

ORGANIC NUTRIENT LINE



SBC HELIX



ORGANIC NUTRIENT LINE

Helix organic products are formulated to deliver pure, efficient nutrition and energy to the plant through amino acids, carboxylic acid groups, humic substances and natural plant extracts. Soil Basics is leading the market with a premium organic product line that delivers the diversity of support required for the microbial, enzymatic and physiological functions within the plant. The SBC Helix product line is WSDA and CDFA organic certified, field-proven and third-party researched. SBC Helix brings organic production to a HIGHER LEVEL.



SOIL AMENDMENTS & ADJUVANTS

SBC Helix Edaphos

A soluble blend of humic substances and metabolites from the microbial digestion of leonardite, this product serves as a carbon source for both soil and foliar applications. Humic substances have been shown to increase the efficacy and efficiency when used as a tank mix partner for all fertilizer and applied nutrients.

SBC Helix Carom

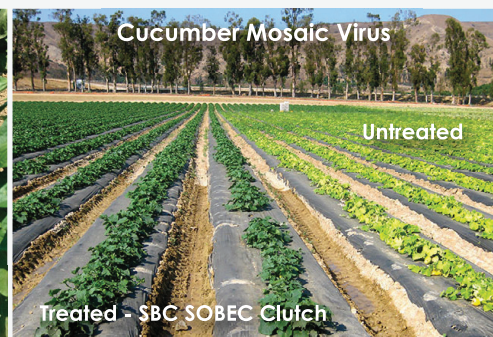
SBC Helix Carom has been used to enable water penetration and lateral movement, increase availability of soil nutrients, and aid in providing a favorable soil environment for microbial sustainability. SBC Helix Carom can be applied “solo” or in nutritional blends.



ORGANIC MICROBIAL INPUTS

*Microbiology plays a critical role in plant nutrition & soil health. The synergy of a microbial component added to your nutrition program can bring **exponential** results.*

Soil Basics has partnered with SOBEC, Inc. — a microbial company that has been leading the industry for thirty years & hallmarked with proven results, high quality products and microbial diversity.



SOBEC

The Original "Pro-Biotic" for the soil - SOBEC is a microbial solution consisting of a broad diversity of beneficial microorganisms and biological metabolites. Research and commercial use has shown that SOBEC can aid in overall root density and vigor, as well as increased nitrogen efficiency.

