petals, many plant waxes (paraffins) are also distilled, resulting in a waxy, oily product called an *attar* or *otto* (derived from the Arabic '*itr*, meaning *perfume* or *essence*). The water contains many water-soluble components, particularly beta-phenylethanol, and this rose water is marketed for use in cosmetics or food. Rose petals may also be extracted with petroleum ether, producing a yellow-colored, waxy *concrète*. Extraction of the odoriferous principles into ethyl alcohol, leaving behind the yellow pigments and waxes, produces an *absolute from concrète*.

Rose Oil Chemistry

The typical rose scent is due to a simple water-soluble alcohol, beta-phenylethanol, and three monoterpenic oil-soluble alcohols, geraniol, nerol, and citronellol. The acetate esters of these alcohols are also rose-scented but of a slightly different fragrance. The clove-scented eugenol and methyl eugenol provide spiciness, while ionones give hints of violets. The relative concentrations of these chemicals determine the final odor. The attar may also be characterized by various waxes, such as nonadecane, eicosane, and heneicosae, but these are essentially odorless.

Major Rose Species & Cultivars

All of the following old roses, unfortunately, flower only once in spring. The fruit of some species, such as *R. canina* and *R. rugosa*, are large and red. These "hips," as the fruit is called, softened by the first heavy frost, have a tomato-like taste and are rich in vitamin C (ascorbic acid) and especially good prepared as conserves and jams with cream cheese for tea cakes. Under ideal conditions, rose hips may have 0.5 percent vitamin C. However, vitamin workers have reported asthma-like symptoms induced by inhalation of powdered rose hips.

In our discussion we have included seven basic rose species and ancient hybrids which have utility in the herb garden. Many cultivars, particularly those designated as "heritage" roses, could also be recommended, but remain beyond the scope of this article.

The literature on roses is voluminous: for a survey of this literature, we recommend Keith Stock's Rose Books. Gerd Krűssmann's encyclopedic *The Complete Book of Roses* provides a general history and guide through the complex evolution of roses. For descriptions and dates of cultivars, Thomas Cairn's *Modern Roses XI* is a good introduction. For color pictures of the species and heritage roses, we recommend, in particular, Peter Beales's *Classic Roses*, Trevor Griffiths's *The Book of Old Roses* and *The Book of Classic Old Roses*, and Roger Phillips and Martyn Rix's *Roses.* Look for books on rose culture in your region, such as Liz Druitt and G. Michael Shoup's *Landscaping with Antique Roses*, which is great for the Deep South.

> It may be that which we call a rose by any other name would smell as sweet, but I should be loath to see a rose on a maiden's breast substituted by a flower, however beautiful and fragrant it might be, that is went by the name of the skunk lily.
>
> ~ Alexander Henry

Rosa alba rō-zå ăl-bå

***Rosa alba* 'Maiden's Blush'**
Photo by Kurt Stueber

The white rose is unknown outside of cultivation and has an unknown pedigree. The white rose has clean, white petals with bluish green foliage and a wonderful old-rose scent; it is typified by a Linnaean specimen with nine petals. This is var. *alba*, sometimes incorrectly designated as 'Semi-Plena'; it may bear up to twelve petals. *Rosa alba* var. *alba* has been called the "York" rose because it was chosen by Edward IV (reigned 1461-1470) as a symbol of the House of York. Another cultivar is 'Suaveolens,' the white rose of the perfumers since before 1899, with twelve to sixteen petals. 'Suaveolens' is typically used as a windbreak for the damask rose fields in Bulgaria, and the petals are also harvested for the commercial attar. 'Maxima,' with forty-four to fifty-one petals, was the rose of the Jacobites, chosen by the supporters of the House of Stuart after James II lost his throne in 1688. 'Maxima' predates 1400 and was often pictured in fifteenth-century paintings.

Important Chemistry: The attars of 'Suaveolens' and 'Maxima' are very similar, with 32 to 34 percent geraniol and 18 percent nerol.

Dog Rose

Rosa canina rō-zå kå-nī-nå

Photo by Luc Viator

The dog rose or dog hip is typically used as a rootstock for grafting hybrids, particularly by nurseries in England, and it is frequently naturalized in North America. This is a large shrub to 8 feet (2.4 m). The flowers are single and pink; the hips (fruits) are orange-red, large, tasty, and high in vitamin C. The seeds yield an oil rich in trans-retanoic acid and are potentially useful for cosmetics.

Cabbage Rose

Rosa centifolia rō-zå sĕn-tĭ-fō-lĭ-å

Cabbage rose, or *rose de Mai* in French, may date from ancient times, but it definitely appeared in the form 'Maxima' from Dutch nurseries in the sixteenth century. 'Maxima' is difficult to locate today, and some modern nurseries pawn off other cultivars that do not match the 'Maxima' pictured in early Dutch paintings. The true 'Maxima' looks like a small, pink cabbage, as the

Photo by H. Zell

name implies. While desirable for form, color, and texture, the true cabbage roses tend to be rather weak plants.

Rosa centifolia, translated as the hundred-leaved (petalled) rose, gave rise to many cultivars in Dutch and French nurseries. Today some nurseries still offer 'Bullata' (*ca.* 1801), the cabbage-leaved cabbage rose, with red-tinged leaves that are crinkled like a those of a cabbage.

The cabbage rose is particularly noted for sporting in the past to the moss roses; these roses have a distinctive pine-scented mossiness on the flower stem, hypanthium, and sepals. The most distinctive early moss is 'Crested Moss' ('Chapeau de Napoléon, 1827). These cultivars also have that full, cabbagy form and old-rose scent typical of the true cabbage rose in additon to the moss.

The rose water of *R. centifolia* is listed as GRAS at 100 ppm. Rose oil from Morocco, reputedly *R. centifolia*, was found to have anticonflict effects from the content of beta-phenylethanol and citronellol.

Important Chemistry: The attar of 'Crested Moss' petals is dominated by 34 percent geraniol and 18 percent nerol. Oil from Morocco, supposedly *R. centifolia*, has 34 percent citronellol, 15 percent nonadecane, and 14 percent geraniol.

French	*rose p,le, rose Ö cent feuilles, rose de Provins*
German	*Zentifolien-Rose, Centifolien-Rose, Provence Rose*
Dutch	*centifolia roos, Provence roos*
Italian	*rosa centofoglie*
Spanish	*rosa centifolia, rosa de cien hojas, rosa com ´n*

Summer Damask Rose

Rosa damascena rō-zå dăm-å-sē-nå

French
rose de Damas

German
Damaszener Rose

Dutch
damast roos

Spanish
rosa damascen

Rosa damascena
Photo by H. Zell

The scientific name of *Rosa damascena*, the summer damask rose, was first published by Jean Herrmann in his *Dissertatio Inauguralis Botanico-Medica de Rosa* in 1762. However, Herrmann's rose is not the damask rose we know, but an unidentified hybrid. Six years after Herrmann's description was published, Philip Miller published *R. damascena* for the rose that we grow today. Because Herrmann's prior use of this name takes precedence under the International Code of Botanical Nomenclature, the correct name of today's damask rose is actually unknown, but this is only one of many instances of confusion concerning the correct identity of roses. We use *R. damascena* here simply because no other name is currently available and generally understood. The damask rose may be derived from hybridization of *R. moschata* Herrm., *R. gallica*, and *R. fedtschenkoana* Regel, but futher studies are need to confirm this.

The rose commercially cultivated in Kazanlik Valley of Bulgaria is usually listed in rose books as 'Trigintipetala,' a name first published by G. Dieck in 1889. This cultivar has become thoroughly confused in the nursery trade with 'Prof. Émile Perrot,' which was gathered from commercial fields in Iran and introduced by the rosarian Turbat in 1931. 'Prof. Émile Perrot' is the cultivar offered as 'Trigintipetala'

by American, Canadian, and British nurseries; one leading American heritage-rose nursery even has the audacity to offer 'Alika' of 1906 as 'Trigintipetala'. A rose similar to 'Trigintipetala' is 'Gloire de Guilan,' which was gathered from commercial fields in the Caspian provinces of Iran by Nancy Lindsay and introduced by the Hilling, a British rose nursery, in 1949. All these damask roses bear double flowers, usually pink, with typical damask scent.

'York and Lancaster' ('Versicolor,' 'Variegata') is called the Tudor rose and supposedly originated about the time of Henry VII when he ascended the throne in 1485; this story may be apocryphal because the rose can be dated with certainty only to the description of Clusius in 1601. The petals are usually white but sometimes streaked light pink, thereby uniting in a floral emblem the Houses of York and Lancaster (see *R. alba* var. *alba* above and *R. gallica* 'Officinalis' below, also Shakespeare's King Henry VI, part 1, act 1, scene 4, when Henry VII marries his cousin, Elizabeth of York).

The attar of *R. damascena* is listed as GRAS at 0.01 to 15 ppm. The essential oil is antibacterial. The tea made from the petals is rich in antioxidants.

Important Chemistry: The commercial Bulgarian attar is dominated by 33 to 36 percent citronellol, 16 to 26 percent geraniol, and 5 to 14 percent nonadecane. Iranian oil is rich in 15 to 47 percent citronellol, 0 to 40 percent nonadecane, 0 to 19 percent docosane, 0 to 19 percent disiloxane, 0 to 18 percent geraniol, 0 to 18 percent heneicosane. Indian oil is rich in 15 to 36 percent geraniol, 12 to 36 percent citronellol, and trace to 25 percent nonadecane. Chinese oil is rich in 31 to 44 percent citronellol, 16 to 22 percent geraniol, and 2 to 17 percent nonadecane. Gülbirlik rose oil from Turkey has 31 to 44 percent citronellol, 8 to 15 percent nonadecane, and 9 to 14 percent geraniol. Turkish absolute is rich in 50 to 86 percent beta-phenylethanol. The attar of 'York and Lancaster' is dominated by 25 percent geranyl acetate plus citronellol, 17 percent geraniol, and 11 percent heneicosane. The attar of 'Trigintipetala' is dominated by 19 percent nonadecane, 15 percent geranyl acetate plus citronellol, 14 percent geraniol, and 11 percent heneicosane. The attar of 'Prof. Émile Perrot' is dominated by 21 percent geraniol, 19 percent geranyl acetate plus citronellol, and 13 percent nonadecane. The attar of 'Gloire de Guilan' is dominated by 33 percent geraniol and 12 percent nonadecane.

French Rose

Rosa gallica rō-zå găl-lĭ-kå

French
rose rouge

German
Gallische Rose

Dutch
rode franse roos

Spanish
rosa frances

A hybrid of *Rosa gallica*
Photo by Bern Haynold

The French or Provins rose is usually cultivated as the semidouble, cherry pink cultivar 'Officinalis,' the apothecary's rose. 'Officinalis' dates to about 1240 and was the red rose of the House of Lancaster, chosen by Edmund, Earl of Lancaster in 1277. 'Officinalis' was the source of rose water as prepared in Provins, France. 'Versicolor' ('Rosamundi'), a striped version of 'Officinalis', has been sometimes ascribed to the "Fayre Rosamonde," the mistress of King Henry II of England, who died about 1176, but this rose can be dated with authority only to the description by L'Obel in 1581.

Rosa gallica 'Officinalis,' sometimes called the "red damask," was often pictured in paintings of the Virgin Mary, along with *R. alba* 'Maxima.' The apothecary's rose is a vigorous shrub to about 2.5 feet (0.8 m), but it sets out suckers like crazy from its own roots. The petals of 'Officinalis' retain their color nicely on drying and are thus good for potpourri. The petals are also reputed to retain their fragrance when dried, but we have not found any scientific proof for this tale.

Important Chemistry: The attar of 'Officinalis' is dominated by 17 percent nonadecane, 17 percent geraniol, and 12 percent nerol.

Eglantine Rose

Rosa rubiginosa rō-zå rŭ-bĭg-ĭ-nō-så

The eglantine or sweet briar, known in French as *églantier*, has apple-scented young leaves. Except for the incense rose (*R. primula* Boulenger), with sandalwood-scented leaves, this is a rather unique characteristic among roses. It is full of prickles with single, pink roses and grows to about 8 feet (2.4 m) in height. The eglantine was important in the Penzance hybrids, such as 'Lord Penzance' of 1894, with apple-scented young leaves and single, coppery pink flowers.

Rosa rubiginosa
Photo by Stan Shebs

Rugosa Rose

Rosa rugosa rō-zå rū-gōs-å

The rugosa or ramanas rose is worth growing, not only for its large, red hips rich in vitamin C, but also because the curly, green foliage of this rose is rarely troubled by mildew or blackspot. The stems are coated with many fine green to brown prickles. Some hybrids of this rose, such as 'Hansa' (1905) have fine, damask rose-like odors besides good form and color. If you are interested in this species and its progeny, we recommend Suzanne Verrier's book *Rosa Rugosa*. Aqueous and ethanol extracts of dried ramanas rose flowers have been shown to have human immunodeficiency virus type 1 reverse transcriptase inhibitory activity.

Important Chemistry: The attar of rugosa rose petals is dominated by 31 to 38 percent beta-phenylethanol, trace to 29 percent citronellol, 0 to 19 percent geranyl formate, trace to 14 percent nerol, and 6 to 14 percent geraniol.

Note: A key has been omitted for two reasons. First, a key would not be useful unless the thousands of cultivars could be included. Secondly, while rose books continue to designate cultivars, such as 'Mme. Hardy,' as pure species, most roses are hybrids ('Mme. Hardy' is probably a damask × cabbage hybrid, not a pure damask rose).

