

Title Effect of time of harvest, water quality and cut flower food on vase life of *Cyclamen* cut flowers

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Abstract

The effect of the time of harvest during the flowering period, vase water quality and different types of cut flower food on the longevity of *Cyclamen* cut flowers was analysed in several experiments. While *Cyclamen persicum* is more popular as a potted plant, the cultivar Lucky Mix investigated in this study was bred for its use as a cut flower. The later the flowers were harvested during the flowering season (autumn/winter 2007/2008), the shorter was their display life. This was due to the decreasing quality of the flowers which had shorter stems and were weaker and more inhomogeneous later in the flowering season. Water quality was varied by using tap water of high hardness, deionized water and a mixture of both in equal portions. Water quality showed an effect on postharvest life of *Cyclamen* cut flowers only after one week with significantly lower numbers of flowers showing withering in tap water as compared to deionized water. No significant effect of water quality on vase life could be determined after 14 and 21 days. If the flowers were harvested before anthesis they expressed a good vase life, but the petals did not open fully leading to an unacceptable appearance. Various cut flower foods and other additives were tested in the vase water of *Cyclamen* cut flowers, all resulting in a reduced vase life as compared to the control in water. Moreover, flower food containing sugar as well as cellulose cards containing aluminium sulphate caused a significant decrease in vase life of *Cyclamen* cut flowers.