

Wetting agents. Why do we need them ?



Some common issues

- SURFACE TENSION
- (Cohesion: Attraction between water molecules)
- Water stay in the surface

WATER REPELLENCY

• Water is not held by the soil particles

HYDROPHOBICITY

 Could be cause by hydrophobic organic materials that form nonpolar "coatings" on soil or medi particles







Currently two main classes of wetting agent







Penetrants ideal for spreading water



Penetrants ideal for spreading water



Polymer ideal for retaining moisture



Qualibra – evenly distributed and deeper moisture retention



Are you getting the most from your wetting agent?





10/5/2016

Superior moisture distribution and retention Some data to back it up !



Qualibra moves water effectively through root zone 2nd September after 4 monthly applications



Qualibra moves and retains moisture deeper 21st July, monthly applications



Sociality Sy Wetting agent

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Qualibra increases root mass and depth



CURRENT RESEARCH TRIAL AT STRI

2 FIELD TRIALS

Start date: May 1st 2015 Location: Bingley, UK Turfgrass SITE 1: sandy loam rootzone Bentgrass/annual meadow grass sward Turfgrass SITE 2: sand base rootzone with fescue/annual meadow grass sward

TREATMENT	IRRIGA ON VW	TI Assessments C
Untreated	<20%	Turf Quality
	25-30%	Turf Colour Chlorophyll
Qualibra 20lt/h	na <20%	Disease presence
	25-30%	NDVI Surface Hardness
Standard	<20%	Volumetric Moistu
Penetrant 20 lt/ha	t/ha 25-30%	Content Turf Cover
Standard wetting	ng <20%	Thatch
agent 2.5 lt/ha	25-30%	Organic Matter Rootzone pH

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Trial area 2015





Effect on Moisture content



Effect on surface hardness



• Wetting agents DON'T make surface softer under high irrigation

Germination trial. In hydrophobic sand

Site Conditions	Grass species	Timing	Treatment	Assessment		
Start date: September 2015	Bentgrass Fescue Perennial ryegrass	5 Days before seeding	Untreated	Germination and establishment Turf height Turf coverage Turf fresh weights Dry Biomass Rootzone moisture		
Location: STRI			Qualibra 10lt/ha			
greenhouse Bingley, UK			Qualibra 20lt/ha			
Design: 5 replications		On the day of sowing	Untreated			
per treatment			Qualibra 10lt/ha			
typically dry USGA- spec rootzone with hydrophobicity			Qualibra 20lt/ha			-
from Royal Liverpoool Golf Club (Hoylake)						
				(syngent

Germination



Coverage



21 DAYS AFTER SOWING



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Many thanks

questions?

Germination of Bent grass seeds with applications of Qualibra