Rosa alba L., Sp. pl. 492. 1753.

Native country: The white rose is not known outside cultivation.
General habit: The white rose is a deciduous shrub to 2 m.
Leaves: Leaves are divided into five leaflets, 2 to 6 cm long, broad-elliptic or egg-shaped, toothed, hairy beneath.
Flowers: Flowers are semidouble to double, white.
Fruits/Seeds: Fruit is oblong-egg-shaped, red.

R. canina L., Sp. pl. 491. 1753.

Native country: The dog rose is native to Europe.
General habit: The dog rose is a deciduous shrub with green stems to 2.4 m.
Leaves: Leaves are divided into five to seven leaflets, 15 to 40 x 12 to 20 mm, egg-shaped or ellipse-shaped, toothed or doubly toothed, smooth and lacking in glands, dark to blue-green, shining or dull above.
Flowers: Flowers have 15 to 25 mm petals, pink to white.
Fruits/Seeds: Fruit is globose, ovoid, or ellipse-shaped, smooth, red.

R. centifolia L., Sp. pl. 491. 1753.

Native country: The cabbage rose is not known outside cultivation.
General habit: The cabbage rose is a deciduous shrub to 2 m.
Leaves: Leaves are divided into five leaflets, hairy on both sides or only beneath, toothed.
Flowers: Flowers are very double, pink.
Fruits/Seeds: Fruit is ellipsoid to almost globose.

R. damascena Mill., Gard. Dict. ed. 8. 1768.

Native country: The damask rose is not known outside cultivation.
General habit: The damask rose is a deciduous shrub to 2 m with numerous stout prickles.
Leaves: Leaves are divided into five to seven leaflets, egg-shaped to oblong-egg-shaped, toothed, smooth above, more or less hairy beneath.
Flowers: Flowers are double, pink.
Fruits/Seeds: Fruit is almost egg-shaped, hairy, red.

R. gallica L., Sp. pl. 492. 1753.

Native country: The French rose is native to southern and central Europe.
General habit: The French rose is a deciduous shrub, 0.4 to 0.8 m high, forming large patches.
Leaves: Leaves are divided into three to seven leaflets, 20 to 60 × 18 to 30 mm, leathery, almost globe-shaped to egg-shaped, rounded at the apex, usually doubly toothed, dull bluish-green and smooth above, paler, hairy, and glandular below.
Flowers: Solitary flowers, rarely two to four per stalk, are 6 to 9 cm in diameter, deep pink.
Fruits/Seeds: Fruit is globose to spindle-shaped, densely glandular hairy, bright red.

R. rubiginosa L., Mant. pl. 2:564. 1771 (*R. eglanteria* L.).

Native country: The eglantine is native to most of Europe.
General habit: The eglantine is a deciduous shrub to 3 m.
Leaves: Leaves are divided into five to seven leaflets, 10 to 25 × 8 to 15 mm, almost orbicular to egg-shaped, doubly toothed, smooth or hairy above, usually hairy and more or less glandular beneath.
Flowers: Flower has 8 to 15 mm petals, deep pink.
Fruits/Seeds: Fruit is almost globe-shaped, ovoid, or ellipse-shaped, smooth or glandular hairy, bright red.

R. rugosa Thunb., Fl. jap. 213. 1784.

Native country: The rugosa rose is native to China and Japan.
General habit: The rugosa rose is a deciduous shrub to 2 m, densely bristly and prickly.
Leaves: Leaves are divided into five to nine leaflets, 2 to 5 cm long, slightly waxy, wrinkled, lustrous, dark green, smooth above, hairy beneath.
Flowers: Flowers are single, cherry pink to purple to white.
Fruits/Seeds: Fruit is depressed globe-shaped, smooth, brick-red.

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Classes of Roses

By Henry Flowers

Old Rose Classes

Species roses are the roses that nature, in her good wisdom and grace, gave to the world. The genus *Rosa* is believed to have originated over 40 million years ago in China. From there it spread throughout the northern hemisphere. For the most part species roses are once (spring) blooming and provide spectacular displays when in bloom. Some good examples are: *Rosa canina*, the 'Dog Rose' of Europe; *Rosa laevigata*, the 'Cherokee Rose' from China; *Rosa foetida*, the 'Austrian Briar' rose from Persia; and *Rosa setigera*, the 'Prairie Rose' of North America.

Gallica roses, also known as Provins roses, are mostly descendants of *Rosa gallica*. The Gallicas are native to Central and Southern Europe and are richly fragrant, once-blooming roses generally with upright, open, shrubby habits. Most often their flowers are rich versions of red and purple. Two great examples are *Rosa gallica officinalis*, the 'Apothecary Rose', and *Rosa gallica versicolor*, 'Rosa Mundi'.

Damask roses are shrubs of open lax growth descended from *Rosa damascena* of southeastern Europe and the Middle East. Their foliage tends to be downy and grey-green while the flowers are mostly very double and extremely fragrant. Damask roses are perhaps the most prized group for the distillation of rose oil, known as *otto* or *attar*, and its byproduct rose water. Three very important varieties are *Rosa damascena bifera*, commonly known as 'Quatre Saisons' or 'Autumn Damask' and the first "repeat" blooming rose introduced to Europe; *Rosa damascena versicolor*, the 'York and Lancaster' rose and floral emblem of England; and *Rosa damascena trigintipetala*, the 'Kazanlik' rose, which is the main cultivar for attar production in Bulgaria and much of the Middle East.


Damask

Alba roses, as their name implies, are generally white flowered, but some soft pink cultivars do exist. They are once blooming shrubs, superbly scented, and native to northern Europe. They are an ancient class and it is believed that *Rosa canina* may have played a role in their parentage. *Rosa* ×***alba*** - the 'White Rose of York', 'Maiden's Blush', 'Celestial', 'Madame Plantier', and 'Königin von Dänemark' are all well-known examples.

The **Centifolia** roses, also known as Provence or Cabbage Roses, are descendants of *Rosa centifolia* from Europe and generally bear very full, fragrant blossoms in shades of rich pink to soft white. They are once blooming, tend to be lax in growth habit, and are generally very prickly. Some well-known examples are 'Blanchefleur' and 'Fantin Latour' and 'Rose de Meaux.'

Moss roses are variants of the Centifolias which have developed moss-like bristles on the backs and sides of the sepals. This "moss" contains resinous, scented glands. The flower stems may also be covered with similar bristly growth. As a group they became quite popular in the mid-19th century. Well-known examples are 'Alfred de Dalmas', 'Crested Moss', 'Communis', and 'Nuits de Young'.

Portland roses are descendants of a rose named 'Duchess of Portland', which is believed to be a cross between a Damask - Gallica hybrid and an unknown China rose, possibly 'Slater's Crimson'. Some believe that no China rose was involved, but in any case the roses of this class are marked by a short, tidy habit, full and richly scented blossoms and some remontancy (repeat blooming). 'Comte de Chambord' and 'Marquise Boccella' are two good representatives of this class.

The first **Bourbon** rose, 'Rose Édouard', is believed to have originated as a natural cross be tween the 'Autumn Damask' and the China rose 'Parson's Pink' (now commonly known as 'Old Blush') on the Ile de Bourbon (now Réunion) in 1817. This class is mostly made up of long-caned shrubs and short climbers with richly scented blossoms and some remontancy. Good examples are 'Madame Isaac Pereire', 'Louise Odier', and 'Zephirine Drouhin'. The highly popular 'Souvenir de la Malmaison' and it sports 'Kronprinzessin Viktoria' and 'Souvenir de St. Anne's' are notably smaller in stature, more shrub-like, and have a stronger repeat blooming habit than others of this class.

China roses, descendants of *Rosa chinensis*, created quite a stir when they were first introduced from China to Europe near the end of the 18th century, for they exhibited very strong remontancy. Two "stud" Chinas, 'Parson's Pink' (a.k.a. 'Old Blush') and 'Slater's Crimson', were actively crossed with European rose varieties to obtain many new classes.

Today this class is still one of the best for warm climates, with most of its member cultivars being quite shrubby in habit. Most flowers range in color from soft pink to rich reds and the fragrance is soft and fruity. Another interesting characteristic of the class is that the flowers tend to get darker with age, not lighter as is common with most roses. Good examples are 'Archduke Charles', 'Cramoisi Supérieur', 'Mutabilis', and the intriguing 'Green Rose'.

Tea roses or Tea-scented roses are another class that is well-suited to warmer climates of the world. They are descended from two Chinese roses, 'Humes Blush' and 'Park's Yellow Tea-Scented China' (a.k.a. *Rosa odorata ochroleuca*), that were introduced into England in the second decade of the 19th century.

They were brought from China on ships carrying tea and are said to have a tea-like aroma (arguable)—thus the name of the class. In general they are large shrubs with rich burgundy new growth, are quite remontant, love heat, have large and lax flowers, and are mostly in pastel shades of red, yellow, pink, and white. The yellow coloration of many can be traced back to 'Park's Yellow'. Cultivars of note include 'Duchesse de Brabant', 'Mrs. B.R. Cant', 'Safrano', 'Sombreuil', and 'Mrs. Dudley Cross'.

The first **Noisette** rose was a cross between 'Old Blush' and the Musk rose, *Rosa moschata*, made by John Champneys on a plantation near Charleston, South Carolina at the beginning of the 19th century. Champneys shared the results with his friend Philippe Noisette, who recognized the potential in these new roses and made further crosses which he sent to his brother Louis in Paris. Further breeding by Louis resulted in this popular new class, characteristically marked by good remontancy, rich floral fragrance, pastel coloration from white to pinks and yellows, and large floral clusters. Some varieties do well in cold climates, especially the older ones, but many do best in warm climates, especially the later and larger flowered cultivars with more Tea blood. 'Champneys' Pink Cluster' was the first Noisette of note and other well-known cultivars are 'Blush Noisette', 'Lamarque', 'Crépuscule', 'Madame Alfred Carriere', and 'Rêve d'Or'.

The **Hybrid Perpetual** class is a mixed bag of roses descended from the Bourbons, Chinas, Teas, and Portlands. Many were bred for increased remontancy, upright shrubby growth habit, larger and more fragrant flowers, and often to have single flowers on a stem. For much of the Victorian era they were the supreme class of roses, but few have survived to this day. Some that have and are quite notable are 'Paul Neyron', 'Baronne Prevost', 'Reine des Violettes', and 'American Beauty'.

Modern Rose Classes

Hybrid Teas are the quintessential modern rose—bred mainly for their large flowers on long stems. Some are fragrant, but many are notably lacking in this area. Their habit tends to be stiff and upright and most are grafted as they are not vigorous on their own roots. They have a tendency to be afflicted by diseases such as black spot. Some notable cultivars are 'La France' (the first in the class–introduced in 1867), 'Crimson Glory', 'Mr. Lincoln', 'Radiance', and 'Madame Caroline Testout'.

Hybrid Musk Roses

Polyanthas are mostly a group of modern shrub roses with small flowers in clusters and a strong repeat blooming habit. Due to the heritage from *Rosa multiflora*, many of them have a rich musk aroma, but others can smell like older roses or very little at all. Many are small in stature which makes them useful as container and bedding roses. Good examples are 'Cécile Brünner', 'The Fairy', 'Marie Pavié', and 'Perle d'Or'.

Floribundas are somewhat similar to the Polyanthas, but are often a bit bigger in stature and flower. Most are not known for fragrance, but are instead known for their showiness. They are wonderful for mass plantings, for large containers, and as shrubs for smaller gardens. Some examples are 'Grüss an Aachen', 'Kirsten Poulsen', and 'Betty Prior'.

The **Rugosa** roses are descended from *Rosa rugosa*, which is native to Japan and the east coast of Asia. The class is generally marked by crinkly leaves (thus its specific epithet), fragrant blossoms which repeat bloom in the more modern hybrids, and most are very prickly and sturdy shrubs. They are generally very cold hardy, carefree, and more salt tolerant than most roses; they can be found naturalized on beaches in the Pacific Northwest, Alaska, and in New England. Many cultivars are also known to produce very large and showy hips. Some well-known species forms and cultivars are *Rosa rugosa alba* and *rubra*, 'Belle Poitevine', 'Fru Dagmarr Hartopp', 'Grootendorst Supreme', 'Hansa', and 'Rose à Parfum de l'Hay'.

Hybrid Musk roses are mainly the creation of one man, the Reverend Joseph Pemberton of Essex. In the early 20th century he crossed the rose 'Trier', having blood from *Rosa multiflora* and the Noisette 'Reve d'Or', with other roses to create this new class. The Hybrid Musks are generally lax, arching shrubs or short climbers, with good remontancy and large clusters of richly scented blossoms. The scent is often a heavy musk which can be traced to the *Rosa multiflora* and more distant *Rosa moschata* heritage. Many of the class are a bit more shade tolerant than most roses and this, along with their natural lax habit, makes them popular for informal, less-structured gardens. Popular cultivars include 'Penelope', 'Prosperity', 'Cornelia', and 'Buff Beauty'.

Large Flowered Climbers and Ramblers are two classes of long-caned roses. No rose is truly a climber in the vein of vines such as grapes, wisteria, or clematis, but they can be trained onto trellises and other structures or may naturally pull themselves up into trees, shrubs, or other structures by sending canes upwards and then using their prickles like grappling hooks to hold on. There are climbing versions of roses in almost all rose classes—climbing Bourbons, Chinas, Teas, Noisettes, and so on.

