

20 Most Commonly Asked Questions

1. What is new at Florexpo this year?

Answer:

Aside from all of us being one year older this year, here are the most exciting new improvements for the 2007/2008 season. Each year we are listening to customers and investing in our production to bring you the best URC's on the market.

- Improved packaging with Ethylene absorbing packs in every box.
- New Breeder relationships with Suntory, Westoff, Darwin, Future Plants and Amerinova
- Over 200 new employees! We now have over 1,000 on staff
- New Customer Service Desk is now open
- Failsafe fulfillment with new order scanning system
- Bigger Cooling Area – 60% expansion
- Newly expanded regional trials to evaluate genetics in North American locations

2. Please explain your URC cleanliness protocol starting with stock selection testing through the entire process?

Answer:

Florexpo, S.A. renews all mother stock at least annually, if not more frequently. The mother stock, from which its unrooted cuttings are harvested, is built up each year using four methods. The method used is determined by the disease pressures of the variety, the intended market of the unrooted cutting product and the forms of stock available on the world market for a particular variety. The four types of starter plants include 1. elite stock from tissue culture – 1:1 ratio, 2. elite stock from tissue culture – build up at farm, 3. 100% test stock build up and 4. elite stock from breeders

A. Elite Stock from Tissue Culture – 1:1 Ratio

Starter plants will be produced from tissue culture annually. For every stock plant required, one tissue culture start will be used. To minimize the risk of virus contamination, no propagation of stock will occur at Florexpo. The plants grown out from the original tissue culture starts will be maintained in a greenhouse with the following features:

- Fully functional and complete screening
- An airtight double entry door system with a positive pressure fan system
- Footbaths at the entrance door which is filled daily with a clean disinfectant solution
- Coverall, glove and apron station in the chamber between entry doors
- Hand washing at entry door
- Raised metal benches
- Fully concrete floors
- Drip irrigation to all pots

B. Elite Stock from Tissue Culture – Build up at Farm

Starter plants will come from tissue culture annually. The immediate yield of these plants will be used to provide the total number of pots required for producing the production material. The plants grown out from the original tissue culture starts will be maintained in a greenhouse with the following features:

- Fully functional and complete screening
- An airtight double entry door system with a positive pressure system
- Footbaths at the entrance door which is filled at least three times daily with a clean disinfectant solution
- Coverall, glove and apron station in the chamber between entry doors
- Hand washing at entry door
- Raised metal benches
- Fully concrete floors
- Drip irrigation to all pots

For stock build up methods one and two, the following measures will be taken to ensure the continuation of virus free status. The measures will include but are not limited to:

- Steam sterilization of greenhouse structures and irrigation components prior to housing of new stock.
- Virus screening by AgDia using their ‘General Ornamental Screen’ prior to the harvest of cuttings. Samples will be taken using statistically appropriate random sampling techniques.
- Use of disposable coveralls, aprons and latex gloves by harvest crews. .
- Crews working in this type of stock house will start their day in these houses and do not return to them after working in other types of houses.
- Quarterly ‘General Ornamental Screen’ virus tests will be performed by AgDia.

If supply of elite stock becomes unavailable from breeders for renewal, Florexpo maintains a back up supply in its tissue culture lab in Costa Rica.

C. 100% Test Stock Build Up

A portion of the best stock pots from the previous season will be held over for mother stock for the coming year. These pots will be sheared back to the base. When the first flush of cuttings becomes mature, 100% of the mature cuttings will be harvested. The tip cuttings will be stuck in an elite propagation facility and the second cuttings will be sent to AgDia for a General Ornamental Screen. Stock will be built up for the coming year only from cuttings from which the second node cuttings were tested. Thus a 100% test of starter cuttings will have been performed.

D. Elite Stock URC’s from Breeders

Florexpo receives elite cuttings from breeders, performs virus testing for cleanliness, then builds motherstock from these cuttings

On Going Testing: All stock will be tested according to the 07/08 virus test program to ensure virus free status has been maintained. Results of these tests will be reported by AgDia to Florexpo and MPS. In house tests of stock will not be accepted for confirmation that virus free status has been maintained due to the current level of inaccuracy of these types of tests. The testing schedule for each item is indicated on the list attached.

