



Comparison of the Effects of Aquatrols AquaGro® 2000M and SOAX® on Water Absorption and Distribution in a Peat-based Media (Aquatrols Corporation, Cherry Hill, NJ)

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Objective: To compare the efficacy of several rates of Aquatrols AquaGro 2000M and SOAX media surfactants for initial and subsequent water absorption and distribution in a peat-based growing media.

Study Details

Location:

Cherry Hill, NJ

Materials:

- Substrate
 - Generic peat styrofoam media
 - Initial moisture content 28%
 - Dried moisture content 15-20%

Treatments:

- AquaGro2000M and SOAX at 3, 4, and 5 fl oz/yd³. (116, 154, 193 ml/m³)
- Untreated control

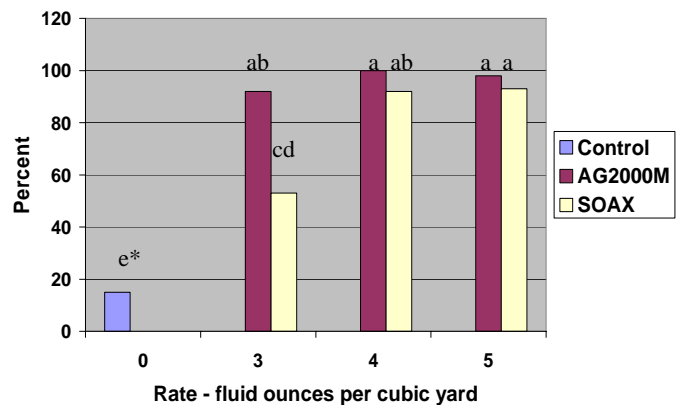
Trial year:

- 1998

Evaluations:

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

Percent of Media Hydrated - Rewetting



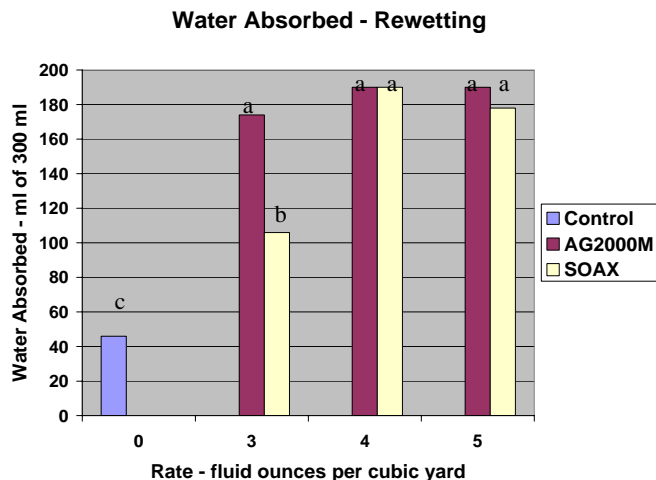
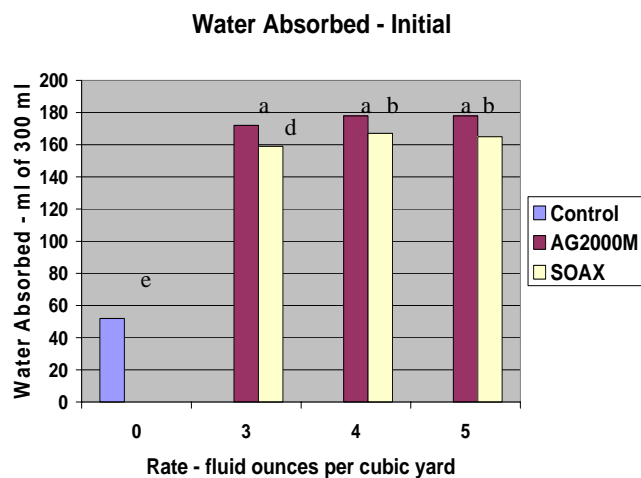
Results

- Aquatrols AquaGro 2000M significantly outperformed SOAX at the 3 oz. rate in percent of media hydrated upon rewetting.
- For initial water absorption, Aquatrols AquaGro 2000M outperformed SOAX at each rate tested in amount of water retained.
- Upon rewetting, Aquatrols AquaGro 2000M significantly outperformed SOAX in amount of water absorbed at the 3 oz. rate.

Conclusion

Aquatrols AquaGro 2000M provided effective water absorption and distribution at 3 fl oz/yd³ (116 ml/m³) and significantly outperformed SOAX at the same rate.

(more data on next page)



*Bars with the same letter do not differ significantly in DMRT.
 SOAX® is a registered trademark of Smithers-Oasis.

Conclusion

Aquatrols AquaGro 2000M provided effective water absorption and distribution at 3 fl oz/yd³ (116 ml/m³), and significantly outperformed SOAX at the same rate.