The **Large Flowered Climber** class is a mix of climbing roses. It includes such venerable cultivars as 'New Dawn' (US plant patent number 1), 'Don Juan', and 'Blaze'.

Ramblers are generally more lax and long of cane and tend to have smaller flowers in clusters, especially those descended from *Rosa wichurana*. Prime examples are 'May Queen', 'Rambling Rector', and 'Alberic Barbier'.

Shrub Roses are a mixed bag of shrub types that don't seem to fit in anywhere else. Many of the roses bred by Griffith Buck of Iowa, such as 'Carefree Beauty', belong here, as do the popular modern 'Knockout' roses and Basye roses such as 'Belinda's Dream'.

English Roses are part of the Shrub rose class, but are often separated out into a subclass of their own. They are the work of David Austin, whose goal in breeding was to create roses that would have the stronger color and repeat blooming habit of modern roses, and that would also have the romantic floral appeal of the older roses. Good examples are 'Graham Thomas', 'Heritage', and 'Shakespeare'.

Some other classes of note, of which there are many more, are the **Sweetbriars** (descended from *Rosa eglanteria* with its apple-scented foliage and flowers), the **Hybrid Multifloras** (descended from *Rosa multiflora* from eastern Asia), the **Boursaults** (a small group of mostly prickleless shrubs), the **Ayrshires** (descended from *Rosa arvensis* of Britain), and the modern dwarf roses known as Miniatures.

Another miscellaneous class, albeit sometimes transient, is the "**Found**" roses. These are roses collected by avid rosarians, many of whom are called "rose rustlers", at old cemeteries, homes, and other locales and temporarily given study names until their true identities have been rooted out. Many roses have been saved from the bulldozer and reintroduced to commerce in this manner. A subgroup of the found roses is the 'Bermuda Mystery' roses from the island of Bermuda where China and Tea roses have especially flourished. Some notable found roses are 'Maggie,' 'Caldwell Pink,' 'Natchitoches Noisette,' 'Spice,' and 'Smith's Parish'.

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Photos used in this article are courtesy of Henry Flowers

Rose Alle with Thyme

Growing Roses Sustainably

By Holly Shimizu

Marie Pavie Rose/Holly Shimizu

At the U.S. Botanic Garden we have been refining the art and science of growing healthy roses organically—this was thought to be an oxymoron, but we have shown that it is possible. This article is based on our current practices.

A sustainable approach to rose growing is important for the health of the environment as well as for pollinators. Using performance as the basis for choosing which roses to grow, together with great horticultural practices, allows for the opportunity to have healthy roses without the application of fungicides and insecticides. This is done by promoting vigorous growth and a strong immune system. The first step is to know the basic needs for growing roses:

- At least six hours of direct sunlight
- Minimal root competition from nearby trees
- A soil pH of approximately 6.5
- Good air circulation as a disease preventative
- Rose roots grow deep (2-3') and prefer a deeply dug soil with ample organic matter

Although many great roses can be found in old cemeteries and abandoned sites and then selected for gardens, giving added attention to roses can help them look their best. Hardiness varies greatly with type, and frost protection is a must for roses whose cold tolerance is marginal for your area. It is best to grow roses on their own roots. If the plants are grafted, keep the bud union (the place where canes join the rootstock) just above the soil level. Plant bare root roses in late winter while the plants are still dormant. Potted roses can go in the ground in spring or fall, but need shelter from extreme weather.



Photos courtesy Holly Shimizu

The following information has been gathered by a host of gardeners over the years of growing roses organically and evaluating them yearly at the U.S. Botanic Garden.

Here are recommendations for initial planting of roses that will promote good health:

- Work into the soil the following mixture (We actually mix these in a large container in these proportions and mix well and add in to the soil at planting time.)

  Kelp (1 teaspoon per plant)
  Composted chicken manure – add a small amount
  Cotton seed meal (1 teaspoon per plant)
  Alfalfa meal (1 teaspoon per plant)
  Cocoa hulls (a handful)

- Apply Epsom salts (¼ cup per plant) in summer to combat heat. (Soils already rich in magnesium do not require the addition of epsom salts.)
- Mulch with cocoa hulls (a byproduct of the chocolate industry, be careful as these can be poisonous to dogs) If cocoa hulls are not available in your area, another suitable mulch may be used.
- In winter, scratch in a top dressing of the nutrient mixture used at initial planting.



Photos courtesy Holly Shimizu

Recommendations for Roses that can be Grown Sustainably

'Blanc Double de Coubert'
Low, open habit, fragrant, coarse foliage

'Carefree Beauty'
Large, loose, semi-double pink, light fragrance, Minor black spot

'Graham Thomas'
A solid performer, good fragrance, interesting butterscotch color

'Heritage'
Always nice, pink, double, very fragrant

'Louise Odier'
Wonderful fragrance, old-fashioned double pink

'Marie Pavie'
A nice small plant with gorgeous, fragrant flowers

'Mrs. Dudley Cross'
Nice blend, loosely double, good rebloom

R. chinensis v. *mutabilis*
Lovely, everblooming shrub or climber in warmer areas

'Roseraie del 'Hay'
Magenta flowers, fragrant, thorny, informal habit of rugosa roses

'Spice'
A small plant, double pink flowers

'The Pilgrim'
Pale yellow, double flowers, good repeat bloom

Photos on opposite page courtesy Holly Shimizu

'Pat Austin'
Great warm color, a good performer

'Pretty Lady'
Small shrub, cream to creamy pink flowers

'Betty Prior'
Great bloomer, single pink, very minor black spot

Periodic Fertilization

To nourish beneficial soil organisms, strengthen the immune system, and combat the stresses of heat, urban pollution, pests and diseases, fertilization should be done every four to six weeks during the growing season, stopping in late summer.

- Plant growth activators that contain beneficial soil bacteria
- Seaweed organic fertilizer which contains kelp, vitamins, chelated micronutrients, fungi and humic acid

Pest Removal

- Remove aphids with a hard spray of cold water

Rose Pruning

First, determine if the rose blooms on old or on new wood. Roses that bloom on old wood include many of the species roses and the old European roses. These are pruned more lightly in late winter. Roses such as teas, chinas, and some new shrub roses, bloom on new growth and can therefore tolerate a harder prune.

When roses are first planted they require minimal pruning. Once established, try to keep three different years of growth—current, 1-year old, 2-year old branches.

- Prune all dead, diseased, crossing and weak branches first and then step back to see what remains
- The best time to prune is in late winter just when the buds are beginning to swell, but at least one month prior to the last frost
- Cut on an angle, just above the buds that face the direction of desired growth (usually away from the plant). Do the same when deadheading.

Holly Shimizu *has been the Executive Director of the United States Botanic Garden since 2000. Under her direction the Botanic Garden, located adjacent to the U.S. Capitol on the National Mall, is experiencing a renaissance with the renovation of the Conservatory, the completion of the National Garden, partnering in the Sustainable Sites Initiative, and continued creation of innovative exhibitions and inspiring gardens. Holly has worked in gardens in many parts of the world and is often recognized from ten years ago as a host of the popular Victory Garden television show. She has degrees in horticulture from Temple University, Ambler Campus, Pennsylvania State University and the University of Maryland. In 2009, Holly received the honorary degree of Doctor of Science from Washington College, Chestertown, Maryland. Throughout her career, Holly has received numerous awards, most recently the prestigious Thomas Roland Medal for outstanding contributions to horticultural education from the Massachusetts Horticultural Society in 2009, as well as the 2008 Professional Award for an Outstanding Public Garden Director from the American Horticultural Society. She has written for numerous publications and can often be heard on National Public Radio. She works with many organizations including Botanic Gardens Conservation International and is dedicated to heightening an awareness and love of plants through her work. Her husband Osamu is a garden designer that she met while working in Europe. They live in Glen Echo, Maryland with their two dogs and there they enjoy their sanctuary garden near the Potomac River.*

A rose must remain with the sun and the rain or its lovely promise won't come true.

-Ray Evans

Rose Etymology

By Rexford Talbert

O.E. *rose, from* L. rosa *(cf. It., Sp.* rosa*, Fr.* rose*; also source of Du.* roos*, Ger.* Rose*, Swed.* ros*, etc.), probably via Italian and Greek dialects from Gk.* rhodon *"rose"* (Aeolic wrodon)*, ultimately from Pers.* *vrda-*. *But cf. Tucker: "The rose was a special growth of Macedonia and the Thracian region as well as of Persia, and the Lat. and Gk. names prob. came from a Thraco-Phrygian source."* Aramaic warda *is from* O. Persian*; the modern Persian cognate, via the usual sound changes, is* gul*, source of Turk.* gül *"rose." The ultimate source of all this may be* PIE *wrd-ho- *"thorn, bramble."*

The preceding paragraph is a direct quote from the *Online Etymological Dictionary* and represents the typically expressed conclusions of our day on the etymological locus for the English word rose. This examination of the journey of a word from one language to another is naturally highly time-sequence dependent and is replete with guesses and assumptions as noted in the quote above. The notation * as in "**vrda*" indicates one of the larger presumptions in the word origin logic as it is a linguistics symbol for a hypothetical word not a recorded word. To be practical then, every comment after this symbol should be considered in a more suspect light.

Other possibilities such as a totally separate path for the word rose should be considered. The Mycenaean word *frodon*, the oldest recorded word for rose, predates the Old Persian *vrda* and compares well with its contemporary Aeolic word *wrodon* and the subsequent Greek word *rhodon*. This logic would encourage us to look no further than the ancient Greeks.

'Stat rosa pristina nomine, nomina nuda tenemus'

The Persian word **gul** *for rose has some extra interest potentially for herb enthusiasts from the state of Kentucky. In their near-pagan celebration of horse racing and especially the Kentucky Derby or "Run for the Roses," a ritual involves the herb* **Mentha** *in a libation known as a "mint julep." The Old French word* **julep** *comes from the Middle Latin* **julapium** *from the Arabic* **Julab** *from Persian* **gulab** *meaning "rose water." The words mint julep were first recorded in 1787.*

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Roses Throughout History

By Lorraine Kiefer

Photo courtesy of Stockxchng

Man has had an intimate relationship with roses that has persisted throughout history. They are one of the oldest flowers known to man, yet still one of the most popular. The potent beauty of roses satiny petals, arrayed outward from the center in a graceful spiral and sitting atop of a single green stem, looks as stately and regal as a queen's scepter. No wonder writers, poets, and lyricists have immortalized them in written word and song. Over time, these fragrant blooms have come to symbolize love, passion, luxury, and pleasure. Truly, they speak a language of their own and mention of them can be found in legends and folklore throughout the world. Roses non-existence would be felt at the events they play a role in, such as the Kentucky Derby, weddings, and Valentine's Day. After perusing just a small bit of rose history, one can better understand why today, more than ever, when a red rose is given it still means love.

Fossil records show that roses were around prior to the existence of man. One of the oldest fossils, discovered in the United States, dates back approximately 30-35 million years. Rose fossils have also been unearthed in Asia and Europe. Cultivation dates back to the fifth-century in China, Asia, and the Mediterranean regions (1).

Romans believed that roses symbolized love, beauty, purity, and passion. They used rose petals in their bath water, to decorate their homes, and to strew across the floor at banquets. The flower was also used for medicinal purposes. Ancient Romans mourned their lovers by placing a rose on their graves, starting a tradition that is still practiced today. In a1998 newsletter article written for the Charleston Lowcountry Rose Society (CLRS) of South Carolina and entitled 'Collection of Historical Vignettes,' writer Murrie Alice Johnson tells of rose bushes being imported from Egypt out of the port of Alexandria, a six-day trip to Rome by boat. Citizens also cultivated roses indoors in primitive, heated greenhouses (3).

Historians credit the crusaders of the twelth and thirteenth centuries with bringing back specimens of Damask roses after their travels to the Middle East. The people there used rose petals as confetti at celebrations and as a source of oil for making perfume. During the Middle Ages, monks grew several varieties of roses in monastery gardens and used them medicinally. Healers and doctors used the flowers to make salves and lotions. They treated everything from eye problems and wrinkles, to hangovers and the plague.

Later European monarchs wanted roses. Empress Josephine of France (*ca.* 1763-1814) was a true patron of roses and was said to have had more than 200 different roses growing in her gardens. Botanists grew and hybridized roses in the 1800s; good qualities of fragrance, long bloom times, and disease resistance were valued even then.

English collectors and botanists, John Tradescant (*ca.* 1570s-1638) the elder and his son John Tradescant (*ca.* 1608-1662) the younger, travelled the world collecting new and unusual plants. They introduced several new species of roses to England as well as other plants such as poppies, phlox, and geraniums (2). The plant genus *Tradescantia* is named in honor of them. The English shrub rose Trandescant (*Rosa* 'Ausdir' Tradescant) is named after the Tradescant Trust (2).

One of the oldest garden roses is the apothecary rose, *Rosa gallica* 'Officinalis,' sometimes referred to as the Provins rose because it has been grown commercially in Provins, France for centuries. Doctors and apothecaries believed that this rose could help cure a multitude of illnesses. Since many of their patients could not read, they painted a red rose on the signs outside of their shop to advertise that they were in the business of healing and medicine.

