

### Abstract:

The intensive use of chemical growth retardants in ornamental plant production is of environmental concern. There is a need for developing efficient alternatives. We used drought stress as a single factor or combined it with reduced phosphorus (P) availability, reduced nitrogen (N) availability, or reduced application of chemical growth regulators. In *Hibiscus rosa-sinensis* we showed that reduced P and N availability during production improved post-production quality. It significantly reduced the number of senescent flower buds compared with the controls (using growth regulators). This may be important, since most cultivated flowering plants have inadequate keeping quality if their growth is regulated by chemicals.