Virus Tests to be Performed by AgDia for all samples submitted should be tested using their 'General Ornamental Screen' and include but not be limited to the following 15 tests:

- Arabis Mosaic Virus
- Impatiens Necrotic Spot Virus
- Tomato Mosaic Virus
- Alfalfa Mosaic Virus
- Cucumber Mosaic Virus
- Prunus Necrotic Ringspot Virus
- Tobacco Mosaic Virus – C
- Tobacco Streak Virus
- Tobacco Ringspot Virus
- Tomato Aspermy Virus
- Tomato Ringspot Virus
- Tomato Spotted Wild Virus
- Potyvirus Group
- Broad Bean Wilt Virus
- Chrysanthemum Virus

Harvest Practices: During harvest disease spread is limited by clean cutting techniques. After harvesting from any stock plant. If an autoclave or hot bead sterilizer is not used to clean the knives between stock plants, knives used to take the cuttings are soaked in a sanitizing solution prior to being used on another stock plant. Each cutter uses three knives which are rotated through the sterilizing solution. Crews begin their work day harvesting the most sensitive crops and work their way to the most disease resistant.

Coveralls should be changed between houses and be replaced (except as required for more sensitive crops) weekly.

Standard production greenhouses

Crops harvested from stock build up by methods three and four are produced in standard production greenhouses. These are defined as greenhouses having the following characteristics:

- Fully functional and complete variety specific screening
- An airtight double entry door system
- Footbaths at the entrance door which is filled daily with a clean disinfectant solution
- Raised metal benches
- Fully concrete floors
- Drip irrigation to all pots



**Every effort is taken to insure disease free greenhouses.
Foot baths are just a part of the overall clean environment program.**



A stringent protocol is followed to ensure virus free plant material

Plant Protection: Florexpo has three trained agronomists on staff who oversee a team of employees trained to continually monitor disease and fertility status of the stock plants. They have an aggressive spray or treatment program for any diseases or nutritional problems that are discovered. In addition McGregor Plant Sales contacts customers after shipments arrive to review the health status of the cuttings upon receipt.

Unclean crops: Florexpo and McGregor Plant Sales have made a conscious decision to include a very few crops in our program that are not virus free. If a variety is important to our customers, but is not known to be available from stock sources or in the industry as a clean product, we may choose to keep it in our program while we undergo a cleaning process in one of the laboratories which we work with. These crops are in greenhouses and isolated from other crops.

In order for us to make the decision to include an unclean variety, the virus present must not affect the production or garden performance of the crop. It also must be unlikely to be vectored to other crops during production. Examples of methods of transmission which we would consider to be of low risk to our customers would be transmission via seed or nematode. A list of unclean varieties is available upon request.

3. What are your NGI Production Advantages over other growers of Harmonies?

Answer:

Florexpo's production model of NGI is equal to the Danziger's model in Israel. In this model the finish time for a 4" is 11 weeks from URC or faster. Florexpo elects to follow a faster finish time model in order to give growers more flexibility to decide to finish faster and beat higher heating costs or to perform their own secondary Florel treatment upon arrival.

Modern, high quality greenhouse structures and an excellent grower management team insure uniformity, quality and dependability.



4. What is your year around climate? What is your elevation, latitude, average temperature, day length...

Answer:

Florexpo SA is located in the Central Valley of Costa Rica in the province of Cartago and the county of Paraiso, 45 minutes from the International Airport.

Elevation: 4,450 feet above sea level.

Day length: The day length is very constant year round (11:30 hours to 12:30 hours).

Temperature: 65° F - 75° F.

Water: All the water for irrigation comes from two deep wells of 170 mts in depth.

Cartago, Costa Rica

A climate that allows consistent quality and year round production.



Florexpo is located at 4,450' above sea level. Natural short day length and high light levels allow uniform product to be shipped year round. The production area is over 80 acres.



5. How many cuttings do you produce a year? What is your projection in 5 years? How many acres do you have under cover?

Answer:

Florexpo Produces 130 to 135 million cuttings per year.

Florexpo Growth Projection: 250 million cuttings.

The total size of the farm is 165 acres of land and 38 acres of URC production greenhouses with 77 miles of benches.

6. How was Florexpo started?

Answer:

Florexpo was established by Mr. Fernando Altmann B., as a 1.8 ha flower farm, mainly Gypsophila and Chrysanthemums, to be exported to the U.S. At the same time Mr. Altmann became the general manager of Bromelia Intl., a farm dedicated to the production and export of Bromeliads to the American market. It is during this period which Mr. Altmann had the opportunity to meet Mr. Tom McGregor of McGregor Plant Sales, Inc., the most important client of Bromelia Intl. In a short period of time the business grew significantly as did the relationship between Mr. Altman and Mr. McGregor.

