

Use of Foams and Filler Materials With Cut Carnations

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Many foams and filler materials are used by the retail florist to hold flowers in place in arrangements. Parvin and Krone (2) found certain limitations on the use of foams with roses. Under certain conditions materials containing detergents or those set in shallow water reduced rose cut flower life. Tests were completed at Colorado State University to investigate possible detrimental effects of nine materials on cut carnations.

Foam materials were used according to the manufacturer's instructions. The level of water or preservative solution was maintained near the top of containers approximately four inches deep, with cut ends of the stems below solution level. Nine carnations per foam were used in the first test and 10 in the second. Water, Everbloom (40g/1), and Floralife were used in the first test. Everbloom (1 1/2 tablespoons/qt.), Floralife and Petalife were used in the second test.

The useful life of the cut carnations was measured in a laboratory room. During the first test from June 11 to 27, the temperature varied in this room from 59 to 83°F with relative humidity from 36 to 56%. Temperature was 68 to 90°F and relative humidity 38 to 53% in the second test which ran from June 25 to July 5.

Results and Conclusions

Table 1 shows little or no influence of the foam material on the useful life of cut carnations. There were considerable differences due to the keeping solution used. While useful life was highest with Everbloom in the first test, the concentration of Everbloom used (40g/1) was slightly too strong causing some stems to break over. Everbloom concentration was reduced too much in the second test and keeping life of the flowers was reduced to around normal. Tests are now under way with

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²Cited by Joe Vermulen in *Roses Incorporated Bulletin* for October, 1963.

Everbloom to determine the optimum concentration that should be used on carnations and roses and if this concentration should be varied with different times of the year.

Table 1. Useful life of cut carnations in different foams and different keeping solutions.

Solution	T E S T	Foams								
		F.F.F.	Hydro- F.	Oasis	Oasis- C.	Quickee	Styro- F	Jiffy	Tuff- lite	Sno- Pak
Everbloom	(1)	12.44	13.67	13.33	13.67	13.55	14.22	13.44	13.44	12.44
	(2)	6.90	7.10	6.60	9.00	7.70	8.90	8.20	8.20	7.20
Floralife	(1)	6.66	5.77	7.33	8.10	7.22	6.66	7.11	6.55	6.11
	(2)	6.70	7.60	7.30	7.50	7.80	7.40	7.50	7.60	6.90
Petalife	(2)	6.90	7.10	6.70	7.40	7.10	7.00	7.70	7.20	7.50
	(1)	6.11	5.78	6.44	7.00	6.22	5.89	6.00	6.33	4.78
Total		45.71	47.02	47.70	52.67	49.59	50.07	49.95	49.32	44.93

Summary

No injurious effects from foam and filler materials were observed on cut carnations in these tests. For maximum life, flower preservative solutions should be used with filler materials. According to the work of Parvin and Krone with roses, the cut stems should be at or below the solution level in the container for maximum cut flower life. Further, the container should be large enough to provide adequate solution and it should be arranged so that water can be added to replace that used by the flowers.

A list of materials with companies cooperating in these tests.

COLORADO FLOWER GROWERS ASSOCIATION, INC.
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FIRST CLASS

Oasis	V. L. Smithers Co., Kent, Ohio
Hydro Foam	"
Oasis Chips	"
Styro-Foam	Foliage Co. of America, Ludington, Michigan
Fill-Fast-Foam	A. L. Randall Co., 1433 S. Wabash Ave., Chicago, Illinois
Jiffy	Floralife Inc., 4420 S. Tripp, Chicago, Illinois
Quickee	"
Tufflite	Tufflite Co., Ballston Spa, N. Y.
Sno-Pak	Sno Pak Co., Cooperstown, N. Y.

Your editor,

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