

Abstract:

Cytokinins are able to inhibit leaf yellowing in some cut flowers and potted plants. Thidiazuron is a substituted of phenyl-urea that induce cytokinin-like responses. The first applications of TDZ (TDZ, N-phenyl-N'-1,2,3-thiadiazol-5-ylurea) in cut alstroemeria and lilies have shown to delay leaf senescence. In our experiments we applied thidiazuron aiming to delay leaf yellowing in cut tulips and chrysanthemum. Cut tulips and chrysanthemum flowers obtained from local growers were pulse treated for 24 hours with 10, 50 or 100 mM thidiazuron. In cut tulip flowers cv. Attila and cv. White dream the leaf yellowing, stem elongation, and chlorophyll content were measured during vase life. In cut chrysanthemum the effect of treatments was evaluated by chlorophyll determination and leaf yellowing appearance.

Results have shown that TDZ was able to inhibit significantly leaf yellowing in cut tulips and cut chrysanthemum cv. Regan bianco. Cut chrysanthemum cv. Regan giallo did not show leaf yellowing and TDZ did not affect the quality of cut flower but inhibited the rooting and promoted the lateral shoot elongation.