

Drying and Preserving Flowers and Plant Materials for Decorative Use

Drying and preserving flowers and plant materials is a form of artistic expression that was very popular during the Victorian age and has once again gained popularity. There are many reasons for preserving plant materials, whether your interest is in drying flowers from an arrangement that has special meaning or preserving beautiful cut flowers, foliage, ornamental grasses, and plant materials from the landscape or garden. Dried flowers are used in arrangements, wreaths, swags, pressed art, and other decorations.

To improve your success with drying plant materials, and to enhance their longevity, refer to the following methods for drying plant materials.

Collecting Plant Materials

Plant materials should be collected at the most suitable time of the year for drying and preserving that specific plant part. In general, all plant materials should be collected when they are in peak condition. Plant parts can be harvested at different stages of development for variation in color, form, and texture. Flowers, for example, can be cut at the bud stage and at any later stages until just before full flower. Do not use flowers that have begun to fade.

Almost all plant materials can be dried—everything from flowers, foliage, and branches to seed pods, grains, cones, nuts, berries, and other fruits. One person's weed is another's treasure! Some

plant materials, however, are more “everlasting” than others, particularly if the best drying method is used to preserve the plant.

Other tips for collecting plant materials are as follows:

- Avoid collecting plants when they are wet or moist from dew.
- Use a sharp knife or pruning shears to cut flowers and plant materials.
- Select plant materials that are without insect or disease problems.
- Place stems in water while harvesting to prevent wilting. Some flowers may hold color better if allowed to stand in water for a few hours. Start the drying process as soon as possible after cutting.
- Collect more plant materials than needed to allow for some loss.
- Be mindful of where you collect plant materials; never remove unlawful or endangered plants.

Methods of Drying Plant Materials

Some plant materials are naturally dry and require little work to preserve them. Most plants, however, must be either air-dried, pressed, or buried in a plant-drying mixture.



Naturally Dry Materials

Naturally dry materials include dry grasses, reeds, pine and other cones, and most seed pods. Dry materials should be harvested when they are still in good condition, usually in the fall at the end of their growing season but before they become weathered in appearance. Cattails, however, should be picked when they first turn brown, while flowers are still visible at the top of the spike.

Usually, a little grooming is all that is necessary for naturally dry materials. However, cones and

Pods may need to be washed in water and a mild detergent. Fragile seed heads, such as those of pampas grass, as well as mature cattails, can be sprayed with hair spray or other aerosol lacquers or plastics to hold the heads in place and to prevent shattering as the plants age. Lacquers or shellac can be sprayed or painted on fruits and cones to give them a more shiny, decorative look as well as to help preserve them. Remove seeds from pine cones to prevent shedding that may occur at a later time.

Air-Drying

Air-drying is the easiest method of preserving flowers and plant materials. Many garden flowers and wild plants can be collected, tied together at the stem ends in loose bundles with rubber bands or pipe cleaners, and hung upside down in a warm, dry area. With good air circulation, flowers take 1 to 3 weeks to dry completely. Large flower heads should be hung individually. Most flowers can be dried on their own stems; however, some flowers, such as the strawflower, have a weak stem and require that a wire be inserted before drying to support the flower.

Use the following tips to successfully air-dry plant materials:

- Dry flowers in a warm, dry, dark area that has good air circulation for best results.
- Remove all leaves from stems and branches.
- Tie flowers in small bundles so that flower heads do not touch.
- Hang flowers upside down, or lay them on drying racks or screens raised off the ground.
- Wait for flowers to completely dry, and then sort the plants by flower types and sizes, and store them in an airtight container until ready to use. Dried plant materials can be stored in cardboard boxes such as shoe boxes; however, plants are better protected from insects and rodents if stored in airtight containers. Table 1 lists flowers that are recommended for air drying.

Pressing

Pressing is a method of preserving plants to use on pictures, stationery, place cards, etc. Most foliage and simple flowers with few petals press very well. Pansies are an excellent flower for pressing at all stages of flower development. Ferns make excellent pressed plants. Leaves and branches with foliage can be

pressed to form plant materials with natural curve.

Pressing is done by placing plant materials between layers of an absorbent paper material and applying weight or pressure for at least 5 to 10 days or until the plants are dried. Newspapers, telephone directories, blotter paper, or tissues are good papers to use. Plant presses are also available. After the first week, check the paper for excess moisture, and replace the paper if necessary. Reposition the flowers if needed. Table 2 lists flowers recommended for pressing.

