

Preserving our planet



Dr. Earth®

setting higher standards • producing higher performance • serving a higher purpose



SERVING a higher purpose

Impact of Landfills on Ground Water Quality

There is nothing pretty about landfills except that the garbage is far away from our homes and we don't have to smell it.

Municipal solid waste (MSW) disposal is a global concern, especially in developing countries across the world.

Globally, landfills are one of the major threats to groundwater resources. Waste placed in landfills or open dumps is subjected to either groundwater underflow or infiltration from precipitation. This waste gradually releases its initial water through rock pores and some of its decomposition by-products which contain innumerable organic and inorganic compounds called "leachates." The leachates accumulate at the bottom of the landfill and percolates through the soil contaminating water sources.



We at Dr. Earth are sensitive to a growing world population and share a passion for clean water, which we as humans are all entitled to. It is our right to drink and benefit from clean water and have good sanitation. If we do not dispose of anything that could risk contaminating ground water, we have done our jobs, at least for today.

Our liquid fertilizers take these risks into consideration very seriously. We reduce moist waste going to landfills by transforming it into certified organic fertilizers to grow tomorrow's food with the highest level of integrity and sustainability.



the highest level of
INTEGRITY

HIGHEST of Organics



LEVEL[®]

The Sustainable Solution

We have found a way to turn what would have been food waste from the supermarket industry and convert it into renewable energy. This is the future of real sustainability - no food is ever wasted! From the produce aisle, to fruits, to the meat and seafood department, we've created a solution that comes to the rescue - collecting it all just as it is expiring and would have otherwise been thrown away. Food waste from San Francisco, Los Angeles, Chicago, New York, Tampa, Houston, Atlanta, Seattle and major cities is being collected and converted into OMRI Listed[®] organic fertilizer. This means that what was once landfill waste material can be used to create premium liquid fertilizers which grow vegetables, trees, and everything that grows in the soil all across America. Nothing is wasted and would-be waste is upcycled. This is the future of a truly sustainable solution.



We harvest organic nutrients from today's supermarket food waste to create the purest organic fertilizer to grow tomorrow's food.



Dr. Earth® Soils And Dry Fertilizers Are GMO Free

With all the organic options available today, only Dr. Earth offers soils and dry fertilizers that are Non-GMO Project Verified, signifying a premium product of the highest quality giving you peace of mind that no other soil or fertilizer can provide.



Non-GMO

The only **Non-GMO Project Verified organic dry fertilizer & soil company** in the world.

Our soils and dry fertilizers are GMO free and are verified by the Non-GMO Project. The Non-GMO Project is a mission driven third party non-profit organization, offering the highest level of transparency that savvy consumers demand. Look at the most successful food products at any natural foods market across the country, Non-GMO Project is the gold standard. We are proud to have a level of honesty, transparency, and prestige that no other company has. The Non-GMO Project Verified seal provides assurance that products meet the best practices for GMO avoidance.

Project Verified

Embrace our vision & help shape a better tomorrow.

University and third party tested

Studies Conducted By:

University of Arizona Controlled Environment Agriculture Center (CEAC)

Trial Location: Tucson, AZ

Growing Environment: Evaporatively-Cooled High Tunnel Greenhouse

WISerg® Corporation - Redmond, Washington

Founded by brilliant Silicon Valley Microsoft® executives that were responsible for some of the most prevalent technologies available today. The industry changing launches of Exchange 4.0, 5.0, and 5.5 before moving onto the Windows® team to launch Windows 2000, XP, XP2, and Vista. After leaving Microsoft® they were commissioned by one of the largest national supermarket chains to write a computer program capable of measuring the levels of organic waste their supermarkets created. A lot of money was being lost by grocers and the ability to manage the losses was very valuable information for the supermarket chains. They identified that about 8% of all produce, fruits and meats are lost annually and simply thrown away. They could measure the billions of pounds of waste handled daily and saw a real opportunity to create a forward thinking company that manages this waste stream responsibly. WISerg® is a revolutionary company with big visions, they are highly innovative in the world of sustainability and large scale farming.

Perfect Circle® Corporation - Lake Mills, Iowa

This is a very special company doing some remarkable work. Perfect Circle Corp. is growing certified organic tomatoes at greenhouses situated near the Central Disposable Landfill. They are heating their greenhouses using hot water, which is a by-product of gas-to-energy. Gas-to-energy is a process in which methane gas from the landfill is pumped into a power plant where it is converted to electricity to power over 4,000 homes. Water is used to cool the generators at the power plant. This is where Perfect Circle® Corp. becomes part of the loop and the solution. A very progressive organic grower and produce supplier with the highest ethical standards.



