

fresh focus

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With its graceful line and warm colors, *Euphorbia fulgens* is worth some extra effort.

WHEN YOU HEAR the words “flowering branches,” you probably think spring, and pastels. *Euphorbia fulgens* is the exception. Native to Mexico, *E. fulgens* is not a woody tree branch like spring-flowering cherry or apple but a perennial shrub. Its two- to three-foot-long stems are sturdy and fibrous, but also flexible enough to form graceful, curving arches. Blossoming in the fall and winter, *E. fulgens* conveniently offers the colors we love most at that time of the year: warm red, orange, and yellow, along with pure white.

Red is perhaps the default color; the common name of *E. fulgens* is “scarlet plume.” But since it actually comes in a range of hues, we may prefer to call it simply “euphorbia.” The genus *Euphorbia* is one of the world’s largest and most diverse, with over 2,000 species, but only three euphorbias are in common use

by florists. One is *E. pulcherrima*, better known as the poinsettia. The other is *E. marginata*, also called snow-on-the-mountain, which bears green and white leaves and small, white, five-petaled blooms similar to those of *E. fulgens*, except that they appear in clusters rather than along an arching stem. Beautiful as it is, snow-on-the-mountain is seen on flower markets even more rarely than *E. fulgens*—so for now, let’s agree that “euphorbia” means the “scarlet plume” that also comes in other colors. “Fulgens,” by the way, means “bright” (literally, “shining”).

Almost all of the euphorbia on the cut-flower market comes from Holland (occasionally from New Zealand or Japan). This is a good thing, for at least one reason: Dutch growers routinely treat euphorbia with STS (silver thiosulfate, an effective anti-ethylene

agent). That means that, although euphorbia is definitely ethylene-sensitive, the euphorbia delivered from your wholesaler probably enjoys some protection from the worst effects of ethylene. (Not that you should slack off in guarding against them. See Handle with Care in the September issue of *Flowers&*.)

The right solutions

Ethylene sensitivity is one liability of euphorbia; there are at least two more. The tiny pointed leaves of euphorbia are one of its charms, but they are prone to yellowing and even dropping if, again, the cut stems are not treated to prevent it. For this, growers use an anti-yellowing spray or uptake solution containing a gibberellin, a plant hormone that is also used to treat other flowers with a tendency to leaf yellowing, like alstroemeria and bulb flowers.

Growers are advised to use such a hormone solution, along with STS, for euphorbia. Both treatments are considered standard for Dutch product; however, it doesn’t hurt to ask about the product you are receiving whether it has been treated with both STS and hormones. The two treatments should really be used in conjunction with each other.

There is some evidence that high-sugar flower foods can speed up leaf yellowing in susceptible flowers and varieties, including euphorbia. The flower foods with high sugar are the ones that are typically used at the retail level, when you’re not storing flowers but hoping to stimulate their full development for design and resale. Here’s the good news: euphorbia doesn’t need a high-sugar flower food to open the blooms or get them to color up, since it is typically cut and delivered with the blooms already open.

What you do need to use with euphorbia is a floral solution that will help to control bacteria. A low-sugar holding solution or slow-re-

Flame-red and rich yellow are two of the most commonly available colors for *Euphorbia fulgens*; it also comes in orange and white. The arching stems, with their elegantly pointed leaves, add graceful line to fall and winter designs.

lease chlorine solution would be just the thing—or even a bulb-flower solution, which is designed also to supply those missing hormones that keep the leaves green and healthy.

What sap?

The biggest problem with euphorbia is the milky sap that flows from the stem when it is cut. (The sap may also leak from the stem when a fresh leaf is cut or torn off. This is a challenge that *Euphorbia fulgens* shares with all other euphorbias, including poinsettias.) The sap can irritate the skin, so it’s a good idea to wear rubber gloves when handling euphorbia. It’s not clear whether the sap is directly harmful to other flowers. Some have surmised that the sap might cause bacteria in the water to proliferate, unless controlled by the right kind of floral solution. Exposed to air, the sap coagulates into a sticky latex.

In general, you would prefer not to have an irritating milky sap flowing freely from the stem ends of flowers that you design with, especially if your design is in clear glass. The old-school technique was to sear the cut end of a euphorbia stem in a candle flame before using it in an arrangement. This method does seal the stem. The problem, of course, is that it damages the vascular tissues of the stem and hinders them from rehydrating, diminishing the vase life of the flowers.

Another practice is to plunge the cut ends of the stems into very hot water, then recut halfway through the treated stem segment. One study, quoted on the Chain of Life website (www.chainoflife.org), suggests this method is successful with poinsettias, but the website states flatly it is not beneficial for *E. fulgens*. A similar technique is, however, in common use among Dutch growers, according to Rolf Timmerman, of Chrysal in the Netherlands. In Holland, both growers and retailers (if euphorbia arrives dry at the florist) may recut the stems, quickly submerge the ends in water that is nearly boiling (up to 90 degrees C), then rehydrate in a separate solution.

If you don’t like the idea of subjecting your flowers to heat, dry or wet, even momentarily,

Euphorbia
Euphorbia fulgens

Availability
September to January

Bunch size
10 stems

Vase life
7 to 9 days

try this: simply cut euphorbia stems to the desired length and leave them, segregated from other flowers, in water or in a

low-sugar holding solution, for a good ten minutes at least. At the end of this time the initial flow of sap will have slowed considerably, if not altogether. Then you may use them in designs—without, of course, recutting the stem ends.

Chill: out

Euphorbias are finicky in one other way: as subtropical natives, they are chill-sensitive. Do not place euphorbia in the cooler, unless you maintain an orchid cooler at 50 degrees F or above. If you have no orchid cooler, it’s better to leave euphorbias in a cool spot in the workroom or on the display floor.

We should note that the “flowers” of euphorbia are in fact, botanically speaking, not flowers at all but colorful bracts (the same is true of poinsettias, among other flowers). The tiny real flowers are in the center of the bracts. In purchasing, or evaluating a shipment, it’s a good idea to examine them for black or brown spots, a possible indication that the flowers have been chilled.

For all its challenges, euphorbia brings something special to fall and winter designs: a unique combination of hue, texture, and line that makes the season sing. 🌸



care tips euphorbia

- Many people wear gloves when handling euphorbia to prevent skin irritation from the milky sap.
- Select stems with fully opened flowers all along the stem. Avoid stems with yellow or dehydrated leaves.
- Remove bottom leaves if present, recut stems under water and place in a hydration solution or quick dip hydration solution.
- Euphorbia is highly sensitive to ethylene damage, so treat it with an anti-ethylene product following manufacturer’s instructions, then condition at room temperature for several hours. To help prevent botrytis infection, do not overcrowd stems in buckets.
- Place in a low-sugar holding solution or in plain water, as some studies indicate that the use of regular (high-sugar) floral food with euphorbia may increase leaf yellowing.
- Euphorbia are chill sensitive and should be stored above 50 degrees F.