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Lisianthus is a crop that needs continuous flower food supply postharvest for optimum vase life, flowering percentage, and petal color intensity results. Lisianthus is usually harvested when a stem has a couple of open flowers. These flowers have an intense color. The buds that open later usually have a paler color, up to the stage that the color has basically vanished.



In this image, you can see that the color of the petals of a Lisianthus as well as its size are less vibrant and smaller for blooms that open later. Flower 1 in the image opened first in the field. The other 4 flowers opened post-harvest and with time, the blooms were opening lighter in color and smaller in size.

As the market prefers an intense color, FloraLife developed a specific flower food product, FloraLife® Lisianthus Flower Food, which improves the petal color intensity, but also vase life, flowering percentage (the percentages of buds that developed into open flowers) and flower size.

FloraLife® Lisianthus Flower Food is developed for the final phase, for the consumer, to ensure best results and experience possible.

Several studies with multiple varieties have shown that the use of FloraLife® Lisianthus Flower Food improves petal color intensity, vase life, flowering percentage, and flower size.

METHODS:

FloraLife's laboratory in The Netherlands used freshly harvested Lisianthus stems from Dutch growers. Stems were recut and all foliage that would be under the solution level was removed. The different use solutions prepared were:

1. Water
2. FloraLife® Express Universal 300 liquid
3. FloraLife® Lisianthus Flower Food

Vases were filled with above mentioned use solutions. Then stems were placed in these vases, which were kept at 20°C (68°F) with 12 hours light (approximately 1.000 lux), and 12 hours darkness each day, to simulate the consumer phase. The stems were evaluated for petal color intensity, flower size, vase life and flowering percentage at end of vase life.



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RESULTS:

Table 1. Vase life (in days) for each treatment.

| Treatment | Rosita Lavender | Piccolo Violet | Piccolo White | Rosita Blue | Rosita Green | Rosita Pink | Rosita White | Average |
|-----------------------------------|-----------------|----------------|---------------|-------------|--------------|-------------|--------------|---------|
| Water | 4,6 | 10,6 | 8,0 | 10,2 | 10,1 | 11,1 | 8,7 | 9,0 |
| FloraLife® Express Universal 300 | 14,2 | 18,9 | 16,5 | 21,9 | 20,7 | 22,1 | 21,9 | 19,5 |
| FloraLife® Lisianthus Flower Food | 9,9 | 21,8 | 23,4 | 25,8 | 23,8 | 24,9 | 23,1 | 21,8 |

Table 2. Flowering percentage for each treatment.

| Treatment | Rosita Lavender | Piccolo Violet | Piccolo White | Rosita Blue | Rosita Green | Rosita Pink | Rosita White | Average |
|-----------------------------------|-----------------|----------------|---------------|-------------|--------------|-------------|--------------|---------|
| Water | 30,4% | 76% | 63% | 57% | 55% | 65% | 51% | 56,8% |
| FloraLife® Express Universal 300 | 81,6% | 90% | 88% | 83% | 83% | 92% | 85% | 86,0% |
| FloraLife® Lisianthus Flower Food | 62,6% | 98% | 99% | 98% | 99% | 99% | 92% | 92,5% |

Pictures showing differences in petal color intensity and flower size:

Image 1: Rosita Pink - Water - Day 14





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Image 2: Rosita Pink - FloraLife® Express Universal 300 Liquid - Day 14



Image 1: Rosita Pink - FloraLife® Lisianthus Flower Food - Day 14



CONCLUSIONS:

FloraLife® Lisianthus Flower Food has a definite positive effect on petal color intensity, flower size, vase life and flowering percentage.