Transporting and distributing fresh cut flowers

he extreme perishability of fresh cut flowers dictates that proper care and handling of the product be practiced during every step of the distribution chain. Growers, importers, shippers and wholesalers each deal with this task in a different but effective

by Jean Adamczak

manner.

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Fresh cut flowers must be moved as quickly as possible from grower to consumer to ensure a healthy, long-lasting product. There are four main groups of people involved in the distribution of cut flowers: growers, wholesalers/shippers, retailers and consumers. (See related story on page 78.) When discussing the cut flower distribution channels as they relate to retail florists, the roles of growers, importers, shippers and wholesalers are the most important.

Growers

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Retail florists purchase fresh cut flowers from four different types of growers: local growers, growers who double as wholesalers, grower-shippers or foreign producers. (*See chart on page 78*.) Whether foreign or domestic, a grower's main responsibility is to produce healthy floral products. The major U.S. cut flower growers are based in California, Florida and Col-MARCH 1988 orado, according to the 1986 FTD Flower Business Fact Book. Based on the U.S. Department of Agriculture's Floriculture Crops report, the value of domestically produced cut flowers reached nearly \$364 million in 1985, boosting cut flower production into the ranks of big business.

No one knows better than LaVerne Busmire what a big business cut flower production is. As vice president of production at Pajaro Valley Greenhouses, Watsonville, Calif., Busmire is responsible for the production of more than 20 varieties of flowers, including alstroemeria, chrysanthemums, snapdragons, irises and tulips. Pajaro Valley annually ships more than 10 million cut roses to customers throughout the country. Busmire said, adding that roses are one of the most difficult products to ship successfully.

"You have to keep roses at a nice, constant, cold temperature," he explained, "You can't let them heat up or they'll blow open on you. You can't let them get too wet or soggy or they'll develop botrytis.'' Busmire's solution for keeping roses at a constant temperature during shipping is pre-cooling them and including ice in insulated shipping boxes. Sometimes, though, his shipping problems are not as easily remedied.

"The main problem we run into when shipping product is delays in getting flowers to the customer, usually caused by transportation problems, such as bad weather," Busmire observed. "Of course, these are things we have no control over. If an airplane is grounded in Los Angeles because of fog, there's not a darn thing we can do to get the product out."

Most of Pajaro Valley's product is grown and shipped from its 1 millionsquare-foot greenhouse in Watsonville. Other production facilities are located in the Southern California towns of Nipomo and Vista. Refrigerated semi-trailers transport most of the cut flowers to the company's warehouses in Knoxville, Tenn., and Atlanta. Sometimes, though, it's necessary to get a shipment to a customer as soon as possible. That's when Busmire turns to Federal Express or another overnight delivery service.

"Generally, the boxes are put into a refrigerated truck for transport, but if they're going to be shipped Federal Express, they are picked up at the greenhouse by Federal Express and taken to a waiting Federal Express plane at the airport," he explained. "Federal Express is being used a lot now for transporting fresh flowers because it's guaranteed 24hour delivery."

To get flowers from the greenhouse in Watsonville to anywhere in the continental U.S. takes an average of two days, Busmire noted, less if Federal Express is used. The key factor in shipping product from the grower is to constantly keep product at the proper temperature and humidity levels and to avoid any kind of transport delays, he opined.

Importers

Bringing cut flowers that are grown in other countries into the United States is a controversial issue among many retail florists. We will forego passing judgement on this issue and concentrate on the role importers play in the cut flower distribution process as it pertains to retail florists.

Importers are responsible for picking up and temporarily storing product brought in from other countries. Because of the perishability of the product, all cut flowers are imported by airplane and stored in importers' coolers located in large warehouses at or near airport facilities.

Like flower production, importing cut flowers is also a big business. According to the Foreign Trade Division of the U.S. Department of Commerce, cut flowers were imported from 68 countries in 1985, accounting for approximately \$221 million in customs value. Approximately 60 percent of all U.S. flower imports

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-LaVerne Busmire, grower

originated in Colombia in 1985, the Department of Commerce said. Carnations, mini carnations, roses, pompons and alstroemeria are some of the flowers imported from Colombia. These flowers are shipped via commercial or air freight airlines to Miami, which is the nearest U.S. port of entry for Colombian imports.

