Extending the vase life of cut flowers: Pre-treatments and preservatives studied

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The largest response category was one in which the vase life of 53 cultivars was increased by treating with a holding preservative. Consumer favorites in this category include: basil, bee balm, black-eyed susan, coneflower, coral bells, foxglove, lisianthus, ornamental pepper, shasta daisy, sunflower, snapdragon, and zinnia, among others.

Interestingly, the researchers determined that holding preservatives actually reduced the vase life of 14 cultivars such as ageratum, false queen anne's lace, lisianthus, pineapple lily, yarrow, and zinnia. Hydrating preservatives reduced the vase life of 18 cultivars, including feverfew, lisianthus, ornamental pepper, pineapple lily, shasta daisy, sweet william, sunflower, yarrow, and zinnia. Application of a combination treatment showed that the use of hydrating and holding preservatives reduced vase life in 12 cultivars.

The researchers concluded that, for the majority of cultivars in the study, either all treatments produced a similar vase life or treatment with a holding preservative produced the longest vase life. They cautioned, however, that "a universal recommendation for use of a holding preservative cannot be made as it reduced the vase life of 14 cultivars". The study results also indicated that hydrator preservatives are "not advantageous" in extending the vase life of most of the cut flowers studied.

More information: horttech.ashpublications.org/...t/abstract/20/6/1016

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