

AQUA-ZORB™

Liquid

The Ultimate Wetting Agent
that treats the cause of
Localised Dry Patch



Trials by the STRI have shown when a solution of AQUA-ZORB is percolated through a sieved sample of sandy soil taken from a Localised Dry Patch (LDP) area of water repellent soil, the 'waxy' coating on the soil is removed. STRI field trials at Royal Liverpool Golf Club further underlined the resultant improved water penetration to the root zone.

This improvement can result in firmer and faster greens and improved soil conditions for all fine and amenity sports turf grasses.

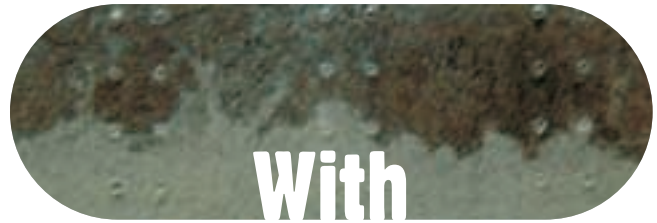
The Key Benefits of AQUA-ZORB are:

- Very long-lasting residual technology ensures that a single application persists for up to 5 months during the higher summer temperatures
- Prevention and cure of Localised Dry Patch (LDP) and the correction of water repellent turf to subsequently increase the speed and depth of water penetration through thatch and LDP areas
- Improved drainage of Compacted Sports Turf Surfaces
- Improved root systems, thereby reducing summer stresses
- Improves both turf colour and turf quality
- Ensures a more economical use of applied fertilisers and fungicides
- Irrigation water can be reduced by up to 50%
- Autumn application will ensure improved drainage of winter rainfall and effectively reduce the formation of dew
- Excellent value for money
- Used worldwide on Golf Courses since 1988





Untreated (left) and treated (right) soil profiles 10 minutes after 1.3cm of irrigation



Colour enhanced soil profiles 10 minutes after irrigation, where the blue areas indicate wet soil, red areas dry soil

Go with the matrix flow



An uneven or preferential flow of water on golf greens can be caused by localised dry patches (LDPs) of soil. AQUA-ZORB is a proven water management product that produces even soil wetting or matrix flow*, which eliminates LDPs and in turn improves turfgrass quality.

* Statistically proven data from a University of Georgia laboratory study, 2000



AQUA-ZORB™

PROVEN

How AQUA-ZORB works:

- Dry Patch (hydrophobic soil) is the result of soil fungi secreting a wax which coats the soil particles making them repel water.
- Trials by the STRI demonstrated that AQUA-ZORB effectively removes the waxy coating on the soil particles and thus allows water to penetrate the soil more effectively.
- Rhizotron studies have shown that greater rooting length occurs following treatment, which reduces effects of summer stress and improves nutrient and water uptake.

Results: improved plant health, colour and vitality

PROVEN

The 1998 STRI trial work has shown that AQUA-ZORB appears to remove the majority of the waxy coatings on water repellent soils by percolation of the AQUA-ZORB wetting agent solution. Sports Turf Research Institute

Rhizotron Study™

A Rhizotron is an underground root observation laboratory which enables research to be carried out on turf and simultaneously view the turf root system through the glass windows. This facility has been successfully used to view the roots of turf that were planted over an area of hydrophobic soil which was treated with AQUA-ZORB at 2.5 ltrs/500 m².

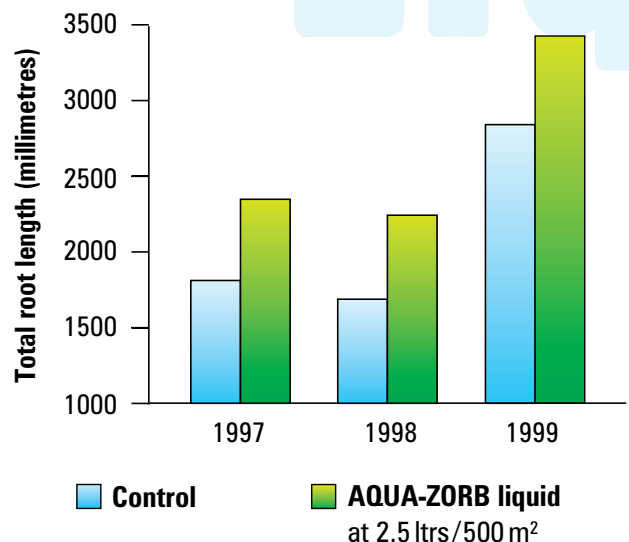


Genuine once-a-season application

Saves times – saves money

The 1997–99 University of Georgia Rhizotron Study has shown that turfgrass treated with AQUA-ZORB can result in greater rooting length in hydrophobic soil during the

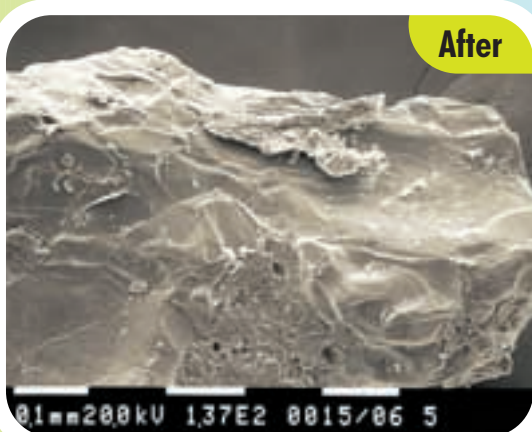
University



Data: University of Georgia, Rhizotron Study, 1997–1999



A typical scanning electron microscope picture of a sand grain before application of AQUA-ZORB, showing the hydrophobic coating

