

Florel Drenches for Daffodil Height Control

William B. Miller
Department of Horticulture
Cornell University
Ithaca NY 14853
wbm8@cornell.edu
www.flowerbulbs.cornell.edu

In 2011 and 2012, we trialed Florel drenches as a new method of height control for daffodils and hyacinths. Florel sprays have been used on daffodils for years, but growers often report inconsistent results from sprays. Florel drenches are a very new concept in floriculture, and our results have been very good, and possibly better than other methods currently in use. Florel drenches are not labeled for use on bulb crops, and we therefore cannot recommend their use. The purpose of this publication is to highlight some of our results and to potentially stimulate interest in a registration for this purpose.

Some highlights:

- Our work shows that Florel drenches are a useful method of height control in pot daffodils. Good height control, and especially *reduced postharvest growth* were seen with Florel drenches.
- Most cultivars showed excellent control with a 200 ppm drench (4 ounces of drench per 6" pot) with little additional control as rates increase up to 500 ppm. See examples with 'Carlton' and 'Ice Follies' below. Cultivars will vary.
- Experiments suggest a slightly greater effect from later drenches, as late or even later than normal Florel sprays (although, more work is going on with this). There is no benefit from early drenches! See photo of 'Primeur' below.
- For most cultivars there is no difference in flower number or senescence and we have never seen phytotoxicity from Florel. There does tend to be a slight delay in flowering (1-4 days, varying by cultivar).
- One major note, however. We have seen fewer flowers in Florel drenched 'Tete-a-Tete'. As the concentration of Florel drench increased, the number of open flowers was reduced. This was mainly seen with early treatments (2 days after pacing in the greenhouse). Applications at 4 or 7 days after housing did not reduce 'Tete-a-Tete' flower numbers. Accordingly, Florel drenches should be used with great caution on 'Tete-a-Tete'.
- Cultivars such as 'Carlton', 'Ice Follies', 'Primeur', 'Exception', 'Cotinga', 'Ice King', 'Tahiti', 'Marieke' and 'Westward' have performed well. Two cultivars, 'Thalia' and 'Geranium', showed flower abortion from Florel drenches. 'Tete-a-Tete' has shown reduced flower numbers from early Florel drenches.





'Carlton', 6" pots. 18 cold weeks, in greenhouse 6 March. L to R: Control, 100, 200, 300, 500 ppm Florel drench at the 2-4" leaf stage. Image 4928.



'Carlton', 6" pots. 18 cold weeks. Same plants as in above photo, showing appearance at end of flowering. L to R: Control, 100, 200, 300, 500 ppm Florel drench. Image 5107.





'Ice Follies', 6" pots. 18 cold weeks, in greenhouse 6 March. L to R: Control, 100, 200, 300, 500 ppm Florel drench at the 2-4" leaf stage. Image 4933.



'Ice Follies', 6" pots. 18 cold weeks. Same plants as in above photo, showing appearance at end of flowering. L to R: Control, 100, 200, 300, 500 ppm Florel drench. Image 5110.





'Primeur', 6" pots. 17 cold weeks, in greenhouse 31 January. L to R: Control (no Florel), 120 ml (4 ounces) of 250 ppm Florel applied as a drench 1, 6, and 9 days after bringing plants into the greenhouse. Image 4615.