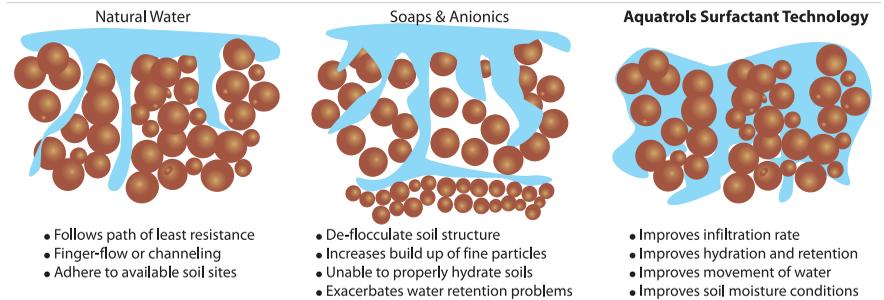


How It Works

Not All Surfactants are the Same

The molecular structure of a surfactant can significantly influence water distribution once in the soil profile. Surfactants differ in size, shape, molecular weight and structure. Each of these characteristics can influence the way in which water attaches to the soil particles, how uniformly it hydrates and its impact on drainage (see graphic). The patented synergistic and novel surfactant technology in this Aquatrols formulation is based on two non-ionic surfactants.



How Does It Work?

Moves Water to the Soil — Not Through the Soil

This technology bridges the gap between the water repellent soil particle and available water. Our patented two-pronged technology enables this formulation to address water movement issues caused by surface tension, **and enables the hydration of water repellent soil particles resulting in more uniform distribution of water throughout the soil profile.** Aquatrols Surfactant Technology increases capillary (plant available) water and maintains water in soils, optimizing water uptake and increasing nutrient uptake resulting in better plant health.

The Situation (Figure 1)

Hygroscopic Water directly contacts the soil particle making a very thin film around it. It is very tightly bound to the soil and is not available to the plants. However, it is important because it needs to be there for capillary water to accumulate over it.

Capillary Water can move through soil laterally and upwards through capillary action and will remain in the rootzone after irrigation or rainfall, providing water and dissolved nutrients to the plant. The lower range of capillary water is the wilting point, and the upper range is field capacity.

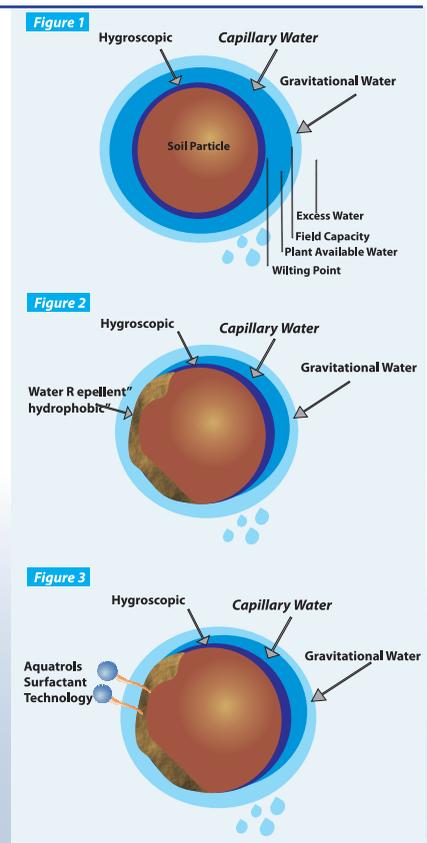
Gravitational Water is in excess of field capacity and leaches through soil. It is affected purely by gravity and is not available to your plant.

The Problem (Figure 2)

A water repellent region (organic material) on the soil particle prevents water from adhering to it; when that occurs all of that region's water holding capacity is lost.

The Solution (Figure 3)

Aquatrols Surfactant Technology is specifically designed to attach to water repellent areas of the soil, bridging the gap and allowing water to move through the soil and stay in the rootzone.



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Results may vary depending upon soil, climate and other conditions.