Rosa gallica
Photo by Javier Martin/Wikimedia Commons

"Gather ye rosebuds while ye may"
1909 Oil painting by John William Waterhouse
Photo courtesy of Wikimedia Commons

Throughout generations of time, storytellers have passed on myths and legends that have fueled many of our beliefs about the meaning and symbolism of the rose. The rose has been called the flower of love, with many legends linking its blooms to the Greek goddess Aphrodite, also known as the Roman goddess Venus, and other goddesses of love. The Roman term *sub rosa*, meaning *under the rose,* came from their practice of hanging roses in rooms or doorways where meetings were held; thus, the rose is often associated with secrecy.

Symbolic meanings of passion and immortal love are attached to many stories. For example, Roman legend says that suitors passionately in love pursued a beautiful maiden. She took refuge in the temple of the goddess Diana (the Greek god Venus) who became jealous. When the suitors broke down the temple gates to get near their beloved maiden, Diana turned the maiden into a rose and her suitors into thorns.

Flora, the Roman deity of flowers (also known as Chloris in Greek mythology), is said to have first coined the phrase 'Rose, queen of flowers.' According to legend, Flora came upon the lifeless body of an extraordinarily beautiful nymph while walking in the woods. Upon seeing the sad scene, she decided to give the nymph a new life in the form of a flower that surpassed all others with its exquisite beauty. Flora placed a crown of dewdrops upon her new creation and named her 'Rose, queen of flowers.'

Today, rose history continues to evolve. Wonderful new varieties are available and several of the much-loved older ones still grace gardens throughout the world. Rose lovers have banded together in rose societies that are dedicated solely to the promotion of this famous flower. The rose industry continues to prosper and grow. This highly esteemed botanical treasure has played an integral role in the past and will continue to do so in the future.

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Did you Know?

❇ Some say the Rosary derived its name from rose hips, which were strung as prayer beads by the monks. Later, rosary beads were formed from the fragrant paste of crushed rose petals.

❇ Attar of Rose was one of the most prized perfumes of the ancient world. Attar is the essential oil extracted from rose petals through the distillation process and it takes several hundred pounds of petals for just a few ounces of oil.

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The Sweet Scent of Roses

The Rose in Perfumery

By Jane Knaapen Cole

Photo courtesy of Stockxchng

"The rose, queen of flowers! Her fragrance captured in the essential oil, is the most precious of all heavenly scents. It refreshes the soul; its fragrant poetry brings joy to the heart."

Susan Fischer-Rizziu

Essential oils give plants their fragrance and flavor. The heart of perfumery, they are obtained, usually, by the distillation of fragrant plant materials. While they are called oils, they are watery in consistency and have the property of becoming gaseous at room temperature. Because they vaporize so readily, they have been called *volatile*, *ethereal*, or *spirit*. Essential oils are not soluble in water, but are soluble in 90 % alcohol, fatty oils, and soap. Most flowers do not withstand the heat of distillation and their scents must be obtained by enfleurage or solvent extraction. The resulting product is called an *absolute*.

The rose is unique among flowers, not only for its ability to withstand the heat of distillation, but for its solubility in water. Yet of all the varieties of roses, only *Rosa damascena*, *Rosa centifolia* (*Rose de mai*), and *Rosa gallica* are oil bearing, and *R. gallica* is no longer grown for that purpose. While Persia and India may have been the first countries to distill rose attar, Bulgaria and Turkey are presently the leading producers of the attar extracted from petals of *Rosa damascena*, with the Bulgarian attar deemed the finer. Morocco is the leading grower of *Rosa centifolia*, which produces most of the rose absolute, although Egypt and Grasse also contribute some. It takes about 180 pounds of damask rose petals to produce an ounce of Attar or Otto, which is pale in color, slightly thick at cooler temperatures, having a deep, tenacious, rosy (some say the attar does not immediately smell of roses) odor, comprised of hundreds of volatile components. 500 rose trees on a ½ acre site will produce 2,200 pounds of flowers in a season; these will distill into 3 ½ ounces of attar of rose (essential oil) which sells for about $1400.00! Essential oil, rosewater, concrete and absolute are extracted from rose petals, the latter two most commonly used in perfumery. Rose absolute, produced by solvent extraction is about half the cost of the attar, orange-red in color, somewhat lighter and sweeter than the attar;

some feel the absolute is closer to the aroma of the flower.

The rose was the earliest flower to be distilled and the most widely used in perfumes. Remnants of *Rosa gallica* and *Rosa ricardii* have been found in Ptolemic and Roman tombs. Theophrastus, Pliny and Dioscorides all recorded recipes for rose perfumes. Mycenaean tablets record the manufacture of rose perfume some 1,000 years before that.

The word *perfume* comes from two Latin words: *per* (through) and *fumin* (smoke) giving us the origin of perfume: incense. The art developed from standing over the smoking fragrance 6,000 years ago, to soaking fragrant resins and plants in animal fats and wax, to distillation and solvent extraction. Aromatics figured prominently in Ancient Egypt: in the Old Kingdom for religious ceremonies and preparation of the dead; in the New Kingdom, the living body had become an object of esteem to be anointed with perfumed oils. The ancient Egyptians indulged in elaborate beauty rituals and invented the sumptuous art of The Bath, incorporating massage with scented oil. Perfume makers excelled in the preparation of scented oils, waxes and fruit pastes; in combining fragrances and making them long lasting. They began the technique now known as enfleurage, layering fragrant petals between layers of tallow and lard, and may even have had a type of still for distilling essential oils. One of the more famous perfumes of that era, *Rhodinon*, was made with oil, roses, camel grass, aspalathos, sweet flag, and cinnebar.

Cleopatra (69-30 B.C.E.) was probably the most famous symbol of beauty. It was said that she bathed in ass's milk to keep her skin supple and youthful, and spent a fortune on cosmetics and perfumes, some of which she prepared in her own laboratory. The cedarwood ship on which she sailed to meet Marc Antony had rose-scented sails, and censers surrounded her throne. She had anointed her hands with kyphi and her feet with a lotion of honey, almond oil, cinnamon and henna; she welcomed him to a bedroom carpeted several inches deep with rose petals!

By the end of the first century B.C.E. Rome was not just importing perfumes from Egypt and Greece, but fragrant flowers, grasses, resins, and woods to make their own. They bathed daily, usually in lavender scented water, anointed their bodies with scented oils, sprayed perfumes on walls and floors, and filled fountains with scented water. Of all fragrances used by the

Romans, rose was the favorite: this was the strongly scented *Rosa gallica*, or *Rosa damascena*, (an historic hybrid of *R. gallica* and *R. Phoenicia*). Rose petals stuffed pillows and cushions, were strewn at banquets and public ceremonies, flavored food, drink, medicine and love potions. Nero once had silver pipes installed under each plate so guests would be spritzed with rosewater between courses. Pliny the Elder (23-79 A.D.), wrote of the plants grown, spices and aromatics imported, and the perfumes made in Rome. He tells us Roman *aromaterii* made three types of perfumes: solid unguents usually of a single fragrance in lard; liquid unguents, a mixture of flowers, spices and resin in a base of olive or sesame oil, sometimes colored with alkanet or cinnebar; and scented powders for sprinkling in clothes. Both he and Dioscorides listed a number of diseases that were treated with roses. Galen left his recipe for a cleansing cream containing beeswax, oil of roses, water and spirit of vinegar; this combination has lasted through the centuries as cold cream, with vegetable oils replacing the attar of rose oil.

Persia is credited with inventing the distillation process and Ibn-Sina (980-1037), with improvements in the technique of distillation. He tells us roses were

Oil-Bearing Roses

Top to bottom: *Rosa damascena, Rosa centifolia, Rosa gallica*
Photos courtesy of Wikimedia Commons

widely cultivated in Syria and distilled for rosewater. Yakub al-Kindi (803-870) left a work in which he described the manufacture of attar of rose and the distillation of musk and balsams. Controlled by the Caliphs of Baghdad during the eighth and tenth centuries, Persia sent 30,000 bottles of rosewater to Baghdad as tribute every year. Islamic courtesy greeted guests by sprinkling them with rosewater. It flavored sherbets and pastries, scented clothing and gloves, went into the mortar of their temples along with musk. Unlike Christianity, Islam was more relaxed as far as the comforts of life were concerned: Muhammad himself is said to have loved women, children, and perfume above all else. Perfume making was refined into an art as the Caliphs who controlled Persia, traded with India, the East Indies and China; Baghdad became the center of the perfume trade and Arabia famous for its perfumes.

Not all perfumes were liquid. Rose petals and aromatics were crushed, made into a paste with gum arabic and shaped into beads. When dried these scented beads were strung, sometimes with pearls and coral. Wearing against the body during the heat of the day would bring out the fragrance. The beads were also used in prayer and meditation. By the thirteenth century the practice had spread to Europe, and Christian monks were "telling their beads", or praying their rosary, from *rosarium*, Latin for rose garden.

The Renaissance celebrated the concept of adorning oneself with jewelry, scent and fine clothing. Rose plantations had been re-established by then; orange trees (neroli) and jasmine had reached Italy. A Venetian observer of the times wrote that everything was scented: gloves, shoes, stockings, shirts, even coins. People kept objects of scented pastes on their persons; carried pomanders filled with aromatic flowers, herbs and resins; tucked sachets in slashed sleeves. Potpourris filled majolica pots and sweet bags; diners rinsed their hands in bowls of rosewater.

When Caterina de Medici married Henri II of France, she brought her perfumer and alchemist with her, setting them up in business in Paris. She might be considered the founder of the French perfume industry, as she also set up a laboratory in Grasse to study perfume making. Grasse was then a center of the glove making industry that used fragrant materials to hide the smell of the tanning process. Olive trees, lavender, jasmine, roses, violets, carnations, clary sage and many medicinal herbs grew there. The use of perfumes and scented

powders (to use on wigs and hair) grew in use among aristocrats, until they became quite common during the reign of Louis XIV (1638-1755), whose perfumer, M. Marietal, created a new scent for him every day! Grasse has since become the center of the perfume world.

England was also creating fragrances during this period. Most castles and manor houses had stillrooms where the ladies of the manor distilled floral and herbal waters, as not everyone could afford imported perfumes. Rose, lavender, and violet were the favorite flowers to use. These floral waters were also used to scent salves, lotions and various medicinal potions. Nostradamus prescribed roses to treat the plague; in the sixteenth and seventeenth centuries, they were used to treat many ailments.

While the French Revolution had put a stop to the production of perfumes and other luxuries in France, when Napoleon became emperor these industries started to emerge once more. He was fastidious about cleanliness, washing daily and using several bottles of Eau de Cologne a day. His wife, Josephine, remembered for the rose garden she created at her chateau at Malmaison, was also noted for her cultivation of fashion and use of perfumes.

The Glittering Second Empire saw the rise of some of the great perfume houses: Guerlain, Worth, Pinaud. Guerlain changed the way perfume was made by focusing on the philosophy of the scent, attempting to evoke a mood or atmosphere. *L'Heure Bleue*, inspired by the hour just before sunset, uses rose, iris, musk and vanilla, while Shalimar conjures up a Mogul garden.

The early twentieth century became the golden age of perfumery becoming linked to the fashion industry. In 1900, Houbigant introduced Ideale, the first perfume to contain 20% of the Bulgarian rose attar. Rose Jacqueminot by Coty, Rose d'Orsay, and Guerlain Rose followed. While blended flower perfumes have replaced these single flowered ones, the rose is still an essential element in many perfumes including Shalimar, Chanel #5, Arpege, Joy, White Linen, Anaïs Anaïs, Beautiful, Lauren and Opium.

In ancient times, perfumes were precious: mystical, magical, used for worship, aphrodisiacs and healing. The ancient Persian pharmacopoeia listed hundreds of perfumed treatments for healing. The Chinese said "Every perfume is a medicine". This is more than a charming statement: essential oils are antiseptic and bactericidal. The

If you'd like to try your hand at blending your own perfume, here are some guidelines. A good perfume is a harmonious blend of essential and fragrance oils suspended in ethyl alcohol. Perfumers use the "musical" scale of top notes, middle notes and base notes to map out their blends. Top notes are what you first smell when you inhale a perfume: they are sharp, light and evaporate rather quickly. The base notes help to fix or hold the scent: they are more intense, not always pleasant alone, and not much is needed. The middle notes or heart notes are the body of the blend; they round out the composition, harmonizing top and base notes. The intensity of each essential oil helps determine how many drops are used. Once the desired blend is created, alcohol is added, and the perfume mellows for a few weeks. Toilet waters and colognes are made by further diluting the perfume with distilled water or a floral distillate. Perfumer Christine Malcolm suggests using about 100 drops of essential oils to one ounce ethyl alcohol, then 10 drops (d.) of that per ounce of water for cologne.

Aromatherapy perfumes can be used to balance the emotional or mental state of the wearer, and use only essential oils. When made for that purpose, only 3-5 drops of EO are used. No absolutes are used as residues of the solvents may remain. Jojoba oil is frequently used for the base as it doesn't go rancid. Therapeutically, top notes stimulate and uplift; middle notes balance; base notes ground, relax. Aromatherapist Christine Wildwood suggests using 25-35 drops essential oils per ounce of carrier oil. Jeanne Rose gives this guideline: 5 drops base note; 10-15 drops middle note; 15-20 drops top note.

movement begun by chemists and doctors in France at the beginning of the twentieth century proved that and resulted in the beginning of Aromatherapy. According to aromatherapist Salvatore Battaglia, rose essential oil is a good tonic and fortifier for heart, liver and gall bladder; has a soothing action on nerves, headaches and dyspepsia; and is anti-depressive. Its emollient, hydrating, antiseptic qualities make it ideal in skin care especially for dry, sensitive or mature skin. Rose Otto is considered the more 'therapeutic'—mostly because the absolute may contain traces of the solvent. Rose is considered the *premier essential oil for opening the heart chakra.* It is harmonizing, balancing, helps soothe anger, fear and anxiety; it restores confidence.