By 1987 Florexpo had grown from its original 1.8 ha to 9 ha of cut flowers, mainly fillers like Asters, Solidago, Solidaster and Gypsophila. Mr. Altmann left at this time to tend to his own

business at Bromelia, but left the door open with Mr. McGregor to begin the export operation of unrooted cuttings when the time was right.

7. How did the un-rooted cutting program start?

Answer:

In 1996 Floreexpo was producing 40 million plants of cut flowers for Mr. Altmann's own use in the 28 ha of covered greenhouses. Mr. Altmann and Mr. McGregor started to talk again about starting the unrooted cuttings business and how they could become the best producer and broker in the market. One key factor was to have an excellent project manager at Floreexpo. Mr. Altmann contacted his friends at Danziger Flower Farm to interview several growers in Israel with the necessary potential and qualifications to make the project come true. Many candidates were screened, yet the first candidate he spoke with was Mr. Menachem Ganon and he decided this person was the right man for the project.

Mr. Ganon came to Costa Rica in 1996 and the story begins with the export of 300,000 un-rooted cuttings for the first season.

8. How long does it take from taking a cutting to delivery to the customer's door?

Answer:

Cuttings will be delivered to a customer's door within 48 hours, standard. 72 hours delivery times may occur in the rural areas of Canada.

9. How many employees do you have at Floreexpo?

Answer:

1000 employees. 60% are dedicated to un-rooted cuttings and 40% are dedicated to cut flowers.

10. What is the process for adding new varieties to the program?

Answer:

In general:

Continued evaluations and trials of new varieties are made for market demand, garden performance, regional needs and national programs. Thereafter, we..

Find a good source.

Import plants.

Test for cleanliness.

Bloom out to prove the variety shipped is true to form.

Trial growing.

Trial shipping.

Commercialize variety in the program.



McGregor sales staff at the farm.

New varieties are trailed and tested before they are added to the Florexpo list.

In Detail: There are two options to get an item “in the program” for a customer:

- An item can be requested and evaluated for entry into the program during the normal annual review time, which is August-September.
 - The item would be part of the next year’s program announced in February.
 - Total quantity needs for this item are reviewed on a case by case basis
- A truly “custom” item can be requested at any time if the total number of desired cuttings warrants it.
 - There are some key factors that can expedite availability of custom items.

- The customer is able to supply clean stock to Florexpo. After verification the stock is truly clean, ramp up time would depend on quantity of stock shipped, ship dates and quantity requested to ship back. Based on these factors, it could take approximately 3-6/9 months to build stock and begin shipping and availability could be less than requested.
- The customer is able to supply stock that is found to not be clean. Florexpo judges whether they can clean up or if MPS needs to get clean stock. This would add anywhere between 2-3 months.
- MPS finds stock. This can take up to 3 months to do depending on availability. This translates to 6 to 9 months from request to actual supply.

11. What is your policy on credits? mixed? virus? arrived in bad condition?

Answer:

Florexpo treats all credits with the utmost in urgency.

Any credit issues, whether obvious or suspect, must be submitted within 72 hours of receipt of the cuttings.

Florexpo should be provided with enough information so they can ascertain the source of the problem in order to improve the quality of future shipments or to determine if there is an issue not related to Florexpo.

The information that should be collected at the time of the credit request is:

Contact name

Company name

Order number, invoice number or ship week

Plant variety involved

Quantity affected

Detailed report of damage

Vendors plan for salvaging the damaged product

Remedy preferred by the customer

Photographs, if possible and especially if it is a mixed variety.

If it is a question of virus, samples need to be taken straight from the box and sent to AgDia for testing.

A credit request form is submitted to Florexpo by a McGregor Plant Sales employee. It is the employee's responsibility to collect the information above and continue to follow up with Florexpo on the submitted credit until written confirmation of approval is received.

Florexpo has committed to resolving all credit issues by the end of the week following receipt. If the situation is unclear or requires negotiation, Florexpo may request a conference call be set up with the customer and Menachem in order to have the credit resolved by the deadline.

Written notice of a claim due to damage, delay, shortage (including perishable and spoilage damage) or such claims due to non-delivered or misrouted packages must be received within 15 days after delivery of a FedEx shipment. A McGregor Plant Sales employee will submit the claim on the customer's behalf to Florexpco. Florexpco is responsible for filing all freight claims with FedEx Costa Rica. The processing of the claim will take approximately 4-6 weeks after receipt of documentation. All credits filed with FedEx will remain open until the claims are settled.

