

Effects of FloraLife® Express Clear 100 on freshly harvested roses

July 2021

Jan Boers R&D Manager Europe & Africa - FloraLife

To restore the water balance of flowers that are shipped and stored dry, one needs to properly hydrate the flowers upon arrival, a common practice. Once rehydrated with FloraLife® Express Clear 100, flowers look fresh and turgid again. This product also has a positive effect on freshly harvested flowers that are not dehydrated.

In order to slow the flower development process down, as well as ensure maximized vase life at the consumer's home, fresh cut flowers are usually moved to coolers quickly after harvest. Low temperatures slow down the metabolism in the cut flower. At this stage, it is not yet necessary to provide nutrients to cut flowers. At a dosage of 2 ml/L, FloraLife® Express Clear 100 is a cost effective product to apply on freshly harvested flowers that are stored in a cooler. It also helps the uptake of a storage and transport product like FloraLife® Express Clear ULTRA 200 needed once flowers are exposed to higher temperatures usually found in stores.

Independent research done by Royal FloraHolland shows that the use of FloraLife® Express Clear 100 on freshly harvested roses and on dry shipped roses improves vase life.

Methods:

The laboratory of flower auction Royal FloraHolland used freshly harvested roses from Dutch growers and dry shipped roses imported from Kenya in their trials. They applied the so called 'VBN standard sales simulation for cut flowers' to these roses:

1-day grower simulation:

Bunched roses, packed in sleeves, stems recut, kept in buckets in a cooler set at 2°C on water or a use solution of FloraLife® Express Clear 100.

4 days wholesale simulation:

Bunched roses, packed in sleeves, kept in the same buckets in a cooler set at 8°C on water or a use solution of FloraLife® Express Clear 100 (same solutions as used during the grower simulation).

2 days store simulation:

Sleeves removed; all bunches moved to buckets with just water. The buckets were kept at 20°C, with 12 hours light (1.000 lux), and 12 hours dark each day.

Consumer simulation:

After the store simulation, stems were recut and all foliage that would be under the solution level was removed. Then stems were placed in vases filled with water. The vases were kept at 20°C with 12 hours light (approximately 1.000 lux), and 12 hours dark each day. The roses were frequently evaluated and recorded when vase life had finished.





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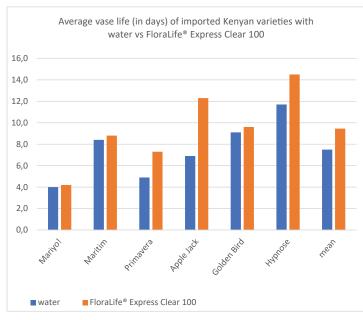
Results:

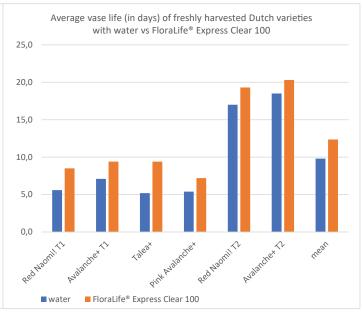
Table 1. Average vase life (in days) for dry shipped Kenyan roses.

Treatment	Mariyo!	Maritim	Primavera	Apple Jack	Golden Bird	Hypnose	Average of all varieties
Water	4,0	8,4	4,9	6,9	9,1	11,7	7,5
FloraLife® Express Clear 100	4,2	8,8	7,3	12,3	9,6	14,5	9,5

Table 2. Average vase life (in days) for freshly harvested Dutch roses.

Treatment	Red Naomi! Test 1	Avalanche+ Test 1	Talea+	Pink Avalanche+	Red Naomi! Test 2	Avalanche+ Test 2	Average of all varieties
Water	5,6	7,1	5,2	5,4	17,0	18,5	9,8
FloraLife® Express Clear 100	8,5	9,4	9,4	7,2	19,3	20,3	12,4





Conclusions:

FloraLife® Express Clear 100 has positive effects on dry shipped roses. It also prolongs the vase life of freshly harvested roses.

