

THE ROAD TO SUSTAINABLE ROSES

> Down to the water and soil that nurtures the roots, up to the hands that care for the flower buds, many roses grown in South America for Valentine's Day encompass multiple pillars of sustainability.

Whether it's environmental initiatives to conserve water and energy and reduce the use of pesticides with biological agents, or social sustainability programs that care for farm workers, here is how two South American farms prepare, grow and harvest roses for Valentine's Day with sustainability in mind.

Preparing for a Flush

Rose plants can live for decades — in fact, at Ayura Eclipse Pride Flowers farm in Colombia, which produces 60- and 70-cm roses and carnations on 30 hectares, some rose plants are more than 30 years old, says owner José Antonio Restrepo. Every year he replants about 10 percent of his farm to make room for new varieties.

Before he can plant, he must prepare the soil by plowing and adding natural materials to enrich it, including

rice husks and compost made from discarded leaves and buds. If planting rootstock with a new variety grafted on, the farm must have the plants in place up to 8 months in advance of Valentine's Day.

Around November, many farms "pinch" the plants, a practice that involves pruning all the stems of the plants in order to generate a large flush in time for Valentine's Day. It takes a rose about 90 days from the pinch to

produce a bud. Those 90 days are critical and stressful as the cycle can be affected by extreme weather changes that can speed up or delay production.

Sustainability for Quality

Hacienda Santa Fe, a small farm in Ecuador with 12 hectares of production near the capital of Quito, concentrates production on five varieties of roses and focuses on biological controls. The farm attacks malicious spider mites with beneficial spider mites, a strategy the company has used for almost 20 years to help reduce the use of pesticides by 80 percent, according to the farm. Hacienda Santa Fe has also implemented a prebiotics biological program. This natural fertilizer, made on the farm, helps supplement the micro and macro flora of the soil to suppress pests and diseases in the plants without the use of pesticides and chemicals. The goal is twofold: Not only does the fertilizer keep pests and disease at bay but it also helps the plant develop stronger immunity to those afflictions. The farm raises its total rose production from 20,000 to 400,000 stems per week, with its biggest and only peak for Valentine's Day.

Conserving Water and Energy

Ayura Eclipse Pride Flowers captures rainwater from the greenhouses and stores it in reservoirs until it is used to

SUSTAINABILITY STANDARDS

Many of the farms that provide roses to the U.S. market for Valentine's Day are certified through sustainability programs in two of South America's biggest flower-producing countries. In Ecuador, Expoflores (the Ecuadorean Association of Flower Growers and Exporters) has certified more than 90 growers through its FlorEcuador program, which ensures not just environmental benefits, but also business management benefits. In Colombia, Asocolflores (the Colombian Association of Flower Exporters) has certified up to 107 farms through the Florverde Sustainable Flowers program, which holds growers to the highest sustainability standards worldwide as benchmarked by GlobalG.A.P. and the Floriculture Sustainability Initiative.



ZERO WASTE A farm worker at Hacienda Santa Fe in Ecuador loads plant material into a truck to be composted.

water the rose plants. When the flowers are ready to be harvested, they are stored in postharvest coolers equipped with solar panels. Solar powers about 60 percent of the farm's energy, Restrepo says.

Nurturing the People

Handling such a large volume of flowers can put a lot of demand on the workers. At Restrepo's farm, workers are given the flexibility to choose whether they want to work overtime and earn more or work regular hours. In the weeks leading up to major floral holidays, the farm feeds the employees breakfast, lunch and dinner and encourages coffee breaks. It also provides a shuttle for workers who stay so they don't have to worry about traveling in the dark. Employees are encouraged to take breaks for activities, from Zumba to massages.

"It's been a very important program for us," Restrepo says. "I don't sell my flower at a higher price because I'm part of the Florverde program, but it's very, very helpful for the organization in terms of having all the processes." 🌿



ALL IN A DAY'S WORK In the weeks leading up to floral holidays, farm workers at Ayura Eclipse Pride Flowers in Colombia are treated to three meals a day, transportation home and frequent activity breaks.



CONSERVING ENERGY Two of the postharvest buildings at Ayura Eclipse Pride Flowers in Colombia are equipped with solar panels, which provide about 60 percent of the farm's energy.

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