

**Performance of Aquatrols AquaGro® 2000G in a Peat-based Media**  
(Aquatrols Corporation, Cherry Hill, NJ)

**Research Cooperator:** Kevin Browne

**Objective:** To evaluate several rates of Aquatrols AquaGro 2000G granular media surfactant for initial and subsequent water absorption and distribution in a peat-based growing media.

### Study Details

**Location:**

Cherry Hill, NJ

**Materials:**

- Substrate
  - Peat, perlite, vermiculite media
  - Initial moisture content 24.42%
  - Dried moisture content 15-20%

**Treatments:**

- AquaGro 2000G at 0.50, 0.75, 1.0, 1.5 and 2.0 lbs/yd<sup>3</sup>. (0.29, 0.43, 0.58, 0.86, 1.16 kg/m<sup>3</sup>)
- Untreated control
- 5 replicates

**Trial year:**

- 1999

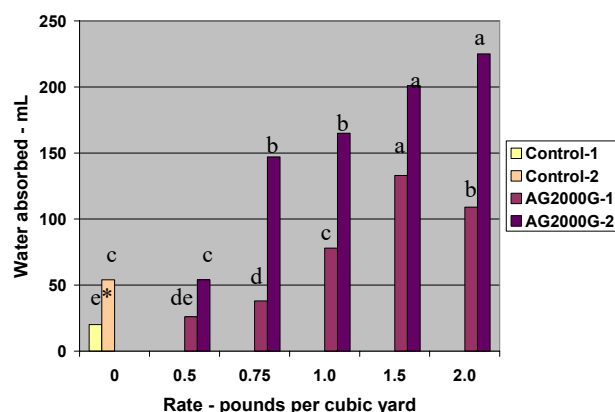
**Evaluations:**

- Water distribution – visual assessment of percent of media hydrated - at initial wetting and after rewetting
- Water retained from a measured amount of water applied (300 ml) – at initial wetting and after rewetting

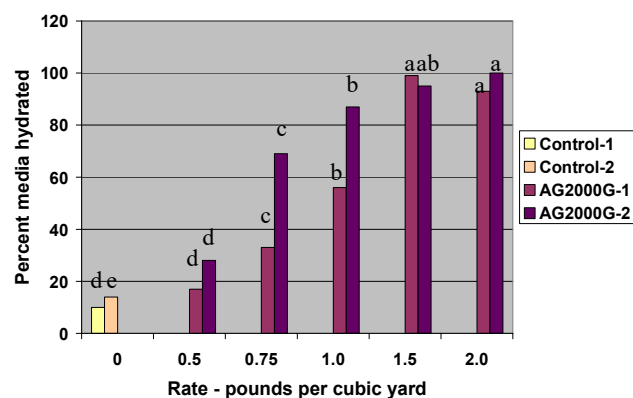
### Results

- Aquatrols AquaGro 2000G significantly increased water absorption and distribution. (p=0.05)
- Best results were achieved at the 1.5 and 2.0 lb/yd<sup>3</sup> rate.

**AquaGro 2000G Impact on Water Absorption**



**AquaGro 2000G Impact on Water Distribution**



\*columns with the same letter are not significantly different.

### Conclusion

Aquatrols AquaGro 2000G significantly improves water absorption and distribution in peat-based media when incorporated at a rate of 1.5 lbs/yd<sup>3</sup> (860 gm/m<sup>3</sup>) or higher.