FIELD

Proven University Results in Organic Greenhouse Lettuce Trials

Study conducted by:
University of Arizona in conjunction
with WISErg® Corporation.

University of Arizona
Controlled Environment
Agriculture Center (CEAC)

Trial Location: Tucson, AZ

Growing Environment: Evaporatively-cooled
High Tunnel Greenhouse.

Growing Media: 12" Sand Bed Culture.

Fertilizer Delivery: Drip Tape.

Double Row Plant Spacing: 10" Between
Rows 8" In-Row.

Transplant Date: March 21, 2013

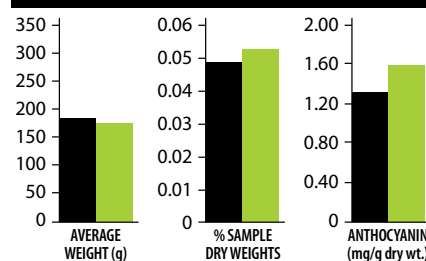
Harvest Date: April 19, 2013

TRIAL

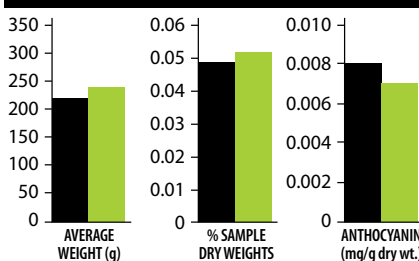
lettuce



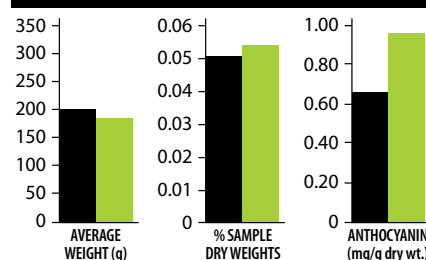
SALNOVA RED BUTTERHEAD



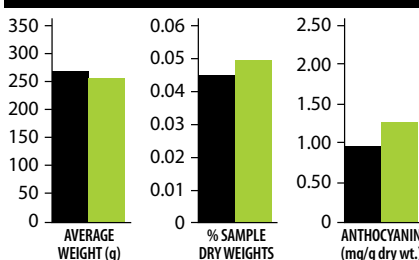
REX GREEN BUTTERHEAD



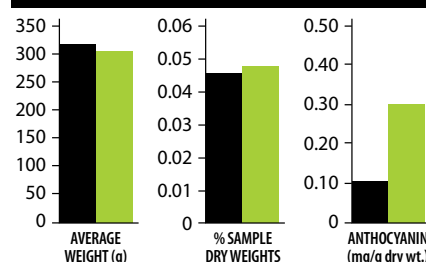
SALNOVA RED INCISED



CHEROKEE



MAGENTA



■ Conventional Hoagland
■ Dr. Earth

Purpose: To determine if Dr. Earth is competitive with conventional crop fertilization in a controlled environment. This study by the Agriculture Center at the University of Arizona in Tucson (CEAC) compared yield and quality of lettuce grown with Dr. Earth liquid fertilizer and a conventional Hoagland fertilizer solution. One of the most interesting observations besides the "dry" weight and yield is the increase of anthocyanin levels. It has been shown in various other studies that these powerful compounds may help prevent CVD (cardiovascular disease), cancer, and boost cognitive function.

RESULTS:

Dr. Earth® fertilizer was equal to or exceeded the non-organic lettuce in the following five areas: "dry" weight, yield, average leaf count, anthocyanin levels, and nutrient concentration levels.

FIELD

Dr. Earth® increased tomato production

Study conducted by:
Perfect Circle® in conjunction
with WISErg® Corporation.

Proven Results in Organic Greenhouse Tomato Trials

- Tests prove that using Dr. Earth liquid fertilizer significantly increases crop yield and over-all tomato production.
- Contains a full spectrum of macro and micro nutrients.
- Highly micronized for immediate bio-availability. Filtered to 25 µm and will not clog sprayers/drip lines.
- GMO free, chemical free, and pathogen-free. Free of chicken and other cheap manures.
- Effective on both indoor and outdoor plants anytime of the year.

