



# 20 TIMES MORE AVAILABLE WATER THAN TURFACE®

## INDEPENDENT LABORATORY “A” RESULTS - AXIS® REGULAR

Water Holding Capacity at 1 Bar	111.29%
Water Holding Capacity at 16 Bars	18.53%
<b>Total Available Water Capacity</b>	<b>92.76%</b>

## INDEPENDENT LABORATORY “B” RESULTS - AXIS® REGULAR

Water Holding Capacity at 1/3 Bar - Field Capacity	90.45%
Water Holding Capacity at 15 Bars - Permanent Wilt Point	25.43%
<b>Total Available Water Capacity</b>	<b>65.02%</b>

## INDEPENDENT LABORATORY “B” RESULTS - TURFACE® MVP

Water Holding Capacity at 1/3 Bar - Field Capacity	58.12%
Water Holding Capacity at 15 Bars - Permanent Wilt Point	53.71%
<b>Total Available Water Capacity</b>	<b>4.41%</b>

On average, **79%** of the water that **AXIS® REGULAR** absorbs is plant available.

By comparison, only **4.4%** of the water that **TURFACE® MVP** absorbs is plant available.



Diatom Magnified 3000X

### Definitions:

**Saturation:** The soil water content when all pores are filled with water. The water content in the soil at saturation is equal to the percent porosity.

**Field Capacity (1/3 Bar):** The soil water content after the soil has been saturated and allowed to drain freely for about 24 to 48 hours. Free drainage occurs because of the force of gravity pulling on the water. When water stops draining, we know that the remaining water is held in the soil with a force greater than that of gravity.

**Permanent wilting point (15 Bar):** The soil water content when plants have extracted all the water they can. At the permanent wilting point, a plant will wilt and not recover. Unavailable water is the soil water content that is strongly attached to soil particles and aggregates, and cannot be extracted by plants. This water is held as films coating soil particles. These terms illustrate soil from its wettest condition to its driest condition.

**Available Water Capacity (AWC):** Defined as the range of available water that can be stored in soil and be available for growing crops (Richards and Wadleigh, 1952).

The concept, put forward by Frank Veihmeyer and Arthur Hendrickson (1927), assumed that the water readily available to plants is the difference between water content at field capacity (FC) and permanent wilting point (PWP):  $AWC = FC - PWP$ .

\* Testing on competitive products based on a limited number of samples, using the identical, standardized test methods as used on AXIS.



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