



The University of Alabama in Huntsville
Office of Technology Commercialization

October 6, 2005

Dick Holloway
Chair & CEO
WIWTD
655 Big Cove Road
Owens Cross Roads, AL 35763

Dear Mr. Holloway:

We have completed the water retention testing of your 6" SmartGrow mat. The tests were conducted under controlled conditions at 20°C and 65% humidity, and were performed as follows:

- 1) Five (5) 6" test mats were weighed and each weight was recorded.
- 2) A container was filled with 2 cups of tap water and each mat was submerged in the water for 60 seconds.
- 3) The mats were removed from the water and allowed to drip dry on a flat rack for 60 seconds.
- 4) The drained mats were then weighed and each weight was recorded.
- 5) The water retention ratio of each mat was determined by dividing the wet/draind weight by the dry weight. The average ratio of the five mats was 4.1.

Please accept this letter as our certification that the tests were run per your instructions and duly recorded on the attached form provided by you.

Please let us know if we can be of further assistance.

Sincerely yours,

A handwritten signature in black ink, appearing to read "William E. Gathings".

William E. Gathings, Ph.D.
Director

SMART GROW WATER RETENTION TEST

PURPOSE: Determine the water retention capacity of the Smart Grow Mat.

TEST METHOD:

- 1) Five six- inch mats will each be weighed while dry and the weight recorded.
- 2) Each mat will be soaked in a water bath for 60 seconds.
- 3) Mats will be removed from the water bath and allowed to drip dry for 60 seconds.
- 4) Each mat will be weighed and the weight recorded.
- 5) The dry weight (step 1) will be subtracted from the weight with water (step 4) and recorded as the weight of the water retained.

TEST DATA:

SAMPLE NO.	DRY WEIGHT	WEIGHT WITH WATER	RATIO
1	139	969	4.2
2	209	839	4.2
3	259	899	3.6
4	199	829	4.3
5	219	879	4.1

CONCLUSION: The SMART GROW MAT has an average water retention ratio of 4.1.

DATE: 10/5/05

TEMP: 20°C

Humidity: 65%