TRIAL

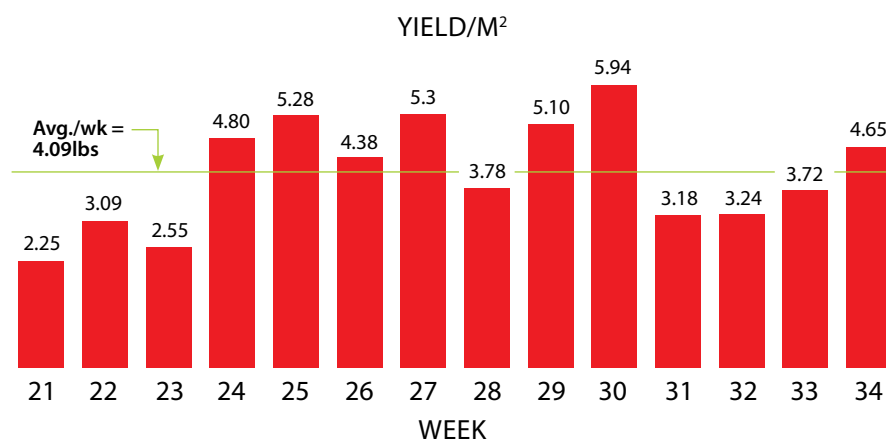
tomatoes



The use of Dr. Earth fertilizer in greenhouse grown tomatoes has proven to successfully sustain tomato yields that is above the production of conventional fertilization programs. The study conducted by Perfect Circle® clearly demonstrates greater yields and weight production over that of tomatoes grown solely with conventional methods. Perfect Circle® Corporation was able to grow more tomatoes in the same time period as shown below.

They observed, over a 14 week period, that Dr. Earth liquid fertility program yielded an average of 4.09lbs (1.90 kg) of organic tomatoes per square meter (m²) per week. The conclusion is very positive, especially as observed in week 30, which had over a 25% increase in weight.

14 WEEK PRODUCTION SNAPSHOT



Measured in pounds per week

*high yields
and even higher
nutritional value*

FIELD

Foliar Applications On Grapes Increased Cluster Production

Study conducted by:
WISErg® Corporation
in Eastern Washington

TRIAL DETAILS

Foliar Applications: Sprayed on Riesling grapes.

Measure: Berry count per cluster.

Measure: The ratio of fruit to tannins, anthocyanins, and other polyphenols in vines.

Purpose: To determine if the effects of Dr. Earth fertilizer used in a foliar spray on wine grape production would yield positive results. The study was conducted in eastern Washington. A grower's standard pre-season fertilizer was applied to an entire study block of Riesling grapes. In season, Dr. Earth liquid fertilizer and a fish fertilizer were applied via foliar spray at an equivalent nitrogen loading rate of 28 lbs/sq ac. Extra attention was paid to the underside of the leaves, as the stomata openings are where the majority of the nutrients will be absorbed when they are open. The rate was applied at a per acre rate, spaced over three applications.