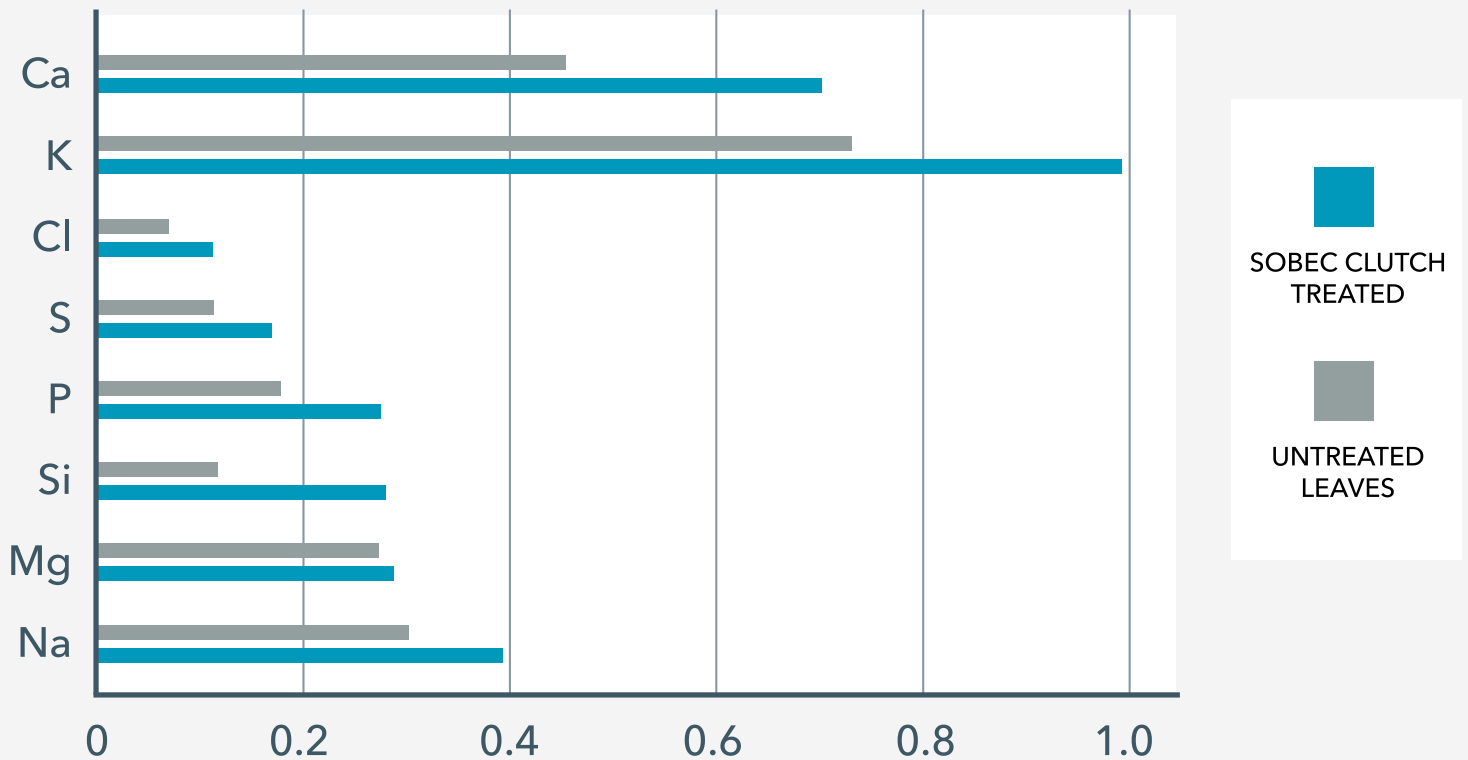
SOBEC Clutch

An upgrade on the original "Pro-Biotic" SOBEC. Through DNA sequencing and third-party field trials, SOBEC Clutch has proven there is strength in numbers. Adding the work force of 12 million distinct DNA strands, including 5,497 genetic individuals offers a broad-spectrum microbial metabolite concentrate which augments the soil's microbial biodiversity. SOBEC Clutch contains biologically derived organic acids in a soluble carbon complex, and has also been shown to buffer salts and increase nitrogen utilization.

BHF-10

BHF-10 is the result of an organically certified microbial digestion of leonardite. This liquid product contains diverse microbial metabolites, soluble carbon, and humic substances. BHF-10 buffers salts and is a key component in augmenting organic nutrient blends.

FINAL HARVEST LEAVES



SOBEC Clutch* was tested for its effect on nutrient exchange between strawberry plants and soil in the rootzone. This study showed that strawberry plants treated with SOBEC Clutch resulted in:

- increased root and crown growth,
- increased water content in the roots and leaf tissue,
- increased % Nitrogen, and % Carbon (per dry weight) in the leaf tissue.

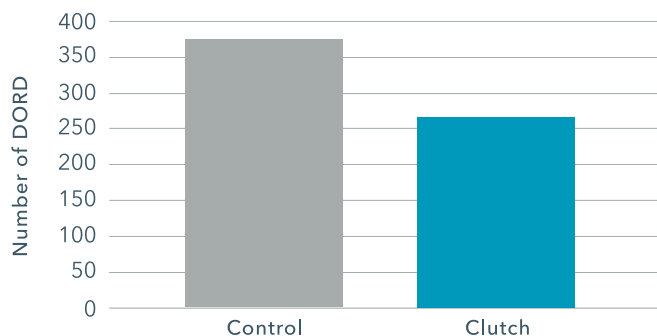
SOBEC Clutch also increased the transport and accumulation of potassium in strawberry root and leaf tissues (shown in figure above).

The following nutrients: Na, Mg, Si, P, S, Cl, K, Ca and Zn were also shown to be increased using XRF (X-ray fluorescence) comparing nutrient pools in leaf tissue.