Burying Flowers in Plant-Drying Mixtures

Flowers can also be dried by burying them in a plant-drying mixture. The drying agent in the mixture helps support the flower while removing moisture, preserving the flower's shape and form. The most common mixtures used are borax mixtures and silica gel.

Borax Mixtures

Borax detergent combined with cornmeal or sand is an inexpensive material for drying flowers. Although sand will work, cornmeal is a lighter material and is less likely to flatten flowers.

Table 1. Flowers Recommended for Air-Drying

Astilbe	Dusty-miller	Hydrangea	Santolina
Baptisia	False-dragonhead	Larkspur	Smoketree
Baby's Breath	Fennel	Lilac	Statice
Blackberry-lily	Gaillardia	Marigold	Strawflower
Calendula	Globe thistle	Milkweed	Sumac
Cattails	Goldenrod	Okra	Tansy
Chinese lantern	Gomphrena	Paulownia	Teasel
Chives	(Globe Amaranth)	Polygonum	Thistle
Crimson Clover	Grains	Poppy (seed pods)	Yarrow
Cockscomb	Grasses (ornamental)	Rose	Xeranthemum
Dock	Honesty (Money Plant)	Salvia, Sages	

Table 2. Flowers Recommended for Pressing

Ageratum	Cornflower, Bachelor's button	Heather	Primula
Alyssum		Hydrangea	Queen Anne's lace
Anemone	Cosmos	Johnny Jump-Up, Viola	Rose
Azalea	Crocus	Larkspur	Salvia, Sages
Bleeding heart	Daffodil	Lily-of-the-valley	Statice
Butterfly weed	Daisy	Marigold	Sweet pea
Candytuft	Delphinium	Nasturtium	Verbena
Celosia, Cockscomb	Ferns	Nemesia	Zinnia
Chrysanthemum	Geranium	Pansy	
Columbine	Heath	Phlox	

Ratios of borax to cornmeal vary, depending on who you ask, from 1 part borax to between 1 and 10 parts cornmeal. Using 1 or 2 tablespoons of salt per quart of mixture may help speed up the drying process.

Borax mixtures can be reused. To preserve the mixture for reuse, spread the mixture evenly in a shallow baking pan, and heat it at 250 degrees F for about 1 hour or until it is dry to the touch. Store the borax mixture in an airtight container until ready to use it again.

Silica Gel

Silica gel is a fairly expensive moisture-absorbing chemical desiccant. It is an excellent product for drying flowers. It is lightweight, dries flowers faster than borax mixtures do, and can be used over and over again if dried properly.

Silica gel is sold under many different trade names and is available at most craft stores, garden supply stores, and florists. It must

be kept in an airtight container at all times. As silica gel absorbs moisture, the crystals in the gel change color. To dry silica gel for reuse, spread it in a shallow baking pan, and heat it at 250 degrees F for 1 hour.

Methods of Burying Flowers

After choosing a drying agent (desiccant), select a container that will fit the flower types and desiccant to be used. Flowers dried in borax mixtures should be left uncovered during the drying process to allow for good air circulation and faster drying. A shallow box can be lined with newspaper to strengthen the box. The box should be deep enough to allow the flowers to be covered completely. If drying flowers face down, it is not necessary to cover the stems, just the flower. Silica gel must be used in an airtight container. Plastic containers or tins with airtight lids are excellent choices.

Flowers can be dried in one of three positions: faceup, face-

down, or horizontally. Flat-faced flowers, such as daisies and cone-flowers, dry well when placed facedown in the drying mixture. Elongated, spike-type flowers should be dried horizontally. All other flower types can be dried faceup.

Some flowers should be wired before drying. Remove the natural stem, and use one of the following stem-wiring techniques. Flowers that have a small, soft center should be hook-wired. Using a 20- to 24-gauge florist wire, push the wire up through the center of the flower. Bend a small hook in the end of the wire, and pull it back into the flower head so that it cannot be seen. Flowers with hard centers, such as roses, should be cross-wired. Push a piece of florist wire through the base of the flower head at a right angle to the stem. Bend both ends of the wire down around the flower base to form a stem. Wire stems can be bent out to the side as you bury the flowers in the drying mixture.