TRIAL

grapes

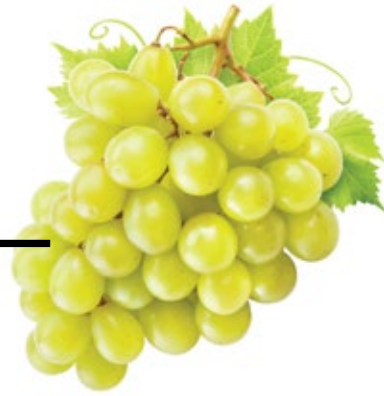


FIGURE 1: GRAPE YIELD BY FERTILIZER

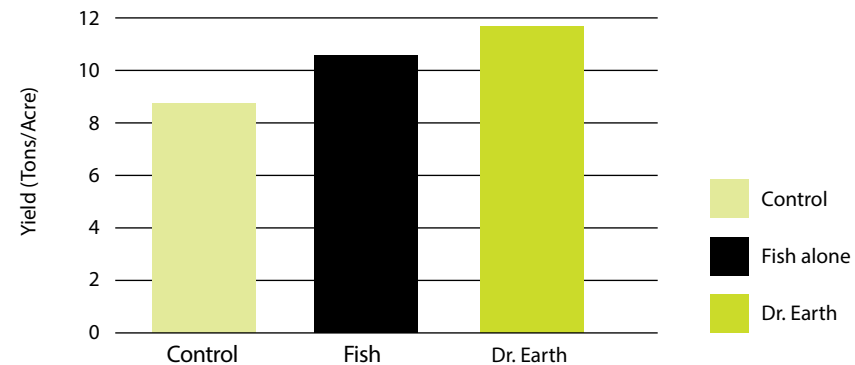
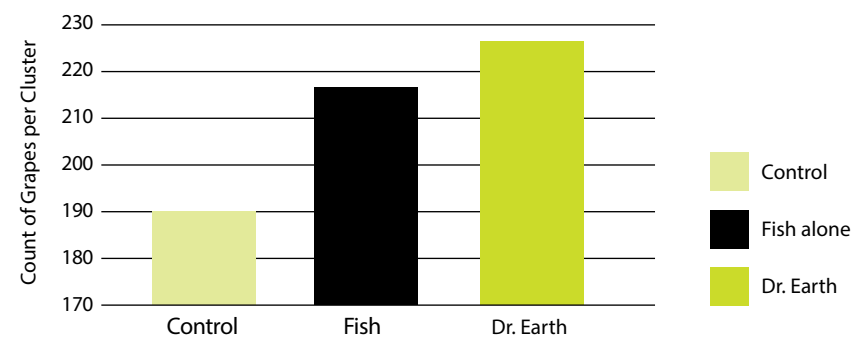


FIGURE 2: GRAPES PER CLUSTER BY FERTILIZER



RESULTS:

Greater grape cluster count was achieved which supports better flavor and nutrient density per grape. Greater yield in weight & overall production.

Results: When the Dr. Earth liquid fertilizer was applied to the grape vines both a greater yield was achieved as well as a higher grape count per cluster. This is very important for flavor and character. Thus, the ratio of fruit to tannins, anthocyanins, and other polyphenols in vines treated with Dr. Earth liquid fertilizer is likely to be higher than that of vines that are untreated or vines treated with foliar applications of standard fish fertilizer alone. One of the most interesting observations is the suggested increase of tannins, anthocyanins, and other polyphenols. It has been shown in various other studies that these powerful compounds may help prevent CVD (cardiovascular disease), cancer, and boost cognitive function among other potential health benefits and greater flavor profiles.

FIELD

Dr. Earth® Increased Size And Potato Production

Study conducted by:
WISerg® Corporation in Washington State's Columbia Basin.

TRIAL DETAILS

Foliar Applications: Sprayed on Russet Potatoes.

Measure: Overall production yield for potatoes in 6 to 10 oz. range.

Measure: Size of potatoes >10 oz.

Purpose: To determine if the effects of Dr. Earth fertilizer used in a foliar spray on Russet Potatoes would yield positive results. The study was conducted in Washington State's Columbia Basin. The block treated with Dr. Earth at 100% of the recommended nitrogen loading rate had the highest yield. The yield for potatoes in 6 to 10 oz. grade was measurably greater using Dr. Earth at 100% recommended nitrogen than all other treatments. The yield for potatoes >10 oz. grade was also dramatically improved using Dr. Earth at 100% recommended nitrogen.

Method: Two organic fertilizer treatments were foliar applied and compared to a control of the grower's standard conventional fertility program (UAN32+KTS).

TRIAL potatoes



FIGURE 1: POTATO YIELD

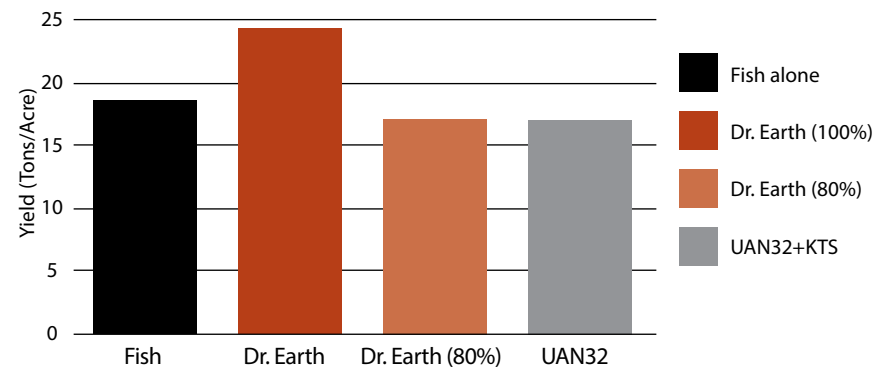
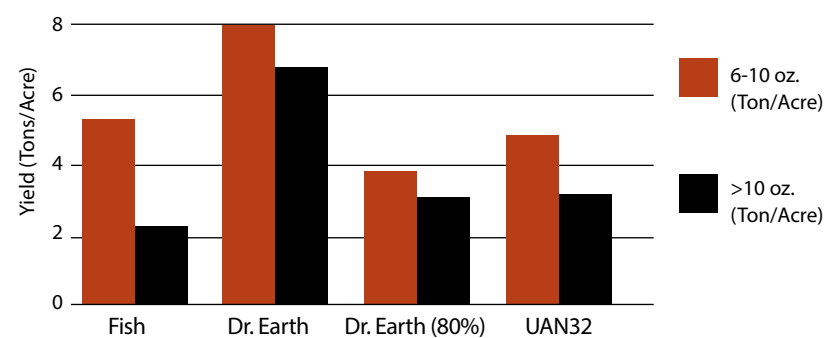


