Title Preserving fresh flowers with natural pigments and texture

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Citation ISHS Acta Horticulturae 804:391-396. 2008.

Keywords fresh flowers; physical properties; preserving

Abstract

Methods for preserving fresh flowers with natural pigments and texture are reported. Petals were dehydrated by various dehydration treatments, and then petal physical properties were determined by observing the petal sections and epidermal cells under a microscope. Most pigments leached out of the petal, but some diffused and were retained in the petals of a preserved flower. Although pigments were lost in preserved flowers prepared by the conventional methods, it was possible to prepare processed flowers with natural pigments similar to those of fresh flowers using appropriate solvents. Appropriate solvents were chosen from different normal monohydroxy alcohols and polyols on the basis of their structural formula. The results show that processed flowers with natural pigments and texture can be made using normal monohydroxy alcohols and lateral chain diols. Such processed flowers are similar to fresh flowers because of their natural pigmentation and textures are retained.