



THE BIRTH OF A ROSE



MARKET ANALYSIS- FARM - TO VASE

- Importance of the rose category to your business
- Understanding where it all starts before the soil
- Market analysis variety selection
- Breeding Hybrid Tea Roses
- Selection of varieties = market needs
- Testing of new varieties world-wide
- Introduction of new varieties to market
- Propagation/commercial production
- The Business of Marketing/ sales of new varieties at Equiflor and what it means for your business



IMPORTANCE OF ROSE CATEGORY

Top Ranking Floral Products

- 1. Roses
- 2. Chrysanthemums
- 3. Carnations
- 4. Alstroemeria
- 5. Tulips
- 6. Lilies
- 7. Minicarnations
- 8. Gerberas
- 9. Gladiolas



BREEDING

The Art Of Successfully Combining The Positive Characteristics Of Two Varieties Or "Parents" For The Creation Of A New Variety "Offspring"

Breeding Consists Of 4 Steps

- Crossings (Hybrids)
- Selection
- Testing
- Introduction



CROSSING (HYBRID'S)

- The objective is to identify, combine and multiply the positive characteristics of both parents
- The process starts with approximately 200,000 crossings of the selected parents

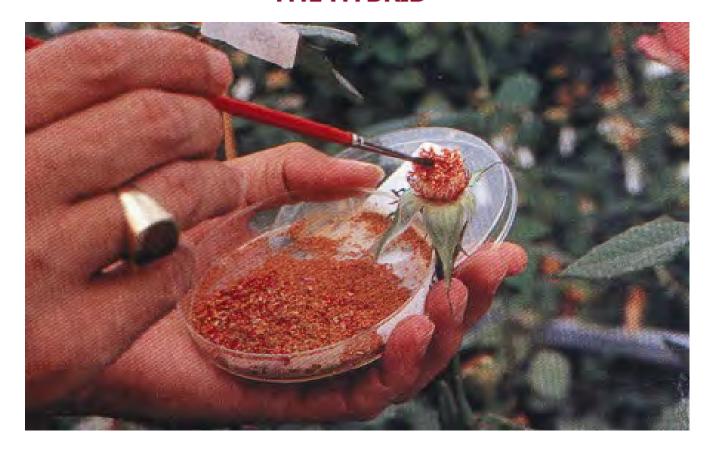


THE PROCESS START BY THE GATHERING OF THE STAMENS/POLLEN FROM THE CHOSEN "MALE PARENT" ROSE



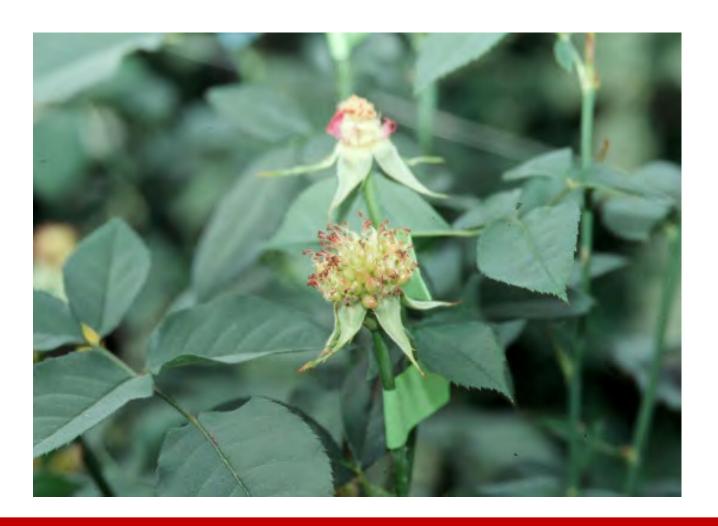


POLLEN IS BEING APPLIED MANUALLY ON THE SELECTED MOTHER, EACH STEM IS TAGGED WITH AN IDENTIFICATION OF THE HYBRID





AFTER POLLINATION THE MOTHER PLANT STARTS PRODUCING SEEDS





DURING THE PRODUCTION OF SEEDS, THE ROSE HIPS START TO GROW





AFTER MATURING, THE ROSE HIPS ARE COLLECTED AND DRIED TO AVOID ROTTING





REMOVAL OF SEEDS FROM ROSE HIPS, THE NUMBER OF SEEDS WILL VARY, ALL SEEDS START THE GERMINATION PROCESS





IT TAKES AN AVERAGE OF 12 WEEKS, AFTER GERMINATION, BEFORE THE FIRST SHOW OF FLOWERS





FLOWERS READY FOR THE FIRST SELECTION





SELECTION PROCESS

About 90% Of All Seedlings Will Be Discarded Immediately
During The First Selection