Table 3. Flowers Recommended for Burying/Desiccant Drying

Ageratum	Daffodil	Lantana	Queen Anne's lace
Anemone	Dahlia	Larkspur	Rose
Bells of Ireland	Daisy	Lilac	Salvia
Black-eyed Susan	Delphinium	Lily-of-the-valley	Snapdragon
Butterfly weed	Dogwood	Magnolia	Stock
Carnation	False-dragonhead	Marigold	Verbena
Chrysanthemum	Feverfew	Nierembergia	Waterlily
Coleus	Forsythia	Pansy	Yarrow
Coneflower	Gladiolus	Passionflower	Zinnia
Coralbells	Hollyhock	Peony	

To bury the flower, place at least 1/2 to 1 inch of the drying mixture in the bottom of the container. Make small mounds of the mixture where flowers will be placed. Sift the drying mixture between and around the petals until the flowers are completely covered. It is generally easier to work with flowers when they are placed in one single layer per container. Place the flowers so that they do not touch.

Drying times vary depending on the flower thickness and the drying agent used. Silica gel requires 2 days for thin-textured flowers and 5 to 7 days for heavier-textured flowers. Borax mixtures generally require from 5 days to 3 weeks, depending on the flower texture. Do not keep the flowers in the drying agent for too long. Petals will become brittle, and some flower color may be lost if the flowers dry too long.

When flowers are thoroughly dry, remove them by gently sliding your fingers under the flowers and lifting. As you lift the flowers, gently shake off the loose mixture, and brush excess material from the petals, using a soft-bristled paint brush.

Flowers that easily shatter or drop their petals are unsuitable for drying. For some ray-type flowers, applying a drop of clear glue may help prevent shattering after they are dried. Table 3 lists flowers recommended for burying or desiccant drying.

Preserving Using Glycerin

Some foliage can be preserved using glycerin, which is available at drug stores. Glycerin will not preserve the green color, but the foliage will retain its soft, pliable feel and can be painted or used naturally in arrangements. Foliage preserved with glycerin can be wiped or cleaned and will last indefinitely. The time to pick

foliage to preserve using glycerin is in the middle of the plant's growing season.

Follow these steps to preserve foliage, using glycerin.

1. Remove damaged or withered leaves, and prune the foliage to the desired outline.

2. Split woody stem ends 3 to 4 inches from the end, or crush them, using a hammer.

3. Mix 1 part glycerin to 2 parts water, and heat the mixture to near-boiling.

4. Pour the mixture into a heavy container that will not tip over, being sure to use enough to cover several inches of the stem.

5. Stand the branches upright in the solution.

6. Check the branches often, and add water to keep the solution several inches up on the stem. (The solution does not have to be reheated.)

7. Allow the branches to absorb the solution for 2 to 6 weeks, depending on the texture and size of the leaves and branches. This method is somewhat unpredictable if the branches will not take up the solution. You may have to experiment with species to determine the exact length of time required.

As the branches dry, the leaves will change color from glossy green-brown to black or gold, depending on the species. The drying process is complete when all the leaf parts have changed color.

Before using or arranging the branches, wipe away any excess fluids that seep from the leaves. These fluids may stain or damage surfaces.

To preserve single leaves or vines, use a 1:1 solution of water and glycerin, and completely submerge the plant material, and leave it until the leaves have changed color, usually 2 to 3 weeks.

Plants Recommended for Preserving in Glycerin

Aspidistra (*Aspidistra elatior*)

Beech (*Fagus grandifolia*)

Cotoneaster

Elaeagnus (*Elaeagnus pungens*)

Eucalyptus (*Eucalyptus gunnii*)

Forsythia

Holly (*Ilex* spp.)

Hornbeam

(*Carpinus caroliniana*)

Ivy

Leucothoe (*Leucothoe* spp.)

Ligustrum

Magnolia (*Magnolia grandiflora*)

Mahonia spp.

Maple

Nandina (*Nandina domestica*)

Oaks

Oleander (*Nerium oleander*)

Osmanthus (*Osmanthus* spp.)

Pittosporum (*Pittosporum tobira*)

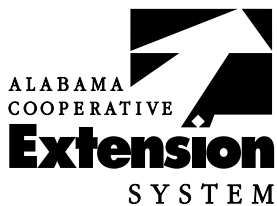
Viburnum spp.