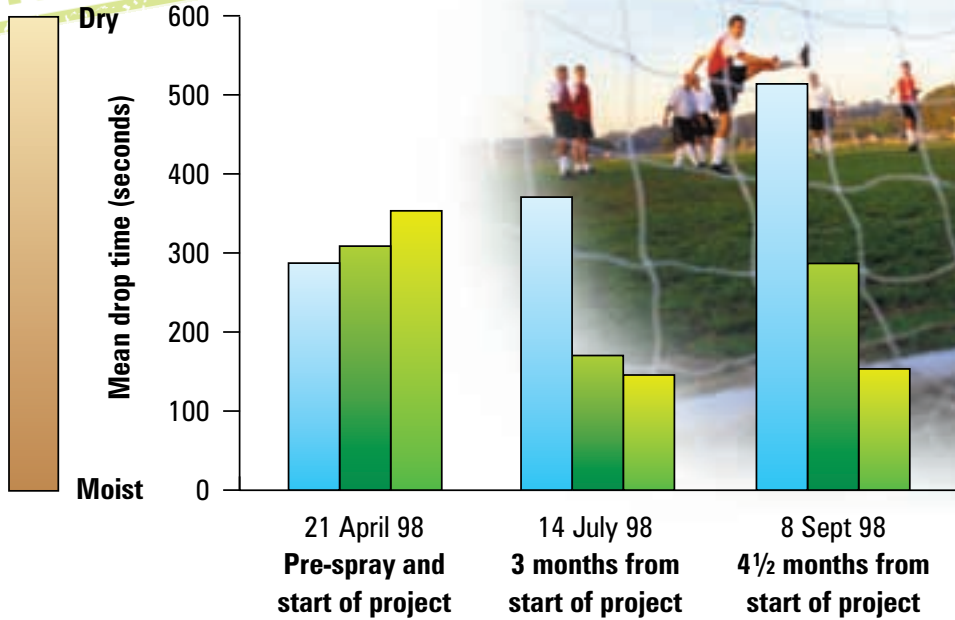


A typical scanning electron microscope picture of a sand grain after treatment by AQUA-ZORB, showing very little hydrophobic coating

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Improved water penetration was observed using the water droplet test. The values on the graph are obtained by calculating the average times for the 0–3cm depths on the dates indicated.



■ **Control** (water only)
 ■ **AQUA-ZORB liquid** 1 application
 ■ **AQUA-ZORB granular** at two-monthly intervals applied in April, June and August at 7.5 kgs per 500 sq. metres

Data: STRI Field Trial at Royal Liverpool Golf Club, Hoylake, Wirral

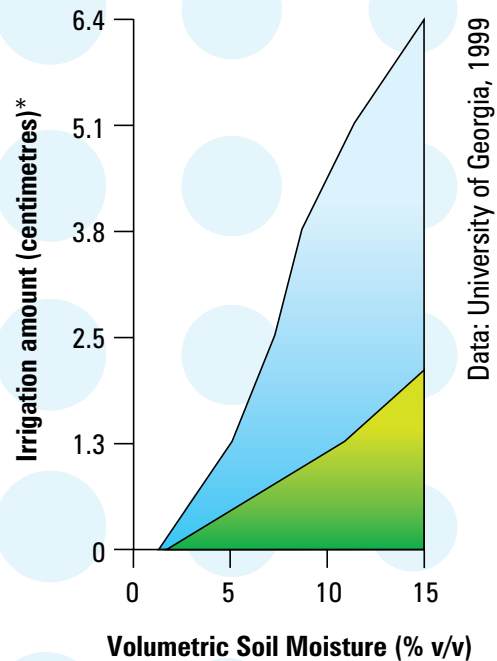


Save the cost of irrigation water

Research from the University of Georgia has proven that turf treated with AQUA-ZORB requires less than 50% of the normal irrigation water to achieve the necessary soil moisture level of 15%, compared to untreated turf. The resultant saving on water more than offsets the cost of adding AQUA-ZORB.



■ **Control**
■ **AQUA-ZORB liquid** at 2.5 ltrs/500 m²



Data: University of Georgia, 1999

* Irrigation applied until volumetric soil moisture reached approximately 15%

AQUA-ZORB™

Granular

PROVEN



- All the benefits of Liquid AQUA-ZORB in an easy-to-apply granule.
- New formula gives faster penetration.
- Totally biodegradable carrier.
- Rapid granule breakdown.
- Cost effective – one pack covers 500 sq.m.

New Recommendations:

- Spot treatment of specific areas.
- Bunker bank application – existing and new construction.
- Exposed windy areas where liquid application is a problem.
- After hollow coring in Autumn.
- Application during new planting.



STRI 'The Sports Turf Research Institute'

Granular

Areas of Use: Goal-mouths, Touch-lines, Walkways, Centre-circles, Baselines, Compacted Areas, Bunker Surrounds etc.



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