- Additional Selections Will Evaluate:
- Bloom Size & Shape
- Petal Count
- Foliage Quality
- Stem Length
- Production Cycle
- Vase Life
- Disease Resistance



- After The Selection Process Has Been Completed,
 Each Variety Is Assigned An ID Code
- Codes Are Tested In Propagators Greenhouses In The Netherlands, Ecuador, Colombia And Kenya



INTRODUCTION

- The New Varieties Are Introduced At Flower Shows And Open Houses
- Propagators Will Start Production Of Plants
- Out Of The 200,000 Crossings, It Takes 6 Years To Introduce Only A Handful Of New Varieties



PROPAGATION

The Activity Of Multiplying And Increasing The Availability Of Plant Material Of A Desired Variety For Planting And Production

- Propagators Represent Multiple Breeders, Displaying Hundreds Of Varieties In Their Showrooms
- Propagators Are Also Responsible For Testing New
 Varieties Prior To Their Introduction Into The Market



PROPOGATORS SHOW ROOM





PREPARING FOR PRODUCTION

Simultaneous To The Propagation Of Plants, Our Farms Must Coordinate A Number Of Additional Activities Required For The Preparation Of A Successful Planting

- Soil Preparation
- Greenhouse Design
- Grafting
- Production
- Post Harvest









GREENHOUSE DESIGN FOR PROPER TEMPERATURE MANAGEMENT





PREPARING BEDS FOR PLANTING & IRRIGATION SYSTEM





SELECTING THE ROOT STOCK (NATAL BRIAR)





ROOT STOCK IN PLANTING SOIL





ROOT STOCK READY FOR GRAFTING





GRAFTING PROCESS BY PREPARING THE HOST





HOST READY FOR TRANSFER





SCION/BUDEYE IS SELECTED & REMOVED FOR TRANSFER





SCION/BUDEYE IS TRANSFERRED TO HOST





HOST AND SCION/BUDEYE ARE WRAPPED WITH PLASTIC FOR PROTECTION





40 DAYS AFTER A SUCCESSFUL GRAFTING, THE PLANTS ARE REFORMED FOR PRODUCTION





90 DAYS AFTER GRAFTING, FLOWERS BEGIN TO SHOW





AFTER PLANTS ARE FORMED, FLOWERS ARE ALLOWED TO COMPLETE A BLOOMING CYCLE STRENGTHENING THE PLANTS IN PREPARATION FOR PRODUCTION





BUD STAGE AT 55 DAYS AFTER PRUNING





BUD STAGE AT 65 DAYS AFTER PRUNING





READY TO HARVEST AT APPROXIMATELY 72 DAYS AFTER PRUNING





HARVESTING





TRANSPORTING THE FLOWERS TO THE POST HARVEST ROOM FOR COOLING & COLD WATER HYDRATION





COOLING & COLD WATER HYDRATION – "CARTONPLAST"





COOLING & COLD WATER HYDRATION – "MESH TYPE"





GRADING SPECIFICATIONS





GRADING ROOM (FIRST GENERATION GRADING TABLE)



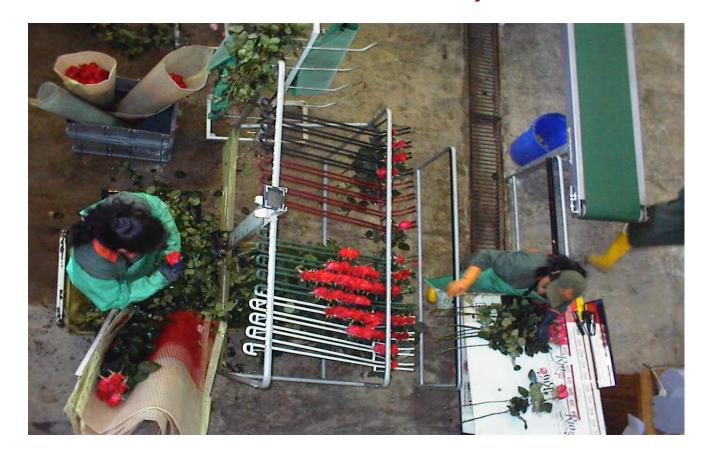


TRADITIONAL GRADING PROCESS, SELECTING STEM LENGTH & BLOOM SIZE (SECOND GENERATION TABLE)





IMPROVED RIO ROSE GRADING PROCESS (THIRD GENERATION)





3D GRADING SELECTION (BLOOM SIZE, CUT STAGE & STEM LENGTH)