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Use

Making Rose Beads

By Susan Belsinger

Rose beads are the basis of a flourishing fund-raising effort by one of the nation's most active herb groups, the Potomac Unit of the Herb Society of America (HSA). Its members gently shape the cooked rose-petal mash into beads, set them out to dry, and then string them together to fashion simple but elegant scented jewelry. Rose-bead necklaces have become the group's signature.

The Rise of Rose Beads

Beads made of rose petals that have been cooked, mashed, and molded by hand trace their origins to India, where the devout used them as a counting device while reciting their prayers. Eastern Christian monks adopted the use of rose beads in the third century, and the beads were given official approval in 1520 by Pope Leo X. The term "rosary" was coined in the fifteenth century; *rosarium* is the Latin word for "rose garden". The word "bead" is derived from the Middle English *bede*, "prayer." Many old rosaries were made from rose beads; while the scent gradually faded away to a memory, the beads themselves have survived for centuries.

Members of the Potomac Unit started making rose beads in 1967, reasoning that it was a good herbal tradition to revive and that it might become an ongoing project. Little did they know! The rose beads have become the most profitable of all the group's fund-raising efforts. We now hold rose-bead workshops for members about six times a year, and the necklaces and earrings that we produce are sold at herb festivals, annual plant sales, and meetings. Members estimate that in the past three years alone, the group has sold about 600 rose-bead necklaces.

The National Herb Garden includes a 50-by-80-foot rose garden filled with antique varieties, and some of the petals used for the rose beads are gathered by Potomac Unit volunteers during the course of their weekly chores here. Most Potomac Unit members grow their own roses and for some members such as Holly Shimizu, roses are a specialty (See Holly Shimizu's article on pages 37-41.)

A Beading Bee

A rose-bead workshop may draw as few as eight or as many as fifteen volunteer workers. It's much like an old-fashioned quilting bee. The members work steadily, enjoying each other's company and

accomplishing much. In just a few hours, large amounts of mash are kneaded, measured, rolled, and placed on wires to dry. The fun that we're having, the camaraderie, and the shared belief in the value of our purpose keeps us turning out beads by the hundreds.

We all have our roles. Some are mash makers or bead rollers, others design or package the jewelry, everyone tries her hand at stringing the beads, and some dabble in all aspects of production.

At a workshop, we all work carefully. Any bead that dries imperfectly is rejected—placed back in the mash pot and cooked down again—and any string with a bead out of place is disassembled and restrung. We mean business: we're creating works of art. From mail-order businesses, gem shows, and local bead shops, members buy and collect other beads to string along with the rose beads for a greater variety in design and colors in the finished necklaces.

The rose-bead project has become a way of life for many members of our group. Some women roll the mash or string the beads as they watch television or listen to music in the evenings. Our families put up with freezers and attics full of rose petals, pots bubbling on the stove for days on end, mothers and wives with blackened hands, not to mention the sometimes overwhelming fragrance. We still laugh to think of Mary Jane Miller's poor husband, who took a big taste out of a steaming pot, thinking it was dinner.

With this project, the Potomac Unit reclaims a lost art. The beads let us combine a passion for flowers with an appreciation of beautiful jewelry. A bonus is that the fragrance of roses is always with us.

Part of the Ruth Smith Botanical Bead Collection
Photo courtesy of HSA Archives

How Do You Do It?

Working with the beaders, I soon realized that there is no single correct method of making rose beads. Each woman has her own way of handling the mash, measuring, rolling, and finishing the beads. The instructions that follow were culled from many experienced rose-bead makers, but you may vary them as you like.

Any type or color of rose can be used to make the beads—they all turn black in the end. It takes clean petals to make a clean, smooth mash, so pick out any leaves, thorns, insects, or other debris. "The petals won't dry well if they've been rained on the day before," Mildred Gordon cautions, "but a little dew won't hurt them."

You can prepare mash from fresh, dried, or frozen petals, or any combination of the three. Potomac Unit members use all three. One member dries petals by spreading them on sheets in the attic, then packs them into paper bags, which she then places in the freezer to kill any insects that may have been clinging to the petals.

Rose Bead Instructions

Our recipe makes about seventy-five smooth black beads, or about enough for one necklace (more if other kinds of beads are added for accent). The batch is easily doubled or even tripled.

Materials

- 2–3 quarts clean rose petals
- Large stainless-steel pot
- Water
- Blender or food processor
- Jelly bag or cheesecloth
- Iron pot or skillet
- Rubber gloves
- Tray
- Newspapers
- Paper towels
- Rose essence
- Plastic containers with tight-fitting lids
- 1/2-teaspoon measuring spoon
- Butter paddles (optional)
- 3/64-inch brass wire, cut into 12-inch lengths
- Empty small box or Styrofoam tray
- Glass jars with lids
- Fine sandpaper
- Unwaxed dental floss
- Assortment of other kinds of beads, if desired

1. Making the mash: Place the rose petals in the stainless-steel pot with water to cover, about 1 quart. Bring the contents to a boil. Reduce the heat to low and simmer slowly for two to six hours, stirring occasionally. You can cook the petals all day or cook them for a while one day, turn off the heat, and finish up the next day. The longer you cook the petals, the more the cellulose breaks down and the easier the job of puréeing the mash.

2. In the blender or food processor, purée the cooled mash in batches. Add just enough extra water to each batch to enable the machine to puree it thoroughly at the highest speed. The finer the mash, the smoother and more uniform the bead. Drain the mash through the jelly bag or cheesecloth to remove any excess water.

Slow cooking: Place the drained, puréed mash into the iron pot or skillet. When the mash is cooked in iron, a chemical reaction of the acid in the petals with the iron turns it black. (Once the mash turns black, it badly stains whatever it touches, so wear rubber gloves and old clothes when working with it.) Because the mash will remove the patina from an iron pot, you may want to use an old one and reserve it for bead making. Cook the mash, covered, over the lowest heat possible, stirring occasionally, for two or three days, or until it is black and about the consistency of soft cream cheese. You can cook it for a few hours, turn it off, and finish cooking it later. Keep it covered to prevent a crust from forming. The mash can also be baked, covered, at 250°F for 1 to 2 days.

Cooling, draining:

Layer the tray thickly with newspapers and cover with a layer of paper towels. (The mash will stick to newspaper, but not to paper towels.) Turn the mash out to cool on the prepared tray, and cover it with another layer of paper towels. Let it drain. Change the newspaper padding when the mash has soaked through; this can take a few hours or overnight and may need to be done two or three times. Add a few drops of rose essence to the mash—6 or 7 drops to one cup of mash—and knead it in.

You can make beads now or store the mash. To store, pack the mash into plastic containers with tight-fitting lids and refrigerate for as long as a week or freeze for a few months. The mash can be thawed and refrozen as necessary.

Rolling:

For each bead, measure out a slightly rounded ½ teaspoon of mash: the bead will shrink to about one-third its original size as it dries. Wearing gloves, knead each piece of mash in the palm of your hand to make sure it is smooth (remove any thorns or debris). With firm, even pressure, roll each bead between your palms until it is round. If the beads show any cracks while you're rolling, dip the beads in a little water or rubbing alcohol and smooth them out, as the cracks will become bigger as the beads dry. Our group adds a textured pattern to the beads by gently but firmly rolling them between two textured butter paddles.

Drying:

Carefully slide the beads onto wires to dry. The wire should pierce the center of each bead. We use brass wires because brass doesn't rust. We place about ten beads on each 12-inch wire, making sure that the beads don't touch each other. Lay the wires across the empty box or styrofoam tray so that the beads are suspended and do not touch the bottom of the container.

Keep the beads at room temperature and away from any drafts. If the beads dry too fast, they will crack; if it is cold or damp, they may mold. During the first week, turn the beads daily, sliding them back and forth a little on the wire to keep them from sticking. Leave the beads on the wires for another week or two, or until they are completely dry. Remove the dry beads from the wires and store them in tightly covered glass jars, which help retain their perfume until you're ready to string them. After removing a batch of rose beads, we sand the wires with fine sandpaper to smooth them in preparation for the next workshop.

Finishing:

We string our beads on double strands of unwaxed dental floss. Our necklaces are about 28 inches long, but they can be any length that suits you, with or without a fastener (available at bead and jewelry stores). We usually add other beads to the strands in regular patterns. We make some of our rose beads into earrings; findings for both screw-on and pierced styles are available at bead and jewelry stores. Pendants, bracelets, and pins are other possibilities.

Each finished necklace is packed in a small glass jar that has a small piece of cotton glued to the lid. A drop of rose essence placed on the cotton keeps the rose beads fragrant and can be renewed as needed.

Susan Belsinger

is an herb gardener, an author of cookbooks, a chef, a longtime contributor to The Herb Companion *and* The Herbarist, *and an enthusiastic bead roller.*

She is an active member of the Potomac Unit of The Herb Society of America and a recipient of the 2006 Joanna McQuail Reed Award for the Artistic Use of Herbs.

Susan is a contributing blogger for Taunton Press (www.vegetablegardener.com). Check out her weekly articles, photos and recipes on herbs, gardening, and related subjects.

Rose Elixar, Tincture, and Vinegar

By Gayle Engels

Photo courtesy of Justus Kinderman

When people consider the medicinal aspects of the rose, they most likely think of the high vitamin C content in the hips (the seed capsule that forms after the petals fall) or the astringency of the petals that make the rose so valuable in cosmetics and other skin care products. Indeed, women in many cultures have long used rose petals on their skin to eliminate wrinkles and promote a youthful appearance. However, roses have other uses going back to ancient times. They were steeped in wine 1200 years ago by the Romans as a cure for hangover and early druggists dispensed rose-imbued remedies for eye ailments, indigestion, skin conditions, and sore throats.

In Traditional Chinese Medicine, roses are used to control diarrhea, and inhibit urinary secretion, as well as to regulate the flow of *qi*, facilitating the flow of blood and thus helping alleviate the pain and discomfort of menstruation. In Ayurveda, rose petal preparations are used for memory, eyesight, mental exhaustion, to promote cheerfulness, and as a blood purifier (agent that helps remove toxins and restore balance to the blood).

Rose petals, in addition to being mildly astringent are antidepressant, antiseptic, aperient (mildly stimulating to the bowels; laxative), carminative (relieves flatulence), refrigerant (cooling), and a cardiac tonic. Western herbalists currently use rose preparations as a nervous system rejuvenator, to relieve stress, anxiety, and depression, for poor appetite and digestion, to soothe the heart and emotions and balance the mind.

Rose petals can be infused in a few different menstruums (the name for the solvent being used to extract the beneficial aspects of the herb in question.) Vinegar can be used to make a preparation for food use. Using a clear vinegar like champagne or white wine will result in a lovely pink vinegar (unless you use white roses, of course). Rose vinegar is cooling, refreshing, and aids digestion; it can also be used to make a mild dressing for use on light green salads or fruit salads.

Tinctures are alcoholic or glycerite extracts of plant material. Alcoholic tinctures last many years, glycerites not as long. Glycerite tinctures are especially good for children and people who do not imbibe alcohol for whatever reason. They also taste better, but not as good as elixirs.

Elixirs, from the Arabic, *al-ikseer*, meaning an effective recipe, are clear, sweet liquids used for medicinal purposes. An elixir

should contain at least one active ingredient. Rose elixirs, specifically, are good externally for reducing the pain of burns and speeding their healing, relieving the itch of insects stings and bites, for rashes caused by contact dermatitis, and as a liniment for nerve pain and sore muscles. All in all, rose elixir is an effective topical first aid treatment, and even more so when combined with other herbs suitable to the condition in question.

Internally, rose elixir can be used to relieve stress, panic, trauma, or fear in both adults and children, as well as animals. The elixir acts as a nervine, calming without sedating. While rose tincture can be used in basically the same way, rose elixir tastes sweeter and is therefore more palatable than an alcohol tincture.

The best roses to use are the old roses, often called heirloom or antique. All roses are not created equal. While the hybrids may have large, pretty, blooms and long stems making them suitable for cutting, they have lost much of their medicinal value through hybridization. Thus, the best roses to use include *Rosa gallica* (apothecary rose, called thus due either to its long medicinal use and/or because it was frequently planted outside apothecary shops), *R. rugosa* (rugose rose), *R. canina* (dog rose), *R. centifolia* (cabbage rose), *R eglanteria* (sweetbriar rose), or *R. alba* (white rose).

Only use rose petals that have experienced no chemical interventions (fertilizer, insecticide, or herbicide) on the plants themselves or in the area. Use roses you've grown yourself or ones from a trusted source whom you know has grown their roses organically.

Collect the petals when the flowers first open, preferably in early morning when the dew is on them. Use only perfect petals with no spots or other imperfections. If they are damp, spread them out in an airy place out of the sun to allow them to dry a little. Fresh petals are preferable; you can use dried petals in a pinch but you will need twice as many to make your infusion.