*SOBEC Clutch is the private label name for VESTA.

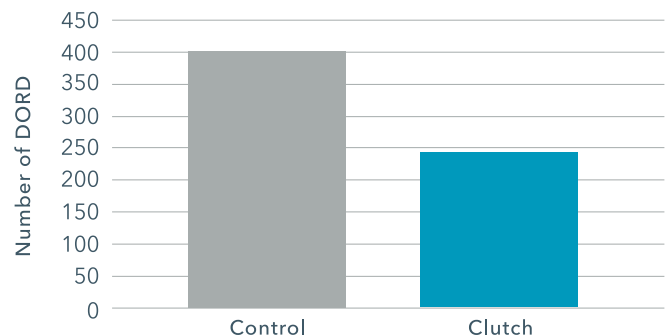
"Nutrient Dynamics in Strawberry Fields: Vesta Influences Nutrient Fluxes Between Soil and Plant" i-Cultiver, Inc.

Trial #1



Trial #1- Clutch treatment reduced the number of dead or diseased (DORD) lettuce plants. The average effect of Clutch treatment was a 28.92% reduction in disease.

Trial #2



Trial #2- Clutch treatment reduced the number of dead or diseased (DORD) lettuce plants. The average effect was a 38.95% reduction in disease.



SBCHELI

ORGANIC NUTRIENT LINE

SBC Helix Boron

A proprietary formulation containing 1.5% boron, amino acids, carbohydrates, natural plant extracts. Increases flower viability, and promotes proper shoot and tissue development.

SBC Helix Copper

A proprietary formulation containing 4.0% copper, 2.1% sulfur, amino acids, carboxylic acid groups, natural plant extracts. Enhances enzymatic activity in the plant and increases disease resistance.

SBC Helix Iron

A proprietary formulation containing 5.0% iron, 2.9% sulfur, amino acids, carboxylic acid groups, natural plant extracts. Increases chlorophyll production and increases leaf cuticle density.

SBC Helix Magnesium

A proprietary formulation containing 2.5% magnesium, 4.0% sulfur, amino acids, carboxylic acids, natural plant extracts. Increases chlorophyll production and overall leaf tissue health.

SBC Helix Manganese

A proprietary formulation containing 7.0% manganese, 4.5% sulfur, amino acids, carboxylic acids groups, natural plant extracts. Increases efficiency of respiration, and reduces water stress.

SBC Helix Micro

A proprietary formulation containing 3.0% sulfur, 0.3% boron, 0.5% copper, 1.25% iron, 1.0% manganese, 2.4% zinc, amino acids, carboxylic acids, natural plant extracts. Increases plant metabolic response, promotes healthy tissue growth, and encourages genetic potential.

SBC Helix Zinc

A proprietary formulation containing 6.5% zinc, 3.8% sulfur, amino acids, carboxylic acid groups, natural plant extracts. Facilitates enzymatic activities in the plant and soil microbiology. Can be used for soil and foliar applications.

NUTRIENTS

Supporting an elevated plant metabolism and sustaining the natural biological systems. Formulated with purer forms of nutrient sources, thus providing nutrition that has a higher energy signature.