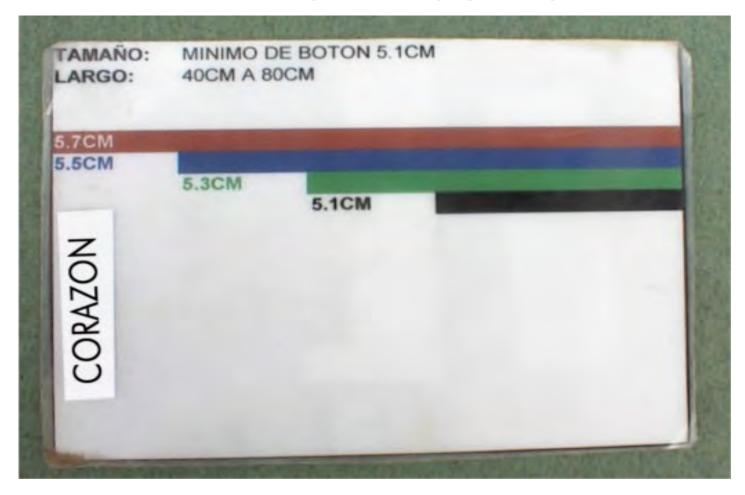


GRADING BLOOM SIZE, CUT STAGE & STEM LENGTH





VARIETY GRADING CARDS





MAKING THE GRADE





PREPARING THE BUNCH ENSURING STEM LENGTH





PREPARING THE BUNCH ENSURING CONSISTENCY



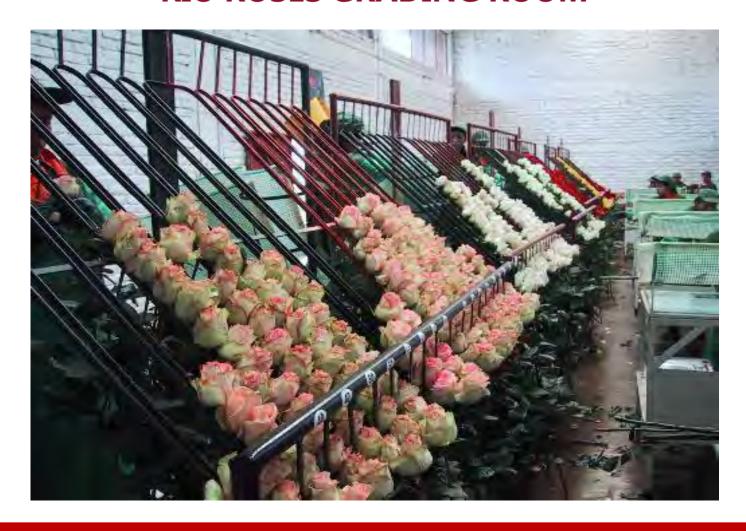


RIO ROSES GRADING ROOM





RIO ROSES GRADING ROOM



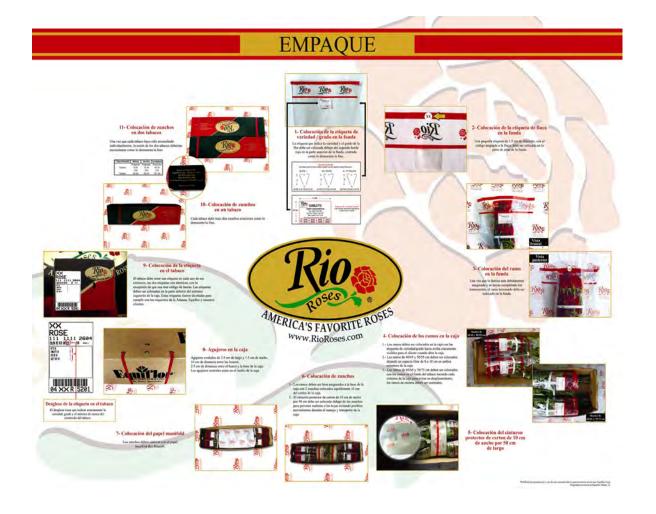


COOLING & COLD WATER HYDRATION AFTER GRADING





PACKING SPECIFICATIONS





PACKING THE FLOWERS IN REFRIGERATION FOR SHIPPING





OUR MOST IMPORTANT RESOURCE "OUR PEOPLE"





ONCE DELIVERED TO THE AIRPORT IN REFRIGERATED TRUCKS OUR FLOWERS ARE PALLETIZED FOR SHIPPING TO THE U.S.





MARKETING & SALES

- Introduction of new variety to market
- Wholesale and retail florist marketing
- Social media channel
- Traditional marketing and sales methods
- Value of the variety to market/packaging
- Understanding retail florists needs
- Consumer expectations



