

## Keeping Quality of Cut Flowers

Z. J. Kulwiec reported on the effects of pre-harvest nutritional treatments on vase life of carnations. Flowers of the cultivars William Sim and Pink Sim were taken every month over a period of one year from a nutritional trial and were subjected to vase life tests. The 12 treatments were 3 levels of nitrogen (100, 180, and 260 ppm in solution at all waterings); 2 levels of boron (0 and 0.5 ppm, also in solution); and 2 levels of calcium carbonate added before planting at 0 and 10 lb per cubic yard. Vase life was measured in a keeping room at 68F. Only the calcium treatments gave significant differences when results were analyzed statistically. Increased calcium reduced the vase life by 0.4 to 0.7 day. In the second year of growth boron also showed significant effects. The application of 0.5 ppm boron in solution at all waterings increased the vase life of flowers by

0.4 to 0.6 day. This result showed that in the second year of growth (or whenever a deficiency of boron develops) the vase life of carnations deteriorated and can be modified by adding boron in the feeding program. Nitrogen did not show any effect on vase life at any time during the experiment.