FIGURE 2: POTATO PRODUCTION BY SIZE



Results: When the Dr. Earth liquid fertilizer was applied to the potato plants in foliar applications, crop yield and tuber size were both greater compared to the fields treated with Dr. Earth at 80%, fish fertilizer, and a combination of UAN32 and KTS, respectively. All fertilizers were applied at 100% of the recommended nitrogen loading rates for the region (33 lbs. per acre), and Dr. Earth was also applied at 80% of the recommended rate. Where Dr. Earth was applied at 100% of the nitrogen loading, crop yield and tuber size were clearly greater.

RESULTS:

The block treated with Dr. Earth® liquid fertilizer at 100% of the nitrogen load rating had the highest yield.

The yield for potatoes in the 6 – 10oz. grade was distinctly greater using Dr. Earth® liquid fertilizer at 100% recommended nitrogen than all other treatments.

The yield for potatoes >10oz. was dramatically improved using Dr. Earth® fertilizer at 100% recommended nitrogen.

FIELD

Dr. Earth® Increased Strawberry Production

Study conducted by:
WISErg® Corporation in California.

TRIAL DETAILS

Measure: Weight of harvested strawberries.

Measure: The increased dollar value of the crop per acre.

Method: Apply with fertigation system at two rates of both 5 and 10 gallons per acre.

Purpose: To determine if the effects of Dr. Earth fertilizer used on strawberry crops would yield positive results in a fertigation delivery system. The study was conducted in California. Each of the three treatments received equivalent amounts of CAN-17. Would a crop increase be measurable if Dr. Earth was used on top of the grower's standard conventional methods and fertility program? Would one application or two applications make a noticeable difference on crop values and monetary dollar values to the grower's profits? Starting four weeks from the initial planting until the end of harvest, strawberries were fertigated at two different rates. The first was twice per month at 5 gallons per acre and the second was once per month at 10 gallons per acre. A third treatment representing grower standard practices was left for comparison as shown on the chart in grey.

TRIAL

strawberries



FIGURE 1: STRAWBERRY YIELD BY FERTILIZER

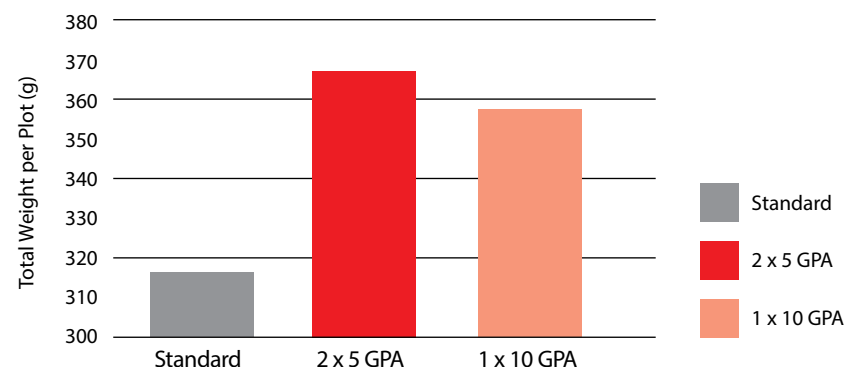
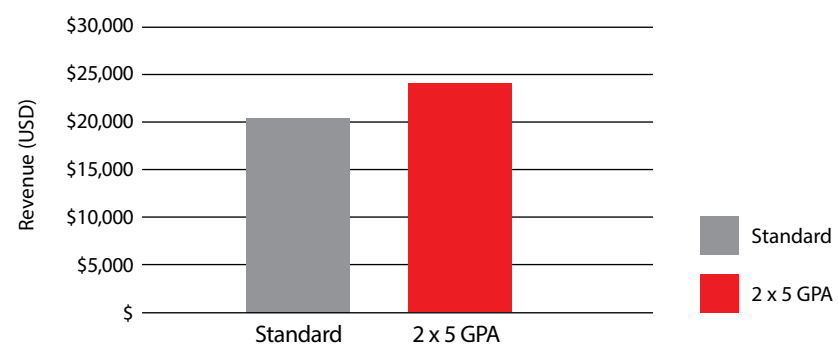