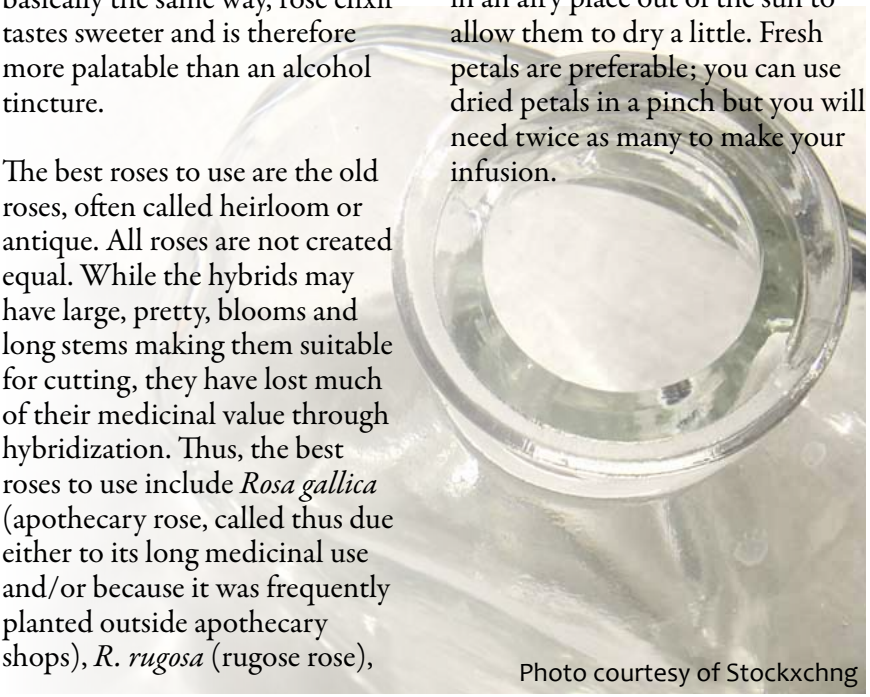

Photo courtesy of Stockxchng

The Recipes

Vinegars and tinctures are basically made the same way so one simple recipe will suffice for both.

Roughly chop enough fresh rose petals to fill a pint or quart jar loosely. Add enough white or champagne vinegar, vodka or brandy (some people use everclear, but others don't care for it due to its high alcohol content), or glycerine to cover the petals. Put wax paper or clear plastic wrap over the lip of the jar and screw on the lid. Label with the ingredients and date, shake gently to assure that all the petals are exposed to the liquid, and place in a dark cabinet. Take the jar out every day or so and shake gently. Let sit three to six weeks. Strain the liquid through cheesecloth. Place in a clean bottle or jar (brown is best because it allows in less light), label and date.

Elixirs are quite similar but require a little different mixture.

Roughly chop enough fresh rose petals to fill a pint or quart jar loosely. Add enough vodka or brandy to fill the jar ¾ full. Add glycerine or raw honey to cover the petals (¼ of the volume).

Note: Honey tastes better but is sticky so you might want to make a glycerine elixir for external use and a honey elixir for internal use. Put wax paper or clear plastic wrap over the lip of the jar and screw on the lid. Label with the ingredients and date, shake gently to assure that all the petals are exposed to the liquid, and place in a dark cabinet. Take the jar out every day or so and shake gently. Let sit three to six weeks. Strain the liquid through cheesecloth. Place in a clean bottle or jar (brown is best because it allows in less light), label and date.

Roses petals in scented water.
Photo courtesy of Wikimedia Commons

A spiced elixir can be made by adding one teaspoon each of whole cloves and whole allspice, two star anise pods, and two sticks cinnamon to the rose petals before adding the liquids.

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Gayle Engels *is the Special Projects Director for the American Botanical Council (ABC) where she has worked since 1995. She enjoys using her Bachelor's degree in Secondary Education from the University of Texas at Austin in a nontraditional educational setting. She currently manages the development and maintenance of ABC's website, coordinates the development of content on special projects, writes for ABC's publications, contributes to its educational and online marketing efforts, and guides the development of its medicinal demonstration gardens. She also gives presentations to educational groups and plant-oriented organizations, including tours of ABC's gardens, demonstrations, study groups, and lectures on various aspects of herbs and plant-based medicine.*

Recipe Section

Bath and Beauty

If worries you hath, lose them in the bath...

Enjoy a relaxing bath this winter with this fragrant mixture of dried herbs especially formulated to relax tense muscles and soothe the soul. The warm water releases the healing properties of the herbs which are then absorbed by your skin. The therapeutic effect of a relaxing bath will result in 20 minutes. Light a candle, sip a cup of herb tea and relax in a warm bath. A spa treatment right at home! Follow your tub with an application of body oil or lotion on damp skin. Delightfully moisturizing and soothing to dry winter skin.

Relaxing Healing Herbal Bath Mix

by: Kathleen Gips

Ingredients: Yield: 3 cups
¼ cup of the following ingredients:
sea salt, chamomile, roses, lemon peel, calendula, lemon verbena

¾ cup of the following herbs:
lavender, lemon balm

Directions:
Mix herbs in container and spoon into jar. Keep in jar. Place one tablespoon of relaxing bath mix into a muslin bag and tie securely.

NOTE: Loose herbs in the tub will clog the pipes! Add one tablespoon to warm tub water and infuse while tub is filling. Remove bath sachet from tub and allow to drain. May reuse if kept refrigerated. The herbs will mold inside the bag if left to dry in a moist atmosphere of the bathroom.

Aromatherapy and Health Benefits from Relaxing Herbal Bath Mixture

Lemon balm: calming and soothing
Lemon peel: increases immunity from disease
Calendula petals: healing to skin cells
Rosebuds: increases happiness with the release of endorphins; soothes irritated skin
Lavender flowers: reduces stress with relaxation of large muscles
Chamomile: helps heal skin cells
Sea Salt: adds needed minerals to promote skin cell health
Calendula: reduces inflammation and heals injured skin

Did you know you can enjoy aromatherapy effects by soaking with these salts in a tub of warm water in just a few minutes? Spearmint scent produces an uplifting feeling. It will have a gentle energizing effect. Peppermint also soothes sore muscles and treats aches and pains. The salts, milk and chocolate will leave the skin smooth and soft. Treat yourself to a soothing aromatherapy bath often. You will inhale the benefits of mother nature. Recipe makes approximately two cups.

Chocolate Rose Mint Bath Salts
by: Kathleen Gips

Ingredients:
½ cup fine grind sea salt
½ cup coarse grind sea salt
½ cup Epsom salts
½ cup baking soda
2 tablespoons powdered milk
1 tablespoon powdered cocoa
15 drops rose fragrance oil
15 drops spearmint essential oil OR peppermint essential oil

Directions to make: Carefully measure all four salts in disposable container that will not be used for food again. A glass jar or bowl is

Chocolate Rose Mint Bath Salts continued on next page

perfect. Put salts in container and mix together with powdered milk and cocoa. Mix all well. Add essential oil and fragrance oil one drop at a time. Stir to mix until all oil is absorbed. Mix salts and oils, keeping oils away from skin and face. Wash hands right away if oil gets on skin to avoid skin irritation from the essential oils. Fill decorative jars with salt mixture. Keep in closed glass jar to keep scent longer. Makes two cups.

Directions To Use: Toss two tablespoons of Chocolate Rose Mint Bath Salts into a warm bathtub. Swish to stir. Salts will dissolve in water. Enjoy your soothing and cooling aromatherapy bath. You will feel freshened and revived. Aches will vanish and soreness will be diminished. Skin will be softened and hydrated. Benefits the mind, body and spirit.

Really Roses Pleasant Dream Pillow Mix
by: Kathleen Gips

3 tablespoons rose petals
3 tablespoons chamomile
1 tablespoon hops
1 tablespoon catnip
1 tablespoon spearmint
Pinch of thyme

Mix all ingredients together and put in a small bag to tuck into the pillow case.

Rose Lavender Exfoliating Salt Scrub
by: Kathleen Gips

1 cup sea salt, fine grind
½ cup almond oil
15 drops lavender essential oil
10 drops rose fragrance oil

Mix ingredients well before each use. Wet body under shower water. Step out of water stream. Scoop one tablespoon salt and oil mixture into the palm of your hand. Gently scrub skin to open pores, stimulate skin cells, exfoliate and moisturize skin cells. Avoid sensitive areas: face, groin. Rinse in shower and pat or air dry. Seal in moisture with lotion applied to damp skin.

Make your own natural body powder puff to use after bathing for soft skin. Easy to make with a delightful lavender and rose scent. Nice for any age. Make one lavender powder puff with natural essential oils and natural French white clay.

Lavender Rose Body Powder Puff
by: Kathleen Gips

Made with natural white clay and essential oils

Ingredients:

½ cup French white clay
1 teaspoon powdered lavender
1 teaspoon lavender flowers
15 drops lavender essential oil
10 drops of rose fragrance oil

Rosebuds to decorate top of container

1 powder container OR make a fabric one with the following:

- -10 inch fabric square or a hanky
- -Small amount of cotton batting
- -Rubber band
- -12 inches of ribbon

Directions:

Measure clay, powdered lavender and lavender flowers in a glass bowl. Carefully drop lavender oil into different spots in clay mixture. Repeat with rose oil. Mix well with the back of a spoon pressing oils into clay mixture. Place clay in powder container or make your own from fabric: Place clay mixture in the center of fabric square with right side down on a level surface. Place a small amount of cotton batting on top of the clay mixture. Gather four corners of fabric and secure with a rubber band. Get all edges of fabric closed with the rubber band by pulling corners. Tie neck of powder puff over the rubber band with the ribbon in a bow. Label your creation.

To Use:

Pat powder puff on skin and rub clay in. Also may be used to dust bed linens. Clay absorbs moisture and soothes the skin while the essential oils of lavender and rose are healing and relaxing.

Rosy Rice Pudding
by: Susan Belsinger

This is an ideal way to use leftover rice—either white or brown—if you cook your rice with salt, omit the salt in the recipe ingredients. This simple, low fat, rice pudding is made Mid-eastern Mediterranean-style, simmered on the stove, or there is an alternative for baking it in the oven. When baking, use the 2 ½ cups of milk. It can be served warm right from the stove or oven, at room temperature, or cold. If you refrigerate it, let it sit at room temperature for about 10 minutes before serving. It can be reheated gently on stovetop or in the microwave, covered, but you will probably need to add a little more milk.

Serves 6

3 cups cooked rice
2 ½ to 3 cups whole, 2%, or almond milk
Pinch salt
About ⅓ cup cane sugar, turbinado or demerara sugar
½ teaspoon cinnamon
¼ cup rose syrup
1 teaspoon pure vanilla extract

Add the rice, salt, and sugar to the 2 ½ cups milk in a heavy-bottomed saucepan. Bring to a simmer over medium heat. Reduce heat, add the cinnamon and rose syrup, cook, just barely simmering, stirring occasionally, for 20 minutes. Depending upon how much it cooks down, you may or may not need to add the remaining ½ cup milk. The pudding will thicken somewhat when it cools. Cool a spoonful, taste for sugar, and adjust if necessary.

Remove from heat and stir in vanilla. Spoon into individual ramekins or custard cups and serve, or cool and serve at room temperature or refrigerate.

Alternative for baked rice pudding: butter a 1 ½ to 2-quart baking dish and preheat oven to 400° F. In a bowl, combine the rice, milk, salt, sugar, cinnamon, rose syrup, and vanilla extract and stir well with a whisk. Transfer to the prepared dish and bake in a preheated oven for about 1 hour to 1 hour and 15 minutes, or until thick. The pudding will thicken as it cools. Remove from oven and serve in ramekins or pretty dessert dishes. Serve warm or at room temperature.

Rose Petal Tea
by: Kathleen Gips

½ cup China Black Tea
2 tablespoons rosebuds, organic or food safe
2 tablespoons hibiscus
2 tablespoons seedless rosehips
1 tablespoon cloves

Place tea in food safe container. Mix in all ingredients and store in airtight container. Aromatherapy effect: roses give feeling of well being and happiness.

To Brew: Place one teaspoon tea in muslin bag or tea infuser. Fill cup with one cup boiling water, cover, brew 3 minutes. Remove tea and serve sweetened with sugar or honey and lemon, if desired.

Loveliest of lovely things are they on earth that soonest pass away. The rose that lives its little hour is prized beyond the sculptured flower.
William C. Bryant

Sunshine Tea
by: Kathleen Gips

Ingredients:
½ cup china black tea OR green tea
2 tablespoons rose buds
2 tablespoons calendula petals
2 tablespoons lemon grass
2 tablespoons cut orange peel

Directions:
Mix all ingredients together and store in an airtight container.

Brewing Directions: Place 1 teaspoon loose tea in a tea ball or tea infuser. Pour boiling water in cup and steep covered for two or three minutes. Sweeten to taste. Sip and savor.

Tips for Eating Roses
by: Mary Versfelt

No rose is safe to eat unless it was grown organically.

Do not use roses that are growing along the street or roadside.

Do not eat roses from florists, nurseries or garden centers.

Wash all roses carefully with a light spritz of water.

Photo courtesy of Cheryl Empey

Rose Petal Sugar
by: Kathleen Gips

1 cup sugar ½ cup fresh rose petals: organic fragrant rose

Layer sugar and fresh rose petals in a straight sided jar or bowl. Begin and end layering with sugar. Sugar layer should be about ½ inch thick and rose petals should be in a single layer. Leave uncovered for two weeks to allow rose petals to dry and sugar to absorb rose fragrance. Stir to mix and break apart dried rose petals. When thoroughly dry store in an airtight container away from heat and light. Use to flavor tea, cakes, cookies, fruit, puddings, pies.

