NEW!

AquaVantage™
Makes Every Drop Count

Reduce chemical input up to 25%

AquaVantage - Natural, bio-based superabsorbent that releases up to 95% of its moisture to plant roots. Made from corn starch and formulated to provide increased benefits for an entire growing season across broad a gricultural production applications.

Healthier plants are more resistant to disease

Affordable, High Benefit / Cost Ratio

Quicker Germination and Plant Emergence

Promotes More Vigorous Root Systems

Greater Plant Health

More Uniform Plant Stand Establishment

Improved Crop Quality

More Efficient Use of Total Crop Input

Greater Yield Security

Excellent ROI Opportunity

Stunning development in the chemistry of superabsorbents

Reduces irrigation demand
Reduces chemical inputs by extending their effectiveness by up to 25%

The AquaVantage™ Molecular Structure Is Made From Starch, Not Oil

Polymerized starch forms the AquaVantage structure that expands and unfolds rapidly when exposed to moisture.

Response to Moisture

Moisture triggers expansion of the AquaVantage molecular structure. When wet it holds up to 500 times the mass of dry AquaVantage granules, about the size of sand grains. In the soil these are millions of tiny reservoirs feeding moisture and nutrients to plant roots.

Like a Thirsty Sponge

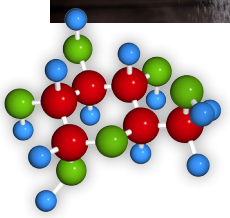
Unlike any other product of its kind, moisture is held at plant available pressures, releasing up to 95% of the moisture held in AquaVantage granules. One result is added days before plant wilt occurs in dry conditions. The AquaVantage granules shrink as moisture is used up by the plant. When moisture comes again, the cycle repeats as the AquaVantage granules expand again. This cycle repeats for an entire growing season in most situations.

Young Roots Thrive

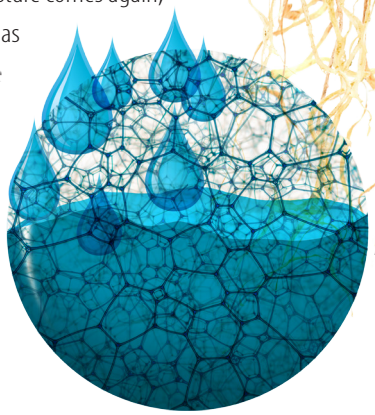
Plant health requires a good start in the life cycle especially at germination and emergence. AquaVantage provides an added moisture source at this critical time. Healthier roots at startup means healthier plant vigor.

AquaVantage™ Revealed

AquaVantage is available in various size granules for in-furrow to fine powder for seedcoat application.



STARCH-BASED POLYMERIZED MOLECULE → SUPER-ABSORBENT GRANULE → SEASON-LONG MOISTURE RESERVOIR



Roots drink directly from the AquaVantage reservoir throughout the growing season.

Illustrations for demonstration purposes

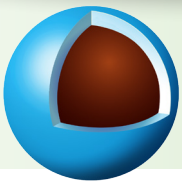
Put AquaVantage™ to work for you this season

- *Easy-apply granules absorb, hold and release soil moisture that plants can use*
- *AquaVantage granules hold up to 500X their mass in plant available moisture and help reduce water management costs*
- *Cycles over and over in the season, has potential to significantly reduce costly chemical inputs*
- *Made from corn starch, naturally biodegrades*
- *No petroleum chemicals, no runoff contamination*

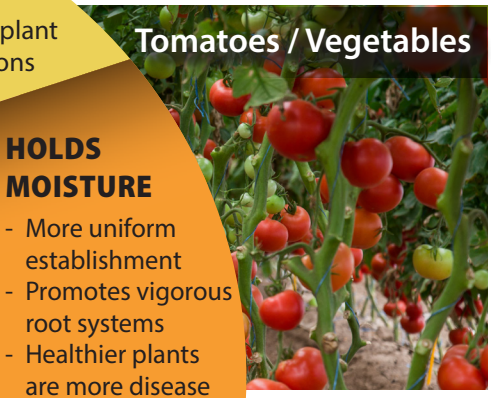
AquaVantage™
Makes Every Drop Count

AquaVantage™ gives every grower a yield security advantage when it comes to soil moisture management.

Did you know?



AquaVantage is an outstanding seed coating!