FIGURE 2: STRAWBERRY REVENUE BY FERTILIZER



RESULTS:

Blocks treated with Dr. Earth® organic liquid fertilizer had a greater yield than the grower's standard treatment.

Dr. Earth® organic liquid fertilizer applied twice per month at a rate of 5 gallons per acre increased return on investment by 20%.

Results: When the Dr. Earth liquid fertilizer was applied to the strawberry crop on top of the grower's standard applications of CAN-17, a significantly greater yield and dollar value was achieved. Blocks treated with Dr. Earth had more yield than the grower's standard treatment. When Dr. Earth was used twice per month at 5 gallons per acre it increased return on investment by approximately 20%. This test concluded that the best application method was the twice per month treatment as it increased the grower's revenue by \$4,110 per acre compared to the grower's standard treatment.

FIELD

Dr. Earth® Increased Sweet Corn Production

Study conducted by:
WISerg® Corporation in Washington State's Columbia Basin.

TRIAL DETAILS

Applications: Both soil and foliar.

Measure: Elevated yield by using Dr Earth organic liquid fertilizers

Measure: Increased dollar value of treated crops.

Purpose: To determine if the effects of Dr. Earth fertilizer used in both soil and foliar applications on sweet corn would yield greater results over conventional feeding programs.

Method: Each of the two treatments received equivalent amounts of organic, dry pre-plant fertilizer at a rate of 140 lbs. of nitrogen per acre. In one treatment, Dr. Earth was soil applied in the planter band at planting and then foliar applied five additional times up to pre-tassel. The total volume of Dr. Earth liquid fertilizer applied in this treatment was 100 gallons per acre. The second treatment was maintained as an untreated control.

TRIAL

sweet corn



FIGURE 1: SWEET CORN YIELD

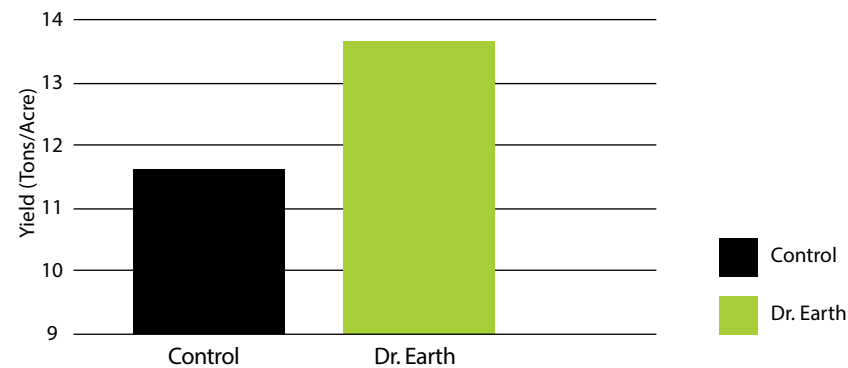
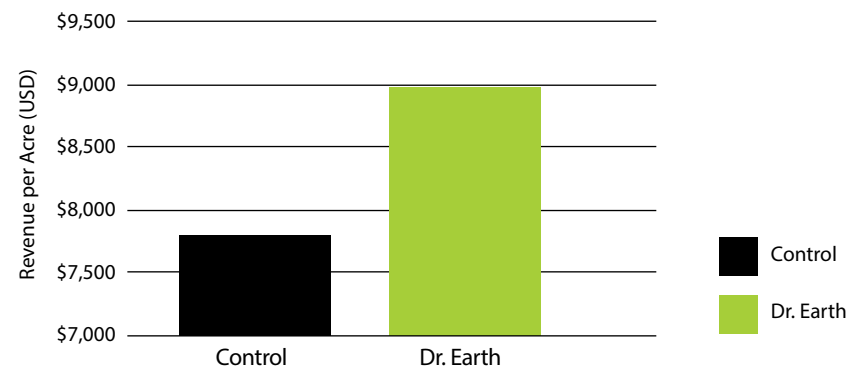


FIGURE 2: SWEET CORN REVENUE



RESULTS:

Sweet corn treated with Dr. Earth® yielded 4,000 more lbs. per acre over the control treatment.

