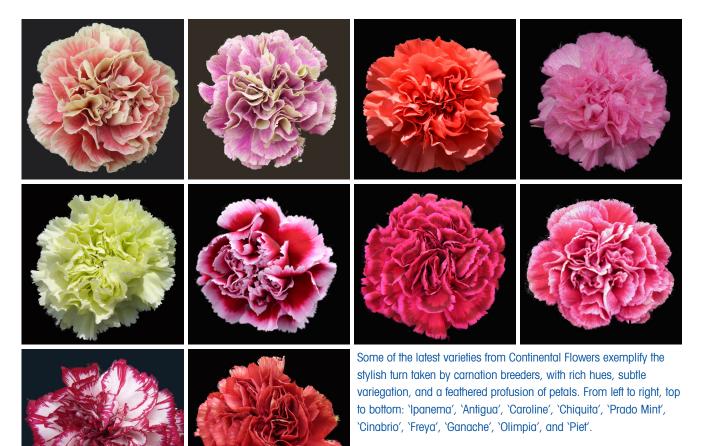
## fresh focus By Bill McKinley AIFD and Bruce Wright

### Making a long comeback, the hardy carnation rises again.



PITY THE POOR carnation? As the workhorse of the floral industry, it has certainly received its share of abuse. Battered by its own reputation as a "commodity" flower, the carnation has suffered from downward price pressure and when prices are low, it's more difficult for breeders and growers to keep quality high.

"There is price pressure on every product, but carnation growers have had a harder time of it than most," testifies Jody Whitekus of Golden Flowers (**www.goldenflowers.com**). "The margins are way too thin." (Golden Flowers won Best in Class for bright pink 'Farida' in the Society of American Florists' Outstanding Varieties Competition in 2011.) in Colombia, where the exchange rate between the dollar and the peso is currently working to the Colombians' disadvantage. Then too, within the recent past, problems with fusarium wilt, a fungal disease and soil pathogen, ate into the carnation growers' profits. Over the past decade, quite a few flower growers have taken out their carnation crops, contributing to a worldwide undersupply that is still felt at major holidays.

It doesn't help

that most carna-

tions sold in North

America are grown

More recently, however, some of those growers have turned around and invested in new plants and better growing techniques. Hydroponic production methods have largely taken care of the fusarium problem. Breeders—mainly in Holland—have continued to create stunning new varieties. Looking for a more profitable crop, growers planted... premium carnations, in fashion colors that could demand a higher price. The success of Florigene carnations, genetically modified to produce flowers in a range of rich mauves and purples, surely played a role in that development.

The carnation comeback story, long predicted and promoted by those who love this humble gypsy flower, is finally underway.

#### The spice of life

Variety is the key, says Bill Fernandez of Continental Flowers—a grower who got his start with carnations and pompons back in 1974 and now supplies more than 60 variet-



'Pomodoro'—seen here growing at Ayura, one of the many carnation farms that thrive in the savannah of Bogota using updated growing techniques—is one of the robust new reds now replacing the familiar but worn-out old favorite 'Nelson'.

ies of flowers to the entire United States and Canada (www.continentalflowers.com). "Back then, it was like in the early days of the automobile with Henry Ford, who said you could have a model T in any color, as long as it was black. You could have a mixed box of carnations, as long as it was red, white, and pink." Other colors were supplied by tinting the white ones, Bill remembers. Of course, that's no longer the case: "Over the past 20 years or so breeders have come up with so many beautiful varieties in so many natural colors that they put the tinting people out of business, except for maybe green at St. Patrick's Day."

At the same time, the market was flooding with many other new and different types of flowers. With all the new options available, some people found it hard to get excited about an inexpensive, everyday flower like carnations. Now, that's changing, says Bill. Continental Flowers still sells mixed boxes but the assortment can be tailored to the customer's needs, and might include anything



Varieties in the 'Viper' series offer ruffled petals enlivened with sporty dashes. More commonly seen in peach or wine, they were shown in burgundy-brown at Colombia's Proflora exhibition last fall, by carnation specialist Colibri Flowers. from pale green 'Prado Mint' to 'Ipanema', light peach with a little pink in it and cream on the petal edge.

Indeed, Bill sees the day coming when carnations will be sold by variety name, like certain roses: "We're learning to put names on the sleeve of the bunch. Because when a bride goes into a flower shop and sees a carnation like 'Ipanema', which is great for weddings, the florist who orders it is going to want to be sure that's what will be delivered"-that exact same color, matching the linens or complementing the bridesmaids' dresses. "We can custom-pack a quarter box with 25 of this, 25 of that, as a pre-book or sustaining order," Bill notes. "We have about 35 different colors and we've created flyers to make it easier for our wholesaler customers to sell them."

The new carnations include some that have been described as "hydrangea-like" for their delicate coloration and ruffled texture. In this contest, growers and buyers are putting a new emphasis on quality and value, rather than on price alone. That means paying more attention to how carnations are grown, cut, treated and shipped.

#### Open to change

As with any flower, one of the issues is finding the perfect cut point. "A few years ago, almost all carnations were cut in a tight bud stage," says Bill. "When the wholesaler or florist got them, they would have to put them in flower-food solution and wait three or four days for them to open up." Today, some growers are cutting carnations a bit more open, "so by the time they get to florist they can be used in arrangements within 24 hours. Another benefit is that they might also open up more fully."