APPLY AT SEEDING
Quicker germination and plant emergence in dry conditions

HOLDS MOISTURE
- More uniform establishment
- Promotes vigorous root systems
- Healthier plants are more disease resistant

OUTSTANDING PAYBACK
Excellent ROI in quantity and quality as well as reduced input costs

AquaVantage™
Makes Every Drop Count

TANGIBLE PRODUCER BENEFITS
Greater yield security
Satisfied return customer

ADDED DAYS BEFORE WILT IN DRY CONDITIONS
Helps reduce chemical input
Helps improve crop quality

Technical Overview

For a complete User Guide, email request or visit SunnGlobal.com > Resources > AquaVantage User Guide

APPLICATION (Examples)	RATE	MESH SIZE	METHOD
CORN	4-5 lbs / ac	8-16 16-30	Apply AquaVantage in furrow at planting or sidedress 3-5" below the soil surface post plant
SOYBEANS & other beans	4-8 lbs / ac	8-16 16-30	Apply AquaVantage in furrow with seed at planting. Apply AquaVantage by shanking 2-4" offset from the seed and 4-6" deep.
WHEAT & small grains	1.5- 2 lbs / ac	8-16 16-30	Apply AquaVantage by mixing or blending with seed or fertilizer and applying in furrow at planting.
POTATOES	7-10 lbs / ac	8-16 16-30	Apply AquaVantage in furrow around seed pieces at planting.
GRAPES	0.5-1 tsp / plant 7-10 lbs / ac	8-16 16-30	Apply AquaVantage evenly in the planting hole or mix in soil while back filling planting hole. Apply to established plantings by shanking as deep as possible (optimum 6") 1-2 ft. inside drip row.
TOMATOES, PEPPERS, VEG. (seed / transplant)	7-10 lbs /ac	16-30	Apply in furrow with seed at planting.
	1 lb per 100 to 400 gal water	50-80	Apply to transplant water at a minimum rate of 1 lb in 100-400 gallons of water. Apply in the root zone before transplanting. Pre-hydrate AquaVantage by slowly adding to water with agitation. Do not use on systems with screens or filters.

Many more application details available. Email info@SunnGlobal.com, or download directly from SunnGlobal.com > Resources > AquaVantage User Guide

AquaVantage improves the soil's water holding capabilities throughout a growing season. Soil treated with AquaVantage releases water in response to a plant's root suction.

AquaVantage repeatedly hydrates and releases moisture as plants need it for a year or more. This reservoir of moisture and nutrients gives plants an advantage in faster germination, quicker and more uniform emergence, consistent growth and higher, better-quality yields.

In times of stress, this advantage is even more pronounced. AquaVantage can add days before wilt in dry conditions by reducing plant stress. It also absorbs and releases soil nutrients, water-soluble fertilizer and chemicals in the same manner as water, creating a healthy microenvironment in the plant root zone. The result is better-quality yields with less water and reduced input.

AquaVantage lasts in the soil for approximately one year, depending upon the level of microbial activity. As a starch-based polymer, it ultimately feeds soil bacteria and other organisms.

AquaVantage was developed in association with the USDA. It enjoys consistent, proven success in worldwide commercial production and trials across a wide variety of agriculture, horticultural, sports field, reforestation, seed coating, and home and garden applications. AquaVantage is environmentally friendly, easily biodegradable and odorless.

FAQs

Will more moisture near roots cause rot?
No. AquaVantage granules expand to many times their original volume, then contract and expand again when moisture is present. This action creates added pore spaces, increasing aeration—one key to preventing root rot.

Does AquaVantage affect how much water a plant needs for optimum growth?
No. Plants require a specific amount of water for optimal growth. AquaVantage simply manages water more efficiently. Instead of water being dispersed into the soil or evaporating, it is absorbed by AquaVantage and held for the plant to use as needed. Millions of tiny "reservoirs" effectively and efficiently nourish the plant.

Is water changed by AquaVantage?
No, AquaVantage triggers no chemical reactions. It merely absorbs and releases moisture along with any water-soluble nutrients it contains.

Will AquaVantage work in my soil type?
Yes, AquaVantage is effective all soil types. In sandy soils AquaVantage holds water, preventing it from leaching down past the roots. In tighter clay soils AquaVantage increases aeration as it expands and contracts, helping increase oxygen levels and water percolation.

APPLICATION TIPS

AquaVantage can be applied in different ways.

- Preplant
- At planting (in furrow)
- Postplant (foliar)
- Postemerge (side-dress)
- Seed coating
- Root dip
- Potting mix

How often do I apply AquaVantage?
In general, we recommend a fresh application of AquaVantage with each new planting.

What if I'm forced to replant?
Replanting disturbs soil in the seedbed, so AquaVantage should be applied each time a crop is replanted.

Can I mix AquaVantage with fertilizer?
Yes. By combining AquaVantage and nutrients, your plants have both food and water while reducing fertilizer input up to 25% in some cases.

How long does AquaVantage remain active?
AquaVantage remains effective for a full growing season, depending on the soil microorganism activity. We recommend a new application with each new planting as a way to ensure optimum AquaVantage performance.

LONG-TERM EFFECTS

What does AquaVantage do to soil long term?
AquaVantage naturally biodegrades. The main component is cornstarch, a food source for soil microorganisms. What remains serves as a soil amendment to improve aeration and other soil characteristics.

What about AquaVantage and soil pH?
AquaVantage granules are pH-neutral and will work well within a pH environment range of 6 to 10 without affecting the soil pH.

PRODUCED BY Sunn Global Biologics LLC

HELPING FARMERS GROW

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