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Baucom's Nursery in Summerville, SC, had a problem maintaining enough water on the outer edge of their poinsettia crop using over head sprinklers. Hand watering was the first approach to solving this problem, however, this employee was needed for addressing other tasks. Therefore, an alternative to hand watering was needed. On October 2, 1998, an experiment was set up to test the effectiveness of Hydretain 2X formula to eliminate hand watering.

Two test plots were used on opposite sides of the greenhouse. Two plots using four rows of twenty plants along the edge closest to the greenhouses' outer walls were selected since these plants showed signs of wilt first. On one side of the greenhouse the first ten plants and four rows were treated with just water. The remaining plants, eleven through twenty, were treated with Hydretain at the rate of 2.0 ounces per gallon (64:1). All plants were watered to run off. On the opposite side of the greenhouse this arrangement was reversed. The first ten plants and four rows were treated with Hydretain and the remaining plants were treated with just water. All plants received equal amounts of solution on the day the experiment started. From October 2, until harvest these plants would only receive the water provided from the overhead sprinklers.

A few weeks into the experiment it was evident that the plants treated with Hydretain were out performing the other plants. On week six of the experiment pictures were taken of the plants from the outer most corner of the experiment. These plants were selected to demonstrate the dramatic difference in growth between the two treatments. The plants treated with Hydretain were larger in size, retained more leaves, and developed a larger root system compared to the plants on "just water". In addition, the plants grown under "just water" were not salable.

Based on this study we believe Hydretain offers growers a solution to those "dry edges". These positive results and other research have shown Hydretain offers solutions to many moisture management issues such as; increased shelf life, better moisture management on plugs, reduced watering time, and increased germination.

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Hydretain Edge Plant Trial With Poinsettias

Baucom's Nursery October 2, 1998 through November 10, 1998

Mark Arena - Clemson University, Cooperative Extension Service



Comparison of Hydretain treated (Top Shelf) and non treated (Bottom Shelf) watered using only overhead sprinklers



Side-by-side comparison of Hydretain treated (Right) and non treated (Left) watered using only overhead sprinklers

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Overhead comparison of vegetative growth of Hydretain treated (Top Row) and non treated (Bottom Row) watered using only overhead sprinklers



Side-by-side comparison of plant & root growth of Hydretain treated (Right) and non treated (Left) watered using only overhead sprinklers