

Screening Hydrangeas for Cold Hardiness

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Two hydrangea cultivars, 'Pia' and 'Hobella' were evaluated monthly for cold hardiness using laboratory techniques from November 1996 to April 1997. For each test date, forty, uniform stem cuttings were collected from plants grown at the Center for Applied Nursery in Dearing, Georgia and were sent by overnight express mail to the cold hardiness laboratory at the University of Georgia in Griffin. The samples were prepared for freezing tests within 2 hours of arrival and placed in a freeze bath. The bath was cooled at a rate no greater than 4 C per hour. Samples were removed from the bath at each 3 C interval from -3 C to -30 C. After about 10 days at room temperature and 100% relative humidity they were evaluated visually for any injury due to the low temperature exposure. There were 4 replications of the stems at each temperature of exposure for each cultivar.

The results indicate that 'Hobella' and 'Pia' had the same cold hardiness levels on the November, March, and April sample dates. However, on the December, January, and February sample date 'Hobella' was found to be less cold hardy than 'Pia'. It is important to note that these findings are preliminary. Further evaluations are being made for 1997-98 and these results will be completed by April 1998.