

X-tend™

adds value

GROWTH AND DEVELOPMENT OF FLOWERS

Micronutrients were identified that help maintain the crucial biological functions of cut flowers in their artificial environments. These elements play a role in, for example, functions such as water uptake and transpiration (wilting), the regulation of growth and development (senescence and opening of the flowers). Because these factors have to be managed very specifically we have developed specific products for different flower types and for the different stages of the cut flower value chain.



Figure 1. Improved quality and life span of roses and cut flowers treated with X-tend.

IN CONCLUSION



X-tend will increase the quality and lifespan of your cut flower displays by improving ...

- (i) The flower's ability to take up and utilise water.
- (ii) The availability of the necessary nutritional, growth and developmental requirements.
- (iii) The quality of the water.

BACKGROUND

X-tend rose food and **X-tend cut flower food** are exciting new products specifically developed to enhance the quality and lifespan of cut flower displays. Its formulation is based on extensive research conducted by experts in the field of plant physiology and .

When cut flowers are harvested it has obvious implications for the growth, development and survival of the detached flower. The loss of the root system does not only influence water and nutrient uptake but also the balance in growth regulators that govern the biological functions of the flower. In addition, the flowers are no longer able to sustain themselves in their new artificial environment and are also more exposed to microbial infections. If these factors are managed proactively it can increase the quality and lifespan of the flowers. Two aspects of a fresh flower display that influence its lifespan are...

- *The growth and development of the flowers.*
- *The quality and nutritional value of the water.*

QUALITY AND NUTRITIONAL VALUE OF THE WATER

Except for the unpleasant nature of contaminated, putrid water it also affects the lifespan of cut flowers negatively. Microorganisms in the environment and on the stems of the flowers proliferate in the water and block the channels through which water is absorbed. In addition, these organisms can produce compounds that are harmful to the flowers. Preventing microbial growth in the water will therefore not only enhance the esthetic value of the display but also increase the lifespan of the bunch.

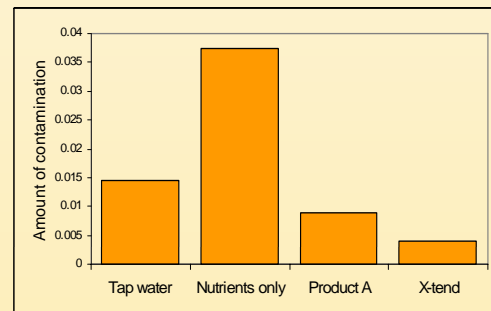


Figure 2. Reduced microbial growth in X-tend treated water.

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