It's a trade-off, explains Jody Whitekus of Golden Flowers, because growers have good reasons, economic and otherwise, to cut carnations tight: "Cutting tighter makes the flowers easier to handle and easier to pack. You can increase the quantity of stems per box, which can make a critical difference to the freight cost. The more open we cut, the more susceptible the flower is to damage and disease." Still, at Golden Flowers, "we don't bud-cut them," Jody says; "that's our standard."

Bill argues that carnations that were cut more open do fine if they are packed and shipped in smaller boxes (four quarter



Though at first you might not recognize it as a type of carnation, 'Green Trick' (along with a similar variety, 'Green Ball') is helping to meet market demand for flowers with bright green color and intriguing texture. In the genus *Dianthus*, it is closely related to sweet William.

boxes, say, rather than two half boxes). This adds to the cost of shipping but offers better protection to the flowers.

How open should carnations be when they arrive in the shop? Jody explains, "They should be at least at the 'copa' stage: that's like a cup that's tapered upwards. You don't want the petals erect or vertical, you want them around 45 degrees, starting to reflex back a little bit."

Carnations are well known to be ethylenesensitive, and carnations from any reputable grower will have been treated to protect them from ethylene damage. They are sometimes graded by stem length as select, fancy, or standard, with select being the longest, around 65 centimeters, fancy around 60 centimeters, and standard a few centimeters less. In practice, however, the stem length doesn't correlate to other, perhaps more meaningful parameters of quality, such as head size.

#### All in the family

All florists are familiar with standard carnations (which have one large flower atop a long stem) and spray carnations (on branching stems). Both come in a multitude of colors, including bi-colors. Standard carnations, however, are typically available in a wider range of colors and in more different petal styles—smooth, ruffled, or with heavily serrated edges. For both standards and sprays, color choices may be limited seasonally, but only because growers limit their production to what they believe they'll be able to sell.

Some florists have taken to calling carnations—especially the exotic-looking new

# fresh focus

varieties—"dianthus," which is the Latin name of the genus to which both standards and spray carnations belong. That practice could cause confusion, however, since the term "dianthus" also applies to another species in the genus, otherwise known as sweet William.

As seen in the chart below, sweet Williams offer clusters of smaller flowers, typically pink, burgundy, dusty rose, or lavender, with or without a thin white edge. There is also an all-white variety suitable for wedding designs. Sweet Williams are frequently very fragrant, scented like cloves, nutmeg—or an entire spice cabinet. They should be purchased with four to six flowers open on each flower head for longest vase life.

The newest members of the genus *Dianthus* to enter the cut-flower market are the 'Green Trick' and 'Green Ball' cultivars of sweet William. With the surging demand for green flowers, these globe-like flowers add a unique texture and form. Flower heads are from two to three inches in diameter and have no fragrance.

#### Looking ahead

The challenge isn't over for carnation growers. It may seem as though they are sitting pretty in the first half of the year, when, of late, supply is not quite sufficient to meet demand. "In the second half of the year it becomes more difficult, because it's more seasonal," says Jody. "Instead of wanting an assortment, people want first oranges and yellows, then reds and white and greens. As a grower, you need to sell the assorted."

Some buyers have been slow to recognize that higher quality is worth a higher price. Even with standard-color carnations, quality requires a continuing investment in new plants and new varieties. Top growers like Golden Flowers, for example, have begun to replace 'Nelson'—once the favorite red variety—with newer reds. "As breeders produce varieties with better characteristics, we're looking for those improvements," says Jody.

As a result, although "carnation production has probably decreased a little bit overall, our own production has actually increased by about 5 percent over the past couple years," Jody continues. "We didn't plant more, but we increased our productivity."

Likewise, at Continental Flowers, "we're selling carnations better right now than a year ago," reports Bill Fernandez. "I've talked to a lot of our customers, wholesalers who are in tune with the trends, and they say carnations are coming back."

As their fans are quick to point out, carnations combine two of the traits that consumers care about most: longevity and fragrance. Among the most prized, exotic, and intensely fragrant flowers to be found in English gardens of a century ago was the 'Malmaison' carnation—recently revived as "one of the cult flowers of the Belle Epoque."

So carnations have a noble heritage, alongside their tough-girl chic. It looks like they are poised for a return to their former glory, blending Astor Park and Jersey Shore.

Common name	Botanical name	Description	Bunch size	Fragrance	Vase life
Standard carnation	Dianthus caryophyllus	One flower, 2-3 inches in diameter	25	Mild, but varies by variety	14 to 21 days
Mini carnation	Dianthus caryophyllus nana	3-5 flowers, each 1-1½ inches in in diameter	10	medium	10 to 15 days
Sweet William	Dianthus barbatus	2- to 3-inch heads with multiple small flowers	10	medium	10 days
`Green Ball'	Dianthus barbatus	2- to 3-inch heads	10	None	10 -14 days

# carnations

• For longest vase life, standard carnations should be purchased with flowers only about one-half open. Spray carnations should have at least one flower open on each stem, and should have several buds showing color.

 All members of the carnation family, Caryophyllaceae, are sensitive to ethylene gas. Unless you're certain your carnations have already been treated with a system ethylene inhibitor, you should treat them yourself, following manufacturer's instructions.

• Remove the small leaves from the lower one-half of the stems, then slant-cut one inch from the stem end and place in a flowerfood solution.

 If carnations are shipped dry and appear to be dehydrated, treat with a citric acid hydration solution prior to placing into a flower-food solution.

 Condition carnations at room temperature one to two hours or overnight to open the blossoms.
To hasten the opening process, mist and cover the flowers with clear plastic and place in bright light (not direct sunlight).

• Store at 36 degrees F and 85 percent humidity.