Dr. Earth® increased revenue 16% from \$7,742 to \$8,559 per acre of production.

Results: The blocks treated with Dr. Earth had 2 tons more crop yield than the control treatment. This directly translated to an increased revenue of \$817.00 per acre. The crop treated with Dr. Earth was increased from \$7,742 to \$8,559 per acre. Further results showed that when Dr. Earth organic liquid fertilizer was applied at a rate of 100 gallons per acre, total yield increased 16% per acre, from 11.7 to 13.7 tons per acre. The Washington state average revenue is \$660 per acre of organic sweet corn production.

FIELD

Dr. Earth® Improved Onion Yield And Increased Onion Size In Diameter.

Study conducted by:
WISErg® Corporation in Washington State's Columbia Basin.

TRIAL DETAILS

Soil Applications: Applied at 80% and 100% strength.

Measure: Overall yield.

Measure: Size of onion (diameter).

Purpose: To compare the use of Dr. Earth fertilizer as compared to organic fish fertilizer and conventional fertilizer.

Method: Dr. Earth was applied at both 80% and 100% of the recommended nitrogen loading rate for onions. A pre-plant fertilizer was applied; during the season two organic fertilizers (Dr. Earth and fish fertilizer) were applied and compared to a control of the grower's standard conventional fertility program (UAN32+KTS). All fertilizers were applied at 100% of the recommended nitrogen loading rate for the region (17 lbs. per acre), and Dr. Earth was also applied at 80% of its recommended rate.

TRIAL

onions



FIGURE 1: ONION YIELD

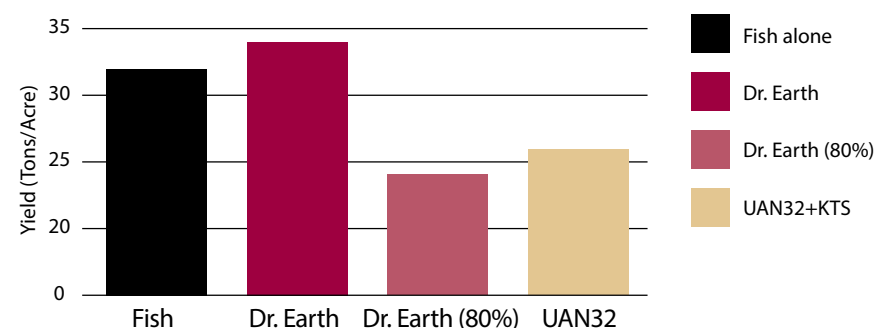
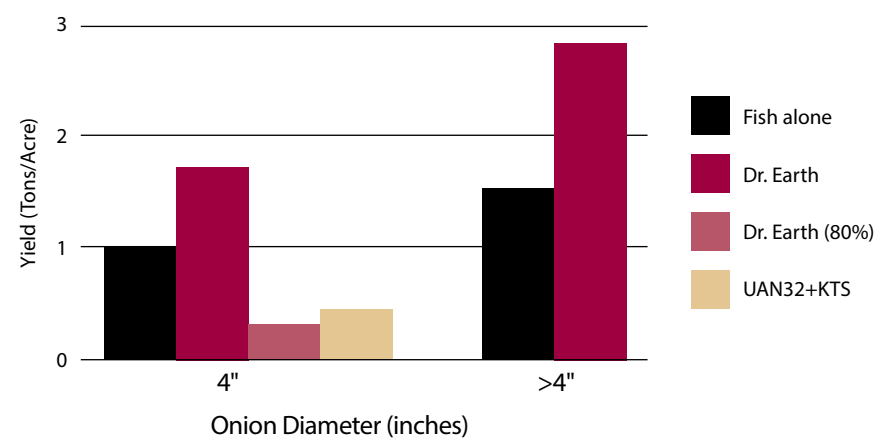


FIGURE 2: HIGHEST PAYABLE ONIONS



RESULTS:

Blocks treated with Dr. Earth® fertilizer at 100% recommended nitrogen loading rate had the highest yield.

The yield of onions in the 4" diameter grade was more than twice that of the control group.

The yield of onions >4" diameter grade was twice the size as onions grown with fish fertilizer alone.