Foliages and Fruits For Decorative Use

The following is a list of plants you can grow to use in arrangements or for decorations. Heavy pruning of these landscape plants will make larger quantities of these foliage available for use at certain times of the year.

Scientific Name	Common Name	Landscape Use and Size	Decorative Use
<i>Aspidistra elatior</i>	Common Aspidistra	Border, 15 to 20 inches	Line and tailoring all year
<i>Aucuba japonica</i>	Japanese Aucuba	Foundation, 4 to 15 feet	Mass, focal all year
<i>Berberis mentorensis</i>	Mentor Barberry	Foundation, hedge, border, 7 feet	Line, summer, fall, winter
<i>Buxus sempervirens</i>	American Boxwood	Foundation, hedge, border, 10 feet	Mass, corsage
<i>Callicarpa americana</i>	American Beautyberry (Purple balls of fruit)	Border, 10 feet	Line when in fruit in early fall
<i>Ternstroemia gymnanthera</i> (Cleyera japonica)	Japanese Cleyera	Corner or border, 15 feet	Line and mass all year
<i>Cytisus scoparius</i>	Scotch Broom	Border, 6 feet	Line, all year, yellow flowers in spring
<i>Elaeagnus pungens</i>	Yellowedge thorny Elaeagnus	Corner or border, 8 to 12 feet	Line and mass all year, corsage foliage
<i>Eriobotrya japonica</i>	Loquat	Small tree, 10 to 25 feet	Mass all year, effective for tailoring
<i>Euonymus japonicus</i>	Goldspot Evergreen Euonymus	Foundation, 8 to 15 feet	Line all year, corsage foliage
<i>Feijoa sellowiana</i>	Pineapple Guava	Border, 18 feet	Line all year
<i>Ilex cassine angustifolia</i>	Alabama Dahoon	Foundation or border, up to 36 feet	Line all year, orange-red fruit in fall and winter
<i>Ilex cornuta</i>	Chinese Holly	Corner, hedge and border, 9 to 15 feet	Line mass all year, red fruit in winter
<i>Ilex cornuta</i> (Burfordi)	Burford Chinese Holly	Foundation, border, hedge	Line mass, red fruit in winter
<i>Ilex vomitoria</i>	Yaupon	Border, hedge, foundation, 15 to 25 feet	Line, red fruit in winter
<i>Juniperus conferta</i>	Shore Juniper	Ground cover, 1 foot	Line all year
<i>Ligustrum lucidum</i>	Yellowleaf Glossy Privet	Small tree up to 30 feet	Line all year
<i>Magnolia grandiflora</i>	Southern Magnolia	Large tree, 50 to 75 feet	Mass all year
<i>Mahonia bealei</i>	Leatherleaf Mahonia	Foundation, 4 to 6 feet	Mass all year
<i>Myrica cerifera</i>	Southern Waxmyrtle	Foundation, border, small tree to 36 feet	Line all year, Bayberry fragrance
<i>Nandina domestica</i>	Nandina	Border entrance, 8 feet	Line-filler, red fruit in fall and winter
<i>Osmanthus americanus</i>	Devilwood Osmanthus	Borders, screens, small tree, 15 to 40 feet	Line, summer, fall, and winter
<i>Photinia fraseri</i>	Birmingham Fraser Photinia	Specimen, screen, hedge, foundation, 15 to 20 feet	Line mass, continual red, new growth if pruned frequently
<i>Pittosporum tobira</i>	Tobira Pittosporum	Foundation, border, hedge, screen, 8 to 14 feet	Mass, all year

<i>Prunus caroliniana</i>	Carolina Laurelcherry	Small tree, corner, hedge, to 36 feet	Line, background fall and winter
<i>Prunus laurocerasus</i>	Common laurelcherry	Corner, hedges, 18 feet	Line mass, fall and winter
<i>Pyracantha coccinea lalandei</i>	Laland Firethorn (orange fruit)	Clipped screen and barrier, 18 feet	Line, fall and winter
<i>Smilax lanceolata</i>	Lanceleaf Greenbrier	Vine	Line mass, fall, winter, early spring
<i>Viburnum rhytidophyllum</i>	Leatherleaf Viburnum	Border, foundation, 10 feet	Line mass, all year
<i>Viburnum tomentosum</i>	Doublefile Viburnum	Border, corner, 9 feet	Line mass, summer and fall



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For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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