

// TRANSPORTATION //

FLOWERS AHOY! AN INDUSTRY LOOKS TO THE SEA

OCEAN SHIPPING OFFERS A VIABLE LOGISTIC OPTION WHEN PROPER PROTOCOLS ARE FOLLOWED.

A paradigm shift is underway in the world of flower shipments. A market dominated by refrigerated cargo jets for more than 40 years has begun to make room for the option of ocean freight. Technological advances and new handling protocols have made this development possible. But achieving success in this alternative realm will require new ways of thinking all along the supply chain.

The Need for Speed

Simply put, airfreight is fast. For perishable items, this is important, and for “visual highly perishables,” it is essential. Airfreight made four-hour flights between Bogotá and Miami ideal, and this is the way flowers have been getting to market since the 1980s.

A Changing Market

Market conditions changed, however, and importers began looking for alternatives. Specifically, shipping costs from South America have been on the rise. In recent years, some costs have risen by as much as 80 percent during holiday shipping periods!

Old World, New Idea

For importers, their search for cost-effective shipments took them across the pond to the EU, where sea freight has been viable since the early 2000s. In the early days, it was often only the hardiest carnations and mums – the “iron weeds” – that came to market by sea. Today, however, our knowledge of the cold chain, packaging, flower selection, and care and handling has advanced greatly. Now, if done precisely the right way, more delicate blooms such as roses and mixed bouquets can last to market, even with an extra nine to 12 days tacked onto the transit time. Let’s summarize some of the important factors of a safe Caribbean journey.

Sea Freight Essentials

In general, partner with suppliers who follow ocean-freight-specific protocols, including the following:

Flower type and careful variety selection

Flowers with longer vase lives but also low susceptibility to *Botrytis* and ethylene damage, as well as those that rehydrate effectively, are the best candidates for ocean shipping. This is one of the most important steps, as some flower types and varieties cannot be sea freighted while others are fine.

Growing conditions Clean water, proper fertilization, pest and disease control, ventilation, humidity regulation and lots of natural light are essential before shipping.

Harvesting Use established crops. Staging is critical (allow for that nine-to-12-day journey to market) with excellent control of cut stage and uniformity. Move flowers to the postharvest area as quickly and carefully as possible. Sanitize tools, buckets, and surfaces – always!

Conditioning Ensure that hydration treatments, along with anti-ethylene, anti-*Botrytis* and other conditioning treatments, are used, where necessary, depending on flower type. If flowers are wet after a treatment (dip or spray), let flowers dry before packing. Note that *Botrytis* and ethylene issues are heightened with sea freight shipping, so proper handling of flowers after harvest and during shipment is essential.

Packaging Shipping boxes must be precooled (1-2 C / 33.8-35.6 F) and designed specifically for ocean freight. In general, ocean shipping demands lighter density packing to assure airflow – crowded flowers weigh on each other and restrict ventilation.

Transport from farm to sea container Closed



systems are the rule, where temperatures remain at 1-2 C / 33.8-35.6 F without fluctuation. Unload quickly and carefully.

Loading sea containers Special pallets optimize airflow. Once again, focus on quick and careful loading in a closed 1 C / 33.8 F temperature-controlled system.

Sea container requirements Clean and sanitized. Climate controlled for temperature, relative humidity and proper air exchange.

Off-loading containers Again, quickly and carefully in a closed system.

Rehydration and processing Rehydrate with professional cut-flower hydration solution in a cooler at 1-2 C / 33.8-35.6 F.

Sea Shipment: When and Why

Now that we have identified sea shipment requirements, when is it appropriate? This has been the interesting and perhaps unintended lesson. For the most part, the hoped-for cost saving eluded us. Farm-to-port logistics refuse to be tamed while the technical requirements for sea freight carry their own unique costs.

The floral industry discovered, however, that sea freight provides a crucial logistical release valve when we need it most: during our busy holidays. It frees up cargo jets for extra shipments (at, perhaps, less-than-priority rates), the lines of trucks gridlocked at the airport are shorter and so on.

Sea freight also has its sustainability benefits. A shipment going to Dallas, for instance, no longer needs to be trucked 1,300 miles from the Miami warehouses. Instead, the freighter docks in Houston – 1,000 miles closer.

Ultimately, sea freight is more evolution than revolution for the cut flower industry; more complement than competitor. But, done properly, it can be another effective tool to move healthy product to market safely, effectively and efficiently! ■

powered by **FloraLife**[®]



See more of this story and others on our website:
<https://qrs.ly/n2a99xm>