Crystallized Flowers
by: Debbie Boutelier

Crystallized flowers will turn an ordinary dessert into an extraordinary and elegant confection! It takes just a few simple ingredients and tools, but does require a little patience. Any organic, edible flower may be used. Rose petals are lovely, but violets, pansies, Johnny-jump-ups, borage, pinks, or scented geraniums are also good choices.

Ingredients:
2 large egg whites
1 teaspoon water
1 cup superfine sugar (sometimes called caster/castor sugar)

Tools:
Small artist's brush
Cookie sheet lined with waxed paper or parchment paper

Instructions:
In a small bowl, combine the egg whites and water; beat egg whites with a fork until frothy. Dip an artist's paint brush into the egg white mixture and gently paint the flower. Cover each petal thoroughly on all sides, but not excessively. While still wet, hold the flower over the sugar dish, and gently sprinkle the superfine sugar evenly all over on both sides. Place the crystallized flowers onto a sheet pan lined with waxed paper or parchment paper and allow to dry for 12 to 24 hours. Use to decorate cakes and other desserts. The crystallized flowers can be stored in an airtight container for up to one year.

Other

Combine these dry ingredients to make a potpourri for a wedding toss, using the rich symbolism of the language of herbs and flowers.

Wedding Potpourri
by: Kathleen Gips

Amaranth: everlasting love

Chamomile: May your wishes come true

Coriander: Your closeness is welcome

Feverfew: You light up my life

Lavender: devotion; loyalty

Marjoram: joy and happiness

Mint: warmth of feeling

Rose: love, beauty

Sage: long life and good health

Thyme: strength and courage

Woodruff: Be cheerful and rejoice in life

Note: Since this combination will be used as a toss, rosemary is intentionally left out of the mix since its sharp needles can be dangerous to the eyes. If this is being used just as a symbolic potpourri rosemary can be added.

Rosemary: remembrance

Lemon Rose Potpourri
by: Kathleen Gips

Ingredients
⅓ cup rose petals
⅓ cup lemon verbena leaves, whole
2 tablespoons calendula petals
1 tablespoon lemon peel
1 tablespoon allspice berries
1 tablespoon lemon balm
1 tablespoon lemongrass
1 tablespoon cut orris root with 30 drops rose fragrance oil and 10 drops of lemon essential oil dropped on top of the orris root

Directions
Combine all botanicals in a bowl and mix well. Place in a glass jar. Carefully pile the tablespoon of orris root on top of the botanicals, but do not mix in. Drop oils onto the orris root. Allow orris to absorb oils for 24 hours and then shake jar well. Shake daily for two weeks to allow fragrances to mellow and blend. After this aging process is done your potpourri will be ready to display in an open bowl. Refresh scent every four to six months or as desired with a few drops of rose and lemon essential oils. Keep potpourri away from furniture finish.

A Special Thanks to our Contributors:

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Potomac Unit, Mid-Atlantic District

Debbie Boutelier
Member at Large, Southeast District

Kathleen Gips
Member at Large, Great Lakes District

Mary Versfelt
South Texas Unit, South Central District

Magical Fairy Dust in a Feather Pouch

by: Kathleen Gips

Thyme and thyme and thyme again, help us dance like fairies can.

Made with the favorite fairy herbs and flowers. Sprinkle fairy dust to encourage the belief in fairies and increase their sightings. Made from fragrant herbs and flowers and gently scented with tea rose fragrance. These herbs and flowers have been chosen by the wee folk for their meanings in the language of herbs and flowers.

Rose Petals for beauty
Thyme for activity
Lemon Verbena for enchantment
Lavender for luck and devotion
Coriander for "Your closeness is welcome"
Calendula Petals for friendship

Ingredients:
Two tablespoons EACH of the following herbs:

- ✾ lavender
- ✾ rose petals

One Tablespoon of EACH of the following:

- ✾ thyme
- ✾ lemon verbena
- ✾ coriander
- ✾ calendula petals

1 tablespoon oak moss fiber
10 drops tea rose fragrance oil
One fabric pouch or 12 inch square of fabric to enclose fairy dust

Directions:
Mix all ingredients together in a glass bowl except oak moss and fragrance oil. Mix herbs together and put oak moss in a small pile on top of herbs. DO NOT MIX IN. Drop fragrance oil onto oak moss fiber. Mix well. Spoon evenly into fabric or into muslin bags.

To Use: Sprinkle liberally where Fairy visits are desired while chanting the Fairy Blessing: "and the fairies be." Mind your manners, sit quietly and watch carefully for signs of Fairy Folk. Be patient.


Delight

A Modern World for Old Roses

Roses for Calais

By Caroline Holmes

Photo courtesy of HSA

The modern world is all about ease of communication so when the phone rang in July 2008 and a man said he had been given my name as 'the' person to design a knot garden, I was instantly flattered. Flattery moved to delight when I learnt that this was to be a Tudor knot in Calais; however, months elapsed before I received a summons in November to meet a contingent from Calais in London. What might they want? Armed with my laptop I created a program of knots for use and delight that we could discuss. A month later I visited the site – the great church of Notre-Dame-de-Calais, and in January 2009 I presented my plans for a circuit of small Tudor Renaissance gardens to exercise the mind and body. Roses would weave the narrative – the ancient healing Apothecary's Rose *R. gallica officinalis*, historic *R. centifolia*, the Tudor Lancastrian *R. gallica rubra* and Tudor Yorkist *R. alba* and resilient *R. eglanteria*; the Virgin Mary known as the Mystic Rose would be represented by *Rosa alba maxima* and *R. alba semi-plena*. The divine and terrestrial would be mixed further with the wafting scents of the roses 'Belle Amour', Damask 'Quatre Saisons' and 'Blush' Damask. The difference between English and French culture is amusingly encapsulated in the rose 'Maiden's Blush', its French name is '*Cuisse de Nymphes*' – Nymph's Thigh.

The Tudor most famously associated with Calais is Queen Mary, whose army lost this last English foothold on mainland Europe. As she lay on her deathbed in 1558 she sighed that Calais would be engraved on her heart. Also known as Bloody Mary, she is better remembered for her zeal in martyring her subjects in a bid to return England to the Church of Rome. The parishioners of the magnificent English perpendicular church of Notre-Dame-de-Calais were amongst the few happy to resume the old religion. The church suffered extensive bomb damage in 1944. Decades later, restoration work was finally reaching completion, funded and organized by the Association *pour la Mise en Valeur de la Patrimoine* Architectural Calaisis (AMVPAC). Calais and the AMVPAC wanted to create an 'English' stepping stone for visitors to the 2012 London Olympics. The symbolism of the true lover's knot was to be the culmination of a spiritual and sensual journey around this historic church.

The knot itself will weave the shape of the bi-colored rose that was the emblem of the Tudor

dynasty. Glorious old roses evoke the past, however, although its historic heart still beats, Calais is a vibrant modern town currently being 'greened'. The English rose breeder Amanda Beales of Peter Beales Roses proposed a new rose—cream, climbing, lightly scented and with thorns that made it vandal proof—that she had bred and which was awaiting a sponsor. Peter Beales Roses is a family run nursery based in Attleborough in Norfolk, England, whose catalogue is a joy to anyone interested in historic roses.

History does not stand still and every year Amanda raises 1-2,000 rose seedlings from which one or two new potentially successful varieties will arise. To create a modern rose is a lengthy business. It takes about 10 years to trial each new rose's disease resistance—will it thrive in hot and dry climates without developing mildew or damp conditions and resist succumbing to rust?

With the increasing move away from chemical sprays towards organic gardening, inbred good health has become a major factor. How long will flowering last, is it remontant (a must for most modern gardeners) and to what dimensions might it grow? Unlike clones, but like human parents, the progeny will be unique with as good a chance of being an improvement as not. So let me introduce the parent, 'Maigold', a robust coppery-yellow climbing rose with an abundance of glossy, mid-green foliage and semi-double flowers. She is a pimpinellifolia hybrid and was introduced in

The church viewed from the lighthouse. Photo courtesy of Caroline Holmes

Rose-Notre-Dame-de-Calais in flower. Photo courtesy of Caroline Holmes

1953. A photo of her progeny with vital statistics was proposed to AMVPAC, who agreed to sponsor her with the name Rose Notre-Dame-de-Calais. She was launched by Peter Beales Roses at the Chelsea Flower Show in 2010 and feted by our current Queen Elizabeth and Patricia Routledge of 'Keeping up Appearances' fame. Endless religious images portray Our Lady as Mary, the meek and mild mother of Jesus, but my goodness, on the contrary, what strength she must have had. Curiously I think Notre Dame has a much stronger ring, so how appropriate that the creamy white flowers of Mary's new rose are held up on a vigorous, shiny dark leaved and thorny plant.

Opposite the great West Door I have designed two beds of Marian plants around rosemary hedges formed into large 'M's. When Queen Phillippa of Hainault married Edward III in 1328 she also re-introduced rosemary into England. In 1347, following Edward's successful campaign to capture the Calais area, she pleaded for and saved the lives of the Burghers of Calais, famously sculpted some 540 years later by Auguste Rodin. A cast of the sculpture still stands in front of the Calais Town Hall as well as the Rodin Museum in Philadelphia and the Smithsonian Hirshorn Museum in Washington D.C.

Two modern Calaisiennes are the descendents of another Calais Burgher, the rose artist Édouard Maubert (1806-1879) who, amongst many botanical subjects, painted Rose Calais and Rose Calaisienne. They appear to have been lost to cultivation— where are they and can you help?

A covered arbor, over which Rose-Notre-Dame-de-Calais will cascade, is to enclose the area to the east of the church, from which visitors can enjoy the contemplative parterre. I have designed a rill of water to run in a straight line from the arbor through the parterre to the church, thus symbolically drawing the souls of the people into the church whilst pouring out its message into the world. The gardens around the Lady Chapel, which forms the east end of the church, will be further enclosed by myrtle hedging and planted up with roses, herbs and scented plants providing a fragrant sanctuary for visitors.

Work will start on creating Notre-Dame-de-Calais' gardens in the fall of 2011; in the meantime the Calais City Council is planting one hundred bushes in bedding schemes across the town. Fit for a modern world, these roses will also play a major part in evoking Calais' history and the sparkling intellectual world in which Mary Tudor grew up as the beloved only daughter of Henry VIII and Queen Katherine of Aragon.

Caroline Holmes *is a respected garden designer, lecturer and prolific writer. She is the author of* A Romantic Herb Garden, New Shoots, Old Tips *and* The Not So Little Book of Dung, *as well as many articles, including some in* The Herbarist. *Caroline received* The Gertrude Foster Award for Excellence in Herbal Literature *from* The Herb Society of America. *She is an international member at large living in Suffolk, England.*

Love thou the rose, yet leave it on its stem.
-Edward G. Bulwer-Lytton

Hunting the Musk Rose

By Jo Sellers

About ten years ago, the Potomac Unit decided to study the plant family Rosaceae. This is a family with many important herbal members and also a family with a special relationship to the Potomac Unit. The musk rose, *Rosa moschata*, is our mascot plant, and making rose bead necklaces has become the unit's largest herbal fundraising endeavor. Unit members selected a variety of plants to research; I chose the musk rose. The information available seemed to dance around the actual musk rose. I would find a note such as, "Musk hybrid roses originated in England through the work of Rev. Joseph Pemberton who crossed *Rosa moschata* with numerous cultivars," or "*R. brunonni* is the rose that is usually passed off as the musk rose."

Of course, often quoted was Oberon's speech in which he describes the bower of Titania, the fairy queen, in Shakespeare's A Midsummer Night's Dream:

> "I know a bank where the wild thyme blows,
> Where oxlips and the nodding violet grows,
> Quite over-canopied with luscious woodbine,
> With sweet musk roses, and with eglantine."

My research later discovered that the musk rose blooms in late August to October. The rose in Shakespeare's A Midsummer Night's Dream was actually *Rosa arvensis*, a native English species.

Frustrated but determined, I stumbled upon Thomas Christopher's book, *In Search of Lost Roses*. It was a book about a group of rose experts who united to rescue old roses, many of which had almost vanished when the first hybrid tea roses were cultivated in 1867. There was actually a whole chapter titled "Of Musk Roses and Other Mysteries."

The chapter described how a gentleman named Carl Cato, who lived in Lynchburg, VA, had located specimens of the musk rose at three different sites. An account of English author Graham Thomas's musk-rose hunting in England stirred Mr. Cato's memory. He recalled seeing the rose in the Elmwood Cemetery in Charlotte, North Carolina, as well as in the garden of Helen Watkins of Hillsborough, North Carolina, and in Lynchburg, Virginia. At the Elmwood Cemetery site it appeared to be two bushes, one with a single white flower and the other with double blossoms. After reading Thomas's repetition of botanist John Parkinson's observation that sometimes the musk rose bears single

" 'One thing leads to another' is an old folk saying that describes my stop-and- start study of the musk rose."
~Jo Sellers

five-petal and double multi-petal flowers on the same bush, Mr. Cato returned to the Elmwood Cemetery to check the base of the twin roses and found that the two bushes were connected and were actually one.

Helen Watkins provided the link between the three separate specimens. Robert Burnwell, a minister and educator, had lived in Lynchburg before moving to Hillsborough and then finally on to Charlotte. It was on the Burnwell plot at the Elmwood Cemetery in Charlotte that one specimen was found. Helen Watkin's specimen in Hillsborough had come from the grounds of the Burnwell School, the woman's academy founded by Robert Burnwell in 1837. A surviving member of the Burnwell family had furnished records that showed the arrival of a John Burnwell in Jamestown in 1607. It would seem that the Burnwell family was the "Johnny Appleseed" of the musk rose.