Unfortunately, cut flowers are not the only items being imported from Colombia. Every year, large quantities of contraband drugs like cocaine, heroin and marijuana are transported across U.S. borders. In an effort to stem drug smuggling and enforce regulations governing the importation of products to America, all shipments entering this country are inspected by U.S. Department of Agriculture (USDA) and U.S. Customs Service officials. Such inspections can be time-consuming and costly to importers, said Wendy Yannis, administrator for the Association of Floral Importers, Miami.

"Once a shipment lands in Miami, it has to go through two clearances.' Yannis explained. "Customs has to inspect it for any contraband and the USDA inspects it for insects. Customs officials randomly select boxes from each pallet coming off the plane. They push long probes through the sides and tops of the boxes to check for contraband substances, particularly cocaine. If the probe comes out of a box clean, that's the end of the [customs] inspection. If a probe finds a substance, the shipment is seized, the plane is seized and it becomes quite complicated after that. The shipment will not be released until a thorough investigation is completed."

The USDA also randomly selects boxes for inspection, opening a box, taking flowers out of it and holding them up to the light to check for insects and evidence of disease, Yannis said. The clearing time for both inspections is about two D.C., ordered customs officials to inspect every box coming in and that can really cause some delays. The average clearing process through customs is about two hours per shipment, but when there's 100 percent inspection the time increases to four to six hours. Importers have been very flexible in these cases, adjusting their selling schedules to accommodate the delays."



Cut flowers are imported into the United States from all over the world by commercial air carriers and freight airlines. This American Airlines 747 LuxuryLiner can carry up to 30,000 pounds of freight. A system of electric lifts and rollers is capable of loading and unloading 14 steel igloo containers in approximately 40 minutes.

hours per plane, she said, but occasionally the government cracks down on imports and inspects 100 percent of every shipment entering the country. This can spell trouble for importers waiting to get perishable product off the planes and into coolers. Such a disciplinary measure was taken in January.

"In that instance, the crackdown happened to be nationwide, but it also happened to us about four years ago," Yannis related. "Officials in Washington,

Once the inspections are completed, two things can happen, Yannis said. The flowers can be picked up and transferred to the importer's semi-trailer and taken back to the importing firm's coolers. Or, import brokers will send their trucks over, pick up the flowers and take them back to the broker's coolers, if the importer doesn't have the proper cooling facilities. Once the product is in the cooler and it's not already earmarked for delivery to wholesalers, buyers will be found and the product will be shipped to wholesalers and retailers.

With about 40 Florida importing companies as members, Yannis said the Association of Floral Importers works closely with customs officials in coordinating shipment inspections. "We work very closely with customs officials on all of the inspections that are conducted year-round," she said. "We have established an excellent relationship with our federal legislators and we visit them in Washington, D.C., a couple of times a year to let them know how we're doing and to request their assistance if it's needed."

Keep on truckin'

The next link in the cut flower distribution chain is the shipper who transfers the product from importers and import brokers and distributes it nationally. One of the largest trucking operations catering to the floral industry is Armellini Express Lines, Inc. At Armellini's headquarters in Stuart. Fla., a 44-door terminal constantly buzzes with activity as employes work around-the-clock transporting approximately 100,000 boxes of flowers per week. 60,000 of which are imports, according to Senior Vice President William Armellini.

"We transport about 60 to 70 percent of the fresh cut flowers imported into the United States from Central and South America," Armellini said. "We also transport a similar percentage of the domestic flowers *Continued on 76* 1 ecause of the perishability of the

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grown in the state of Florida." Additionally, the company ships flowers from Michigan, Illinois, John F. Kennedy Airport in New York, an area stretching from New Jersey to North Carolina, and from various regional growers and wholesalers.

The shipments are transported in 18-wheel semitrailers controlled by teams of two drivers who deliver around-the-clock. Because many of the deliveries are made to wholesale after-



Wholesalers receive and process large quantities of cut flowers, breaking bulk and repackaging the flowers into bunches for delivery to retail florists.

hours, a lock-box system is used, Armelini said.

"We literally have a key to every store we deliver to since most of the deliveries are made when the shop isn't open," he explained. "We just go in the wholesale house, back the truck in, open the door, pat the [guard] dog on the head, turn the alarm off, deliver the flowers, sign our bill and leave."

The biggest problem shippers run into is trying to meet schedules, Armellini said. "Because of the perishability of the product, everything happens very rapidly, so we're trying to receive all the product, get it loaded and get it to its destination when the wholesaler wants it," he related. "In my case, that's my biggest problem: meeting the schedules and delivery times of wholesalers."