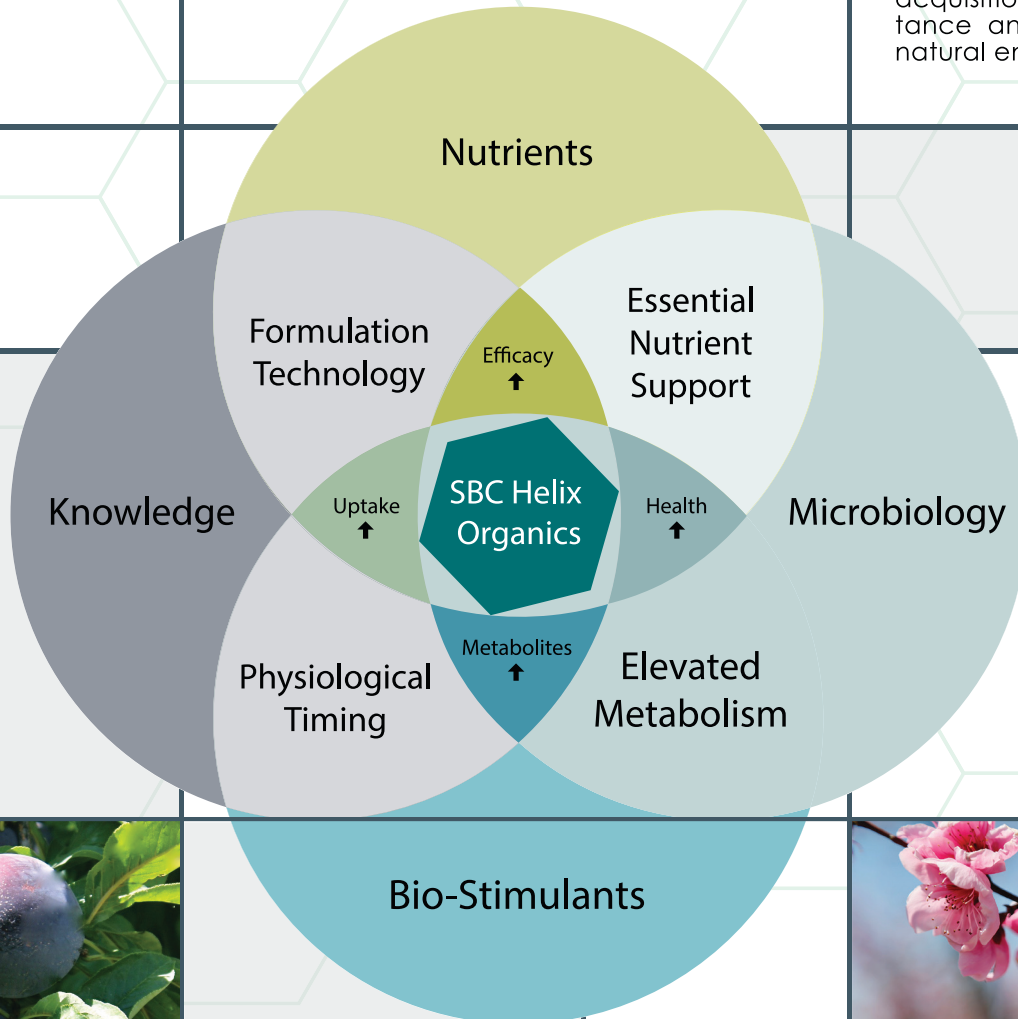
SBC HELIX

ORGANIC NUTRIENTS

Bringing organic production to a **HIGHER LEVEL**

MICROBIOLOGY

These smallest players can not be overlooked - they have the largest influence on any nutritional program. Microbes - bacterial and fungal - activate the biochemical reactions at the interface of the plant and soil. Their role in the rhizosphere and endosphere facilitates nutrient acquisition, pathogen resistance and is a pro-biotic natural energy source.



KNOWLEDGE

Achieving higher yields and plant health requires a knowledge of how to use the right products to maximize physiological events, alleviate environmental stress, optimize nutrition, and foster the microbial and plant relationship.