The spring 1993 board meeting of The Herb Society of America was held in Charlotte, North Carolina, which provided me with an opportunity to visit the Elmwood Cemetery and view the rose on the Burnwell plot. It was easy enough to discover and recruit two other rose enthusiasts attending the meeting (Beverly and Morris Anderson) to join me on the trip to the cemetery. We were dismayed, however, to discover that Elmwood Cemetery was huge. With the size of Elmwood, we could wander for hours and not find the rose's site. Amazingly, we found the Burnwell plot within five minutes. Here indeed was the musk rose alive and well despite some cemetery worker's wild trimming. We wished the rose had been in bloom so that we could have enjoyed its distinctive scent. Our reward instead was the view of the city of Charlotte's impressive skyline.

At the Potomac Unit's Herb Festival later that spring, I was describing my roller coaster research of success and failure to Nick Weber, a member of the Heritage Rose Society and an old-rose expert. I was excited to discover that he had three seven-year-old musk rose bushes growing in his garden that Helen Watkins had given to him. Two had double blossoms and one had single. I filed the fact in the back of my memory and planned to visit Nick's garden in the fall when the musk

roses would be in bloom. Later that year the alarm went off in my mind when weather forecasters predicted our first freeze. In a panicked call to Nick, he told me the musk rose still had a few blossoms. I drove the eighty-four-mile round trip to Nick's just to see and smell that rose. It was worth it!

The single blossoms smelled spicy like cloves, while the double blossoms had a sweeter fragrance, like a damask rose with a coy scent of musk. This was not a timid rose waiting to be held to a nose to be appreciated and admired. The slightest breeze carried the scent twenty to thirty feet away. The big canes had blossoms like a candelabrum. The flowers were pure white. It was obvious why so many roses owed their parentage to this magnificent rose.

Nick mentioned that he had six musk rose cuttings, which were destined for the gardens at Mount Vernon. Knowing how I had researched and been searching for this rose, he offered me one. The next spring I planted my baby rose cutting in the middle of my Tussie-Mussie Garden, in a spot about 20 feet from our deck. The six-inch cutting doubled in size that first summer. Now, 16 years later, the ten-foot-tall adult plant dominates the center of my Tussie-Mussie Garden. It is semi-double, somewhat shapeless, and not a very ornamental plant, but I know its value. Those wide-open flowers with their rich yellow stamens produce such a treat to my senses. The fragrance released very freely into the air allows the lightest breeze to carry the scent. I know I have the "real deal." I have the real musk rose.

Jo Sellers *is a long time member of the Potomac Unit of The Herb Society of America. She has served on the Board of Directors as the Southeast and Mid-Atlantic Membership Delegate. In addition, Jo has served on the Board of Trustees of the National Capital Area Federation of Garden Clubs; been Membership Chair for the Central Atlantic region of the National Council of State Garden Clubs; and was one of the founding members of the Friend of River Farms Board, which serves the American Horticultural Society. She lives and gardens in Burke, Virginia.*

The Elizabeth Park Rose Garden

By Susan Schumann-Skehan

In Connecticut, straddling the town line of Hartford and West Hartford is a gem of a park named Elizabeth Park. Once the property of wealthy industrialist and statesman, Charles M. Pond, the 101 acres were donated to the city of Hartford upon his death in 1894. His request was that the property be used as a horticultural park and named after his wife, Elizabeth. The city took possession of the property in 1897 and hired a Swiss-born gentleman by the name of Theodore Wirth to be the first superintendent of the park. Mr. Wirth designed the garden areas starting with 100 rose bushes because, according to him, "it would please people."

Listed on the National Register of Historical Places, Elizabeth Park Rose Garden is considered the country's oldest municipal rose garden. The main garden is two and one-half acres containing approximately 800 varieties of roses with about 15,000 rosebushes. This area showcases more modern roses. Fences, arches, walkways and a gazebo are draped in climbing and rambling roses. Beyond the central gazebo lie numerous tidy beds of roses. Some beds are maintained by the park staff, while others are sponsored and maintained by garden clubs throughout Connecticut. This area is also part of the All-American Test Garden, where new roses are evaluated before being introduced to the general public.

Across the road from the main rose garden, the Connecticut Valley Garden Club is recreating the Heritage Rose Garden. This area will

Rose Garden at Elizabeth Park. Photo Wikimedia Commons

One of the greenhouses at Elizabeth Park. Photo Wikimedia Commons

hold historical old roses, including the Apothecary's Rose (*Rosa gallica* var. *officinalis*) that dates back to the thirteenth century. This area, still under construction, is accepting donations of older roses from the Hartford area and is also hoping to get cuttings of antique roses from historic landmarks, abandoned gardens and graveyards.

Elizabeth Park is not just for roses. There are several greenhouses, sweeping lawns, picnic areas, a pond, recreational areas, plus a fabulous restaurant, The Pond House Café. It also hosts a number of other gardens including the Perennial Garden, Annual Garden, Dahlia Garden, Shade Garden, Rock Garden and, of course, the Connecticut Unit's Herb Garden which was built in 1998.

On June 14 and 15, 2012, the Northeast District will be hosting the District Gathering at Elizabeth Park in Hartford. The park's rosarian, Marci Martin will be giving a tour and talk on this beautiful and historic rose garden. The peak bloom time for the garden is mid-June so it will be the perfect time to come and visit Elizabeth Park.

Susan Schumann-Skehan

joined The Herb Society of America in 1993 when she joined the Connecticut Unit. For twelve years she co-chaired the Connecticut Unit's Ann Pinto Memorial Herb Garden at Elizabeth Park in Hartford, Connecticut. She also has served as chair and co-chair for the Connecticut Unit. Spending much of her time in Florida, she is also a member-at-large of the Southeast District and leads a local herb study group in Naples, Florida.

Resources

HSA Library Rosa Resources

Books

Cairns, Thomas, Ph.D. *Ortho all about Roses.* Des Moines, Iowa: Meredith Books, 2007.

Covers general culture of roses which includes tips on buying, planting, growing, monthly maintenance schedules, watering, fertilizing, insect and disease control, and proper pruning techniques. Features descriptions and photographs of many rose varieties and their recommended growing zones.

Druitt, Liz. *Landscaping with Antique Roses.* Newtown, CT: The Taunton Press, 1992.

Antique roses offer a wide variety of attributes in flower color, fragrance, overall texture and habit. This book shows how to integrate roses into the design of the garden for maximum impact. Tips are provided for securing roses on fencing, trellises, arbors, the unusual pruning technique of pegged roses, sources of cuttings, propagation, growing roses from seed, planting, after care, and pruning. Eighty roses are profiled complete with date of introduction, author's personal experience growing, hardiness, flower color and growth characteristics.

Druitt, Liz. *The Organic Rose Garden.* Dallas, TX: Taylor Publishing Co., 1996.

Covers designing a rose garden, planting and pruning roses. Explains types of organic fertilizers and identifies disease and insects and their treatments and controls that align with organic gardening. Contains a quick reference chart by size and characteristics. Includes lists and illustrations of roses that grow well in organic gardens. Includes recipes for Rose Petal Jam, Rose petal pound cake, candied rose petals.

Easy-Care Roses: Low Maintenance Charmers. Brooklyn, NY: Brooklyn Botanic Garden, 1995.

From Brooklyn Botanic Garden, this booklet is a compilation of articles from rose experts. Topics include: descriptions of the types of roses, Finding Old Roses, Cemetery Roses Live on, Propagating Roses from Cuttings, A Mystery Rose, Species Roses, Miniature Roses, Chemical-Free Rose Care, Drip Irrigation for Roses, Keeping Deer at Bay, Landscaping with Roses, A Mixed Garden with Roses, Easy-Care Roses by Region, Our Rosy Future.

Klose, Liz and Laura Peters. *Roses for Ontario.* Edmonton, Alberta, Canada: Lone Pine Publishing, 2003.

Covers general rose growing including: buying, planting, growing, pruning, deadheading, winter care, propagation, problems and pests and their controls. Many photographs accompany varietal descriptions and their best attributes of color, fragrance and a bit of history.

Long, Jim. *How to Eat a Rose.* Blue Eye, MO: Long Creek, 2004.

A variety of recipes using rose petals that include: Rose Petal Jelly, Virginia's Rose Sandwiches, Rose Raspberry Salad, Puneet's Rose Soufflé, Candied Rose Petals, and Rose Ice Cream.

The red rose whispers of passion,
And the white rose breathes of love;
O, the red rose is a falcon,
And the white rose is a dove.

-John Boyle O'Reilly

Martin, Clair G. *100 English Roses for the American Garden.* New York: Workman Publishing, 1997.

This book offers a brief history of roses, the types of roses, a definition of an English Rose, rose care, and roses in garden design. Photographs accompany detailed descriptions of English roses, hybridizer information, suitability, availability, stature and habit, fragrance, uses, parentage, disease, denomination (International Code Name), and patents if protected.

Modern Roses 12. Shreveport, LA : American Rose Society, 2007.

A comprehensive listing of rose cultivars, codes for rose type, date of introduction, hybridizer's name, description of flower, color, fragrance, disease resistance, growth characteristics, and sometimes awarded information and marketers. See key on page 5 for codes for Approved Horticultural Classifications and Color classifications. Sixty four pages of color plates of select roses.

Ohrbach, Barbara Milo. *Roses for the Scented Room.* New York: Clarkson Potter, 2000.

The author offers ideas on how roses can be brought in fresh or dried to be used as decorative or culinary items for the house. Covers buying roses, gathering from the garden, conditioning, and reviving roses. Provides methods of drying rose buds and petals by hang-drying, air drying, silica gel and others. Includes recipes for rose vinegars, rose honey, rose scented waters, powders, oils, cream, and ink. Provides tips for arranging roses. Includes directions for rose sachets, dried rose wreaths, and baskets. Contact information for gardens that feature roses in the United States and Europe.

Phillips, Roger & Martyn Rix. *Roses.* New York: Random House, 1988.

Originally published in Great Britain, this book provides a brief history of rose cultivation, basic rose care, and detailed descriptions and photographs of wild species roses. Numerous plates of Albas, Gallicas, Portlands, Damasks, Sweetbriars, Centifolias, China, Bourbons, Hybrid Perpetuals, ramblers and climbers, Rugosa, Hybrid Teas, Floribundas and Miniatures with multiple varieties side by side labeled and described.

I once had a rose named after me and I was very flattered. But I was not pleased to read the description in the catalogue: no good in a bed, but fine up against a wall.

-Eleanor Roosevelt

Rohde, Eleanour Sinclair. *Rose Recipes.* London: Chiswick Press, 1939.

Recipes gathered from early herbals for using roses for household use for flavor and fragrance. Recipes include: How to Dry Rose Leaves in a Most Excellent Manner, Odoriferous Candles Against Venome and the Plague, and To Make Oyle of Roses.

Verrier, Suzanne. *Rosa gallica.* Deer Park, Wisconsin: Capability's Books, 1995.

This book discusses the uncertain history of *Rosa gallica* and its cultivation. Provides photographs and descriptions of dozens of varieties of *gallica* roses.

Verrier, Suzanne. *Rosa rugosa.* Deer Park, Wisconsin: Capability's Books, 1991.

Photographic portraits of this group of hardy roses and descriptions by size, parentage, color, and other attributes. Includes descriptions of scarce historic varieties.

Selected Articles from The Herbarist

Hoover, Caroline. "Don't Just Smell the Roses - Eat Their Seed Pods." *The Herbarist.* 60 (1994): 51-52.

Briefly describes the culinary use of rose hips for flavor and their nutritional value. Wild rose hips and hips grown in northern countries have more minerals and vitamins A, B, B2 and C than those in southern countries. Hips contain 1200-1800 milligrams of ascorbic acid in ½ cup. Includes advice on harvesting and recipes for puree, jam and tea.

"The Rose Garden." *The Herbarist.* 47 (1981): 17.

Roses in the Rose Garden at the National Herb Garden in Washington, D.C. were chosen by Hester Mettler Crawford, Past President of the HSA and noted rosarian. Some old roses included in the garden are Damasks, Albas, Centifolias, Gallicas, Moss Roses, Bourbons, Stanwell Perpetuals, Climbers and Rugosas.

Thomas, Graham Stuart. "The Origins of Yellow Garden Roses." *The Herbarist.* 49 (1983): 6-13.

Traces the origin of yellow roses to China and Iran. The Yellow Rose of Asia (*Rosa foetida*) dates back to the twelfth century. The introduction of four ancient Chinese garden hybrid roses (Slater's Crimson China (*Rosa chinensis* Jacq.), Parsons' Pink China (*R. chinensis* Jacq. × *R. gigantea* Collett), Hume's Blush Tea-scented China (*R. chinensis* Jacq. × *R. gigantea* Collett) and Parks' Yellow Tea-scented China (*R. chinensis* Jacq. × *R. gigantea* Collett) were instrumental in achieving characteristics of modern roses. Credits the modern yellow garden roses we know today to Pernet-Ducher of Lyon France who mated a Hybrid Perpetual with a Persian Yellow (*Rosa foetida* 'Persiana' Herrm.) then further hybridized with a Hybrid Tea, producing 'Soleil d'Or' the first Pernet Rose.

Study Notes

Learn, Explore, Grow

Visit www.herbsociety.org for information on joining The Herb Society of America.