



Cutting and Storing Peony Flowers for Later Use

Don Hollingsworth – Maryville, Missouri

Peony flowers have for long been known for retaining their suitability for floral decoration after several weeks or even months in cold storage. Prior to the technical advancements in refrigerated transportation during World War II, domestically grown peony flowers were a major item in the florist trade for several months of each season. They were shipped in iced boxcars by rail into the big eastern markets. This same durability can be used to advantage at home and for competitive exhibition.

Ready-to-open peony buds can be packaged dry in plastic, until brought out for use, and stored flat on the shelves of a household refrigerator. One may be surprised at how many buds can be so stored on one shelf. When cut at the most favorable stage of development, some kinds can be held for eight weeks or more and still have a good vase life. The longest storage life is obtained at 32° Fahrenheit (0° Celsius) or slightly lower. However, a household refrigerator controls more like 36°- 40° F. The cold serves to slow development of the flower. At the higher refrigerator temperature, storage life is somewhat shortened. With experience (or luck) this may be partly compensated for by cutting at a slightly tighter stage of opening.

The stage at which to cut is somewhat guided by science, but in practice it is a skill that can be expected to improve with experience. For shorter period storage and with the more doubled flowers the rule of thumb is to collect the stems at the soft bud stage. This means that when softness of the center is tested with fingers under the bud and the thumb pressed on top center, the bud feels about like a fresh marshmallow. In the doubled forms, outer petals will be unfurled before the center ball has softened.

The simple flower types, especially those of standard forms Single, Japanese and Anemone, all of which open quite easily, might best be a little more firm than the fresh marshmallow test. The outer petals, which in these sorts are a prominent part of the opened flower form, cut too soft they risk expanding too much in storage, the restriction of the package causing loss of symmetry in the opened flower.

The Bomb form flower, which is similar in anatomy to the simples but with much larger center petals, and the Semi-Doubles, which have looser petalage than the full doubles, also open more easily. For the florist trade channels, growers will cut buds comparatively harder.

Cut softer, any peony opens sooner, if harder it develops more slowly. The one extreme is that they can be cut so hard that they never open. The other is that they can be cut so soft that they expend their vase life potential while yet in storage and the petals fall when taken out or too soon thereafter. A useful precaution is to cut half again or twice as many buds as you think you will need, to allow for losses.

For packaging, we prefer two-gallon size (or larger) plastic slider bags. In a pinch we use grocery plastics. The polyethylene plastic is breathable, allowing exchange of oxygen and carbon dioxide. Karen Gast, Ph.D., former Extension Horticulturist at Kansas State University, who had the cut flower peony research and demonstration project there, used the 2-gallon size slider bags or equal in her storage life trials. A key consideration is that you want 100% humidity around the buds/stems so that moisture loss is

minimized. Frost-free refrigerators can be harsh, unless the stems are packaged adequately. Using the repurposed grocery bags requires taping holes, for example.

The length to cut stems depends on what you expect to need. Don't unnecessarily take foliage off the plant. The fact is that every leaf removed represents a loss of growth capacity. Therefore, when one needs very long stems, only a few can be taken from a plant while still protecting the ability of the plant to produce and store food necessary for performance next year. The long necked peony varieties allow more flexibility in cutting pressure than do the sorts which have flowers closer to the bush (but which are more favored for flowering in the landscape). We take 14-18 inches for exhibition flowers and shorter for many other uses. Choose a storage bag size to accommodate the preferred stem length.

Especially so for competitive exhibition, remove most of the leaves of stems to be stored, also those stems to be used in floral decoration. This reduces bulk in the storage space and greatly reduces the surface area giving off moisture in the bags. Humidity will condense on the inside of the bags. After the leaves have been stripped and the stem lengths adjusted, we arrange the buds in a bundle which will fit in the plastic bag, taking care that all unfurled petals are kept up-facing. For years we also rolled the bundle in one layer of newsprint. The paper keeps the buds from touching the moist plastic. However, more recently we have not used the paper wrap and the results seem equal.

Fungus spots on your buds may be botrytis. Unlike most other fungi, it will continue to develop in the cold conditions of storage. The resulting dramatic spoilage will sharpen one's perceptions for the future selection of which buds to include in cool storage.

What remains is how to handle the flowers upon taking them out of storage. They will be somewhat wilted and the cut ends will have dried. Re-cut the ends to fresh tissue and give them time to freshen and open in deep water away from heat and drafts. Vase-life extenders may be added to the water, although for one- or two-day events there may be no practical benefit from additives. We place the stems to take up water and to finish opening at least 12 hours before we will set them up for viewing. Tighter buds will need additional time.

Peony flowers to be used right away will give their best vase life if cut before they are fully open. Condition the flowers in a cool room, out of drafts, in deep water for a few hours before arranging them, for best vase life.

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