BIO-STIMULANTS

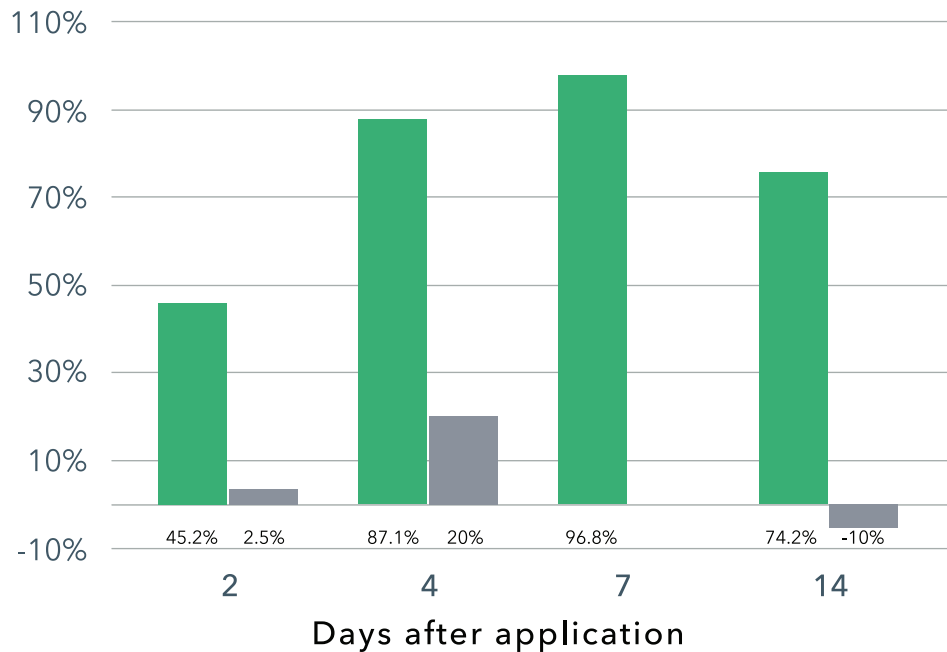
Natural plant extracts, amino acids, humic substances, microbial metabolites, and carboxylic acid groups all promote responses in plants which induce higher levels of production.

HELIX VS. CONVENTIONAL PROGRAM

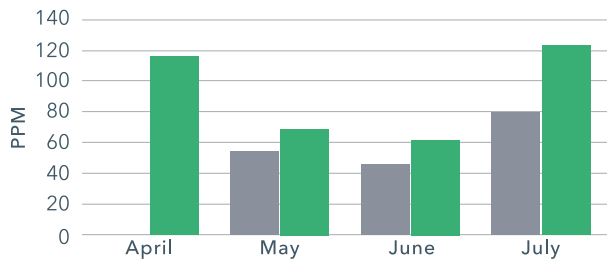
Tissue sample levels were taken on 12 year-old almonds of Butte/Padre varieties.

- Both blocks had the same soil and planting date.
- Applications were soil applied through drip irrigation.
- Nutrients and rates were adjusted based on tissue analyses.
- Tissue samples were pulled by a third-party lab.

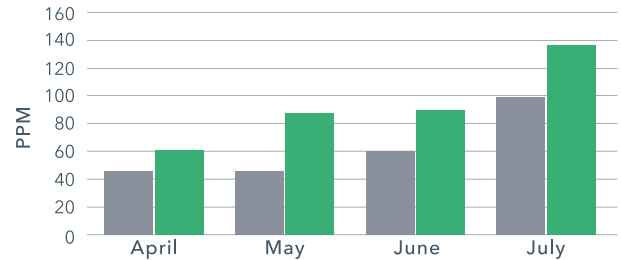
Change from Pre-Application Zinc Content 2019 Almonds, Sanger CA



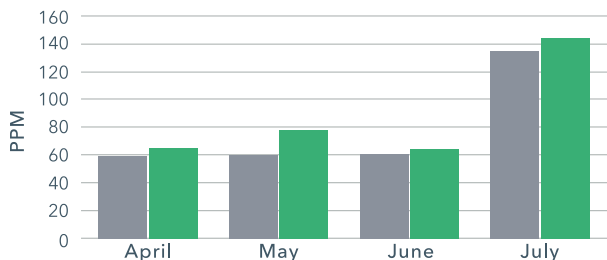
Zinc



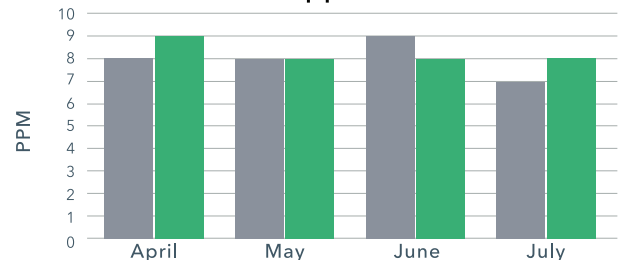
Manganese



Iron



Copper



CONVENTIONAL

HELIX



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