12. How does Selecta figure into Florexpco/MPS?

Answer:

Florexpco is a contract grower for Selecta.

13. To what extent are you using Florel:

Answer:

Florexpco is very careful when choosing the varieties that will be treated with Florel as it can cause late blooming in some varieties. For example: with Fuchsias treatment with Florel can result in better branching, but can delay blooming sometimes up to two months.

Florexpco uses Florel only where it can improve cuttings quality and not affect bloom time. Currently, Florel is limited to these varieties: NGI, Coleus, Lantana and Vinca.

14. What is your relationship with FedEx?

Answer:

Florexpco is in the top ten accounts for FedEx's in Latin America.

There is a FedEx terminal on site at Florexpco.

There is a weekly logistics meeting between Florexpco and FedEx.

FedEx is Florexpco's customs broker in Miami and Canada. They provide clearance for all customers.

In Miami FedEx re-ices the boxes from March to October.

15. What is your fill rate?

Answer:

97.5% on confirmed orders.

16. What is your credit experience on quality returns?

Answer:

.87% (less than 1%) for the 06/07 season.

17. What are your expansion plans for the 06/07 season?

Answer:

12 to 15%

18. What is your ordering process?

McGregor Plant Sales maintains 4 easy methods of placing orders. Phone, fax, email and web. The web provides real time inventory, order tracking, editing, reporting and order downloading. Cultural filters for quick product searches, substitutions and other factors are fast and easy. Reps and CSRs are available by phone or for visits to your location for assistance with product selection.

19. What is your harvesting and quality control process?

Answer:

Harvesting preparation: When the harvesting list is completed, the company knows how many bags and labels need to be created per variety. Usually this process starts 4 days prior to harvest. Before harvesting the person in charge of each group should re-explain the size and quality of the unrooted cutting.

Before entering the greenhouse every worker has to disinfect their hands and shoes, put on gloves, take the cup with the disinfectant solution and get the explanation and sample in hand.

Per every group (10-15 people), there are also people controlling the quality of the cuttings (size, color and quantity). These people are selected by the production manager to be sure they know exactly what the quality of the cutting should be. For this process the company uses tables inside the greenhouse. These tables have one hundred squares so the person can put every cutting from the back, which has the number of the person who harvested it, and know if the quality and quantity is good. Besides the control inside the greenhouse, Florexp has also selected people in the packing area, close to the cold room, who perform the same quality control process. If they find a problem, the person in charge will speak with the person whose number is on the bag and ask them to recheck every bag to be sure the product is OK.



Plants are placed on a grading board to insure consistency. The over pack is an additional 4%.

For Failsafe order fulfillment, bags are scanned by bar code system two times. First as they are accepted into the order fulfillment warehouse and a second time as they are allocated to customer orders.

The bar code order fulfillment system will not allow an order to be closed until all requested items are scanned in and furthermore it will not allow incorrect varieties to be added to boxes.



Plants are collected in the greenhouses and placed in the cooler for grading.

The same person that is controlling the quantities in the cold room is also in charge of the distribution of the varieties per customer inside the cold room.

Packing process:

Prepare Boxes

Ice Packs (8 per box)

Packing

Florexpo prepares a packing list of each customer that includes the list of the varieties and quantity of each. All packing follows this list and is supervised by one person. All packing lists and other documents are always packed in box #1.

Boxes are labeled with the customer address and the varieties and quantities that are packaged in the box.

20. What is your shipping process?

Answer:

From Harvesting through exporting, through clearing the port to the Miami FedEx hub and into Memphis Tennessee, Florexpo maintains a temperature 45° F - 50° F. This includes transportation by truck and plane and also in any holding locations. When the cuttings are being tested by USDA, only a few boxes at a time are removed from the cooler for inspection. The boxes arrive in Memphis TN at 9pm and are delivered to the customer by 10am the next day. Customer located in a rural area receive product by 3pm. This is the only period when the boxes are not under direct temperature control and the majority of this time is at night.



Insulated cartons are setup for new ice packs during the higher temperature seasons.

Transport to airport: As a door to door service, FedEx is responsible for the transport of the shipment, using Rex Intl. for the inland freight.

Customs & Clearance: All the procedures for export customs and imports are done by McGregor Plant Sales so customers do not need to have their own import permits.

Tracking: The shipment follow up begins one day after its departure. FedEx sends a report 3 times a day to Florexpo and a copy is sent to McGregor Plant Sales, until all boxes are delivered to the respective customers.