To facilitate meeting numerous deadlines and schedules, Armellini Express Lines operates three major warehouses in Florida as well as regional operations on Florida's west coast. The company also maintains terminals in Chicago, New York and New Jersey, employing a total of 700 people.

The wholesaler

Wholesalers comprise the last link in the cut flower distribution chain, acting as middlemen between retailers and growers. Wholesalers purchase product outright from growers and/ or shippers, and store product for retailers.

"We break bulk," explained Nate Cooper, general manager, Flower Transfer, Inc. (FTI), Sewell, N.J., an affiliate of Delaware Valley Wholesale Florist. "A wholesaler does nothing to the product but create an orderly market and break bulk. We buy by the box and generally sell by the bunch.

"We will get a product in our warehouse in boxes or, depending on the product, by the bunch, and generally "In most cases, the product stays in the box," he explained. "Some products need to come out of the box immediately. The older the product, the more likely it is you'll see it jarred up [put in



Employes at a grower in the Netherlands process gerberas for shipment to retailers around the world. Growers are the first link in a cut flower distribution chain including importers, shippers, wholesalers and retailers.

the retailer does not need a full box of each product. What they need is a couple bunches of chrysanthemums, a couple bunches of roses, and so on. We break bulk and give them what they need.''

Delaware Valley and FTI operate out of the largest one-house wholesale operation in the country, with a total of 105,000 square feet under one roof, Cooper said. Every day the firm receives flowers from around the world. When flower shipments arrive at the warehouse, they're logged in and, in most instances, put in a storage cooler, Cooper said. water]. Most product stays in the box it was transported in until it's picked by the picker and repacked in a similar box, this time in the quantity and mix the retailer purchased."

Within a 65 mile radius of the warehouse, shipping time is usually one to three hours and no more than 10, Cooper said. "We probably have the easiest time packing product," he said. "Because of our short delivery time, we don't have to protect the product as well as the grower or shipper does. They have to protect the product against the elements."

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"Our packers are taught right off how to pack: heavier, heartier product at the bottom; fragile product at the top. Paper is put in the boxes to keep the product tight and snug it up. So, there's an art to packing and part of the art is getting as much into the box as you can without harming the product. We pack more to protect the product from jiggling around during shipment.

"In the summer, the flowers are put into an unheated box, in the winter they're put in a heated box," Cooper continued. "There are some wholesalers that blow insulation inside their delivery vehicles to protect against extreme heat or cold. We just ordered 23 trucks equipped with temperature maintenance equipment so you can set the thermostat at 38 degrees F. and the truck will maintain that temperature in the cargo area. If it needs heat, it'll give heat; if it needs to be cooled, it'll give cool air.'

Perhaps the most important factor wholesalers must attend to is their product's source, especially around peak holiday times.

"Around holiday time, an ugly word comes into play — storage,'' Cooper pointed out. "The grower will probably back up product, the shipper will back up product and many times the wholesaler will end up having to store product near holidays. Does it harm the product? In some cases, no; in other cases, yes. You have to know who you're buying from, you've got to trust them as to how long



Cut flower distribution channels



ORIGINAL SOURCE: TEXT: THE U.S. FLORICULTURE INDUSTRY

the product has been stored or in transit and go from there."

End of the chain

The chain of distribution for cut flowers is complex. involving millions of workers and generating millions of dollars in annual revenue for those involved. Advances in transportation and packaging have helped increase the availability of product from both foreign and domestic growers. Importers, working cooperatively with U.S. Customs officials and USDA inspectors, help ensure product brought into the country is healthy and meets rigorous government standards. Wholesale florists are a vital link in the distribution chain, trying to keep both growers and retailers happy.

Each of these groups is

responsible for carrying out a number of specific tasks, which are made more difficult by the perishability of fresh cut flowers. To guarantee healthy product reaches consumers, consistent care and handling is an essential part of the distribution process and must be practiced by all involved, from grower to retailer. Consumer dissatisfaction with a floral product reflects on and affects the entire floral industry. □

The travels and travails of fresh cut flowers

Anyone who has ever suffered the slightest jet lag can relate to the need for rest and a cool drink. The same is true for cut flowers, many of which are in transit for days before reaching their final destinations. Because they're such a perishable product, consistent care and handling must be observed by those involved in the cut flower distribution chain: growers, wholesalers/shippers, retailers and consumers. (*See related story on page 73.*)

Whether foreign or domestic, a grower's function is to produce healthy product for the market. Because growers are the first link in the distribution chain, proper harvesting and postharvesting techniques must be adhered to strictly.

Cut flowers are har-Continued on 80