

Title Thidiazuron, a non-metabolized cytokinin, shows promise in extending the life of potted plants
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Abstract

Application of low concentrations of thidiazuron (N-phenyl-N'-1,2,3-thiadiazol-5-yl urea, TDZ) has been shown to be a very effective means of delaying leaf yellowing in cut flowers such as alstroemeria, stock, lilies and tulips. We examined the possible use of this compound for delaying leaf yellowing in a range of potted plants, including geranium, freesia, *Ornithogalum*, and *Euphorbia fulgens*. Spray treatments with 2 to 10 μ M TDZ at the end of the production cycle had significant, sometimes spectacular effects on the postharvest performance of most species studied. In addition to a considerable delay in leaf yellowing and/or abscission in most species tested, TDZ application improved display performance in a number of species. In geranium, for example, the individual florets on TDZ-treated plants had a significantly longer life than those on control plants. In *E. fulgens*, flowers lasted longer, and more flowers opened on the TDZ-treated plants. Our results indicate significant potential for TDZ as a tool to improve the postharvest life of potted flowering and foliage plants.