CONTAINER STYLE AND HYDROPHILIC GEL INFLUENCE ON BEDDING PLANT PRODUCTION AND POSTHARVEST QUALITY

by

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Introduction

Commercial growers and grounds maintenance managers are concerned with production of quantities of bedding plants while optimizing use of greenhouse bench space. Therefore, various sized containers, with a trend towards small individual cells, are being utilized. As well as quantity, quality is an important concern to growers. Bedding plants grown in small containers are susceptible to water stress which may greatly impair the quality of the marketable product and increase management costs. The effect of smaller container size on quality and growth parameters needs to be carefully evaluated.

The purpose of this research is twofold. First, to evaluate the effect of container style and size on plant growth. Second, to investigate the possible use of hydrophilic gels to extend postharvest life of bedding plants.

Brassica oleracea Italica c.v. 'Green Duke' and Calendula officinalis c.v. 'Lemon' have been selected as test crops for bedding plants. These cool season crops were selected since they can be grown under similar environmental conditions, are increasing in popularity in production and marketing, and are subject to stresses in the greenhouse and at the retail market or holding area. Production of a quality plant in minimum space would be of significant value to growers or retailers.