Results: Onion yields and quality significantly increased. Both weight and diameter were increased. When Dr. Earth organic liquid fertilizer was applied at 100% of the nitrogen loading rate, total crop yield as well as the yield of larger onions were greater compared to the fields treated with Dr. Earth at 80%, fish alone fertilizer at 100%, and a conventional control, respectively. Where Dr. Earth was applied at 100% of the nitrogen loading, crop yield and diameter size were clearly greater.

FIELD

Field Trials of Dr. Earth® Show Increased Apple Production

Study conducted by:
WISErg® Corporation in Washington.

TRIAL DETAILS

Foliar Applications: Sprayed on Fuji apples.

Measure: Yield by fertilizer type.

Measure: Quality of yield of better grade apples.

Purpose: To measure the effects of Dr. Earth fertilizer used as a foliar spray and compared to a fish fertilizer and control plots.

Method: Dr. Earth and the fish fertilizer were applied at equivalent nitrogen loading rates of 33 lbs per acre. Both fertilizers were sprayed three times during the growing season. There was also an untreated control block for comparison.

TRIAL

apples



FIGURE 1: APPLE YIELD BY FERTILIZER

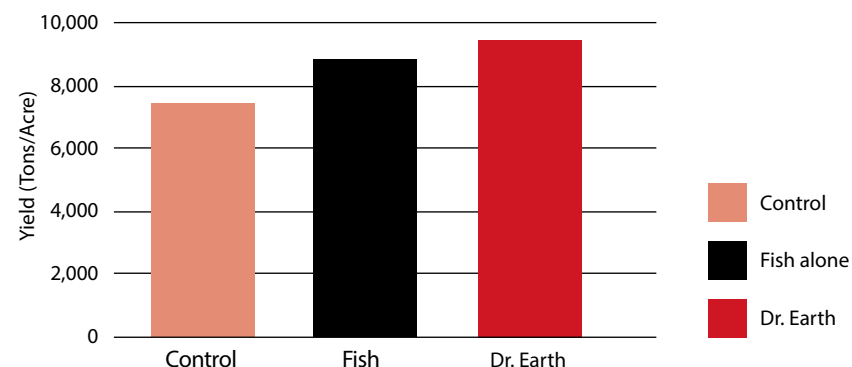
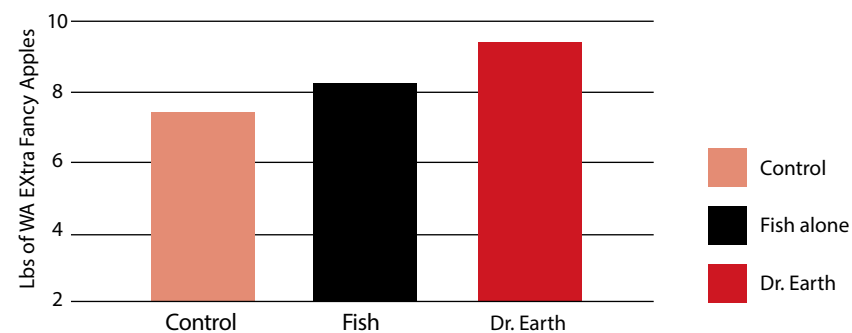


FIGURE 2: YIELD OF WA EXTRA FANCY APPLES



RESULTS:

The study concluded that Dr. Earth® fertilizer had the greatest effect on apple yield. 13% more high grade apples and 8% more weight.

Results: The study block treated with Dr. Earth had the greatest apple yield as well as improved apple quality by producing more premium apples. In Washington state all apples are graded and WA Extra Fancy ranks on the highest level. It was observed that when Dr. Earth liquid fertilizer was applied, apple yield was 8% and 20% greater than with the fish fertilizer and the untreated control, respectively. It was also observed that when using Dr. Earth fertilizer, apple quality improved, resulting in 13% more WA Extra Fancy apples than observed in the fish fertilizer treatment. WA Extra Fancy apples have the highest quality standard for apples in the US and as such demand premium market prices.



FIELD

Dr. Earth® Increased Blueberry Production

Study conducted by:
WISerg® Corporation in Washington.

TRIAL DETAILS

Applications: Soil fertigation system.

Measure: Production of yield, by weight comparing Dr. Earth with fish fertilizer.

Measure: Brix (sugar) value.

Purpose: To determine if the effects of Dr. Earth fertilizer as compared to organic fish fertilizer would increase and improve overall blueberry production and quality which is greatly measured by its Brix content.

Method: Two fertilizer treatments were used to compare blueberry growth on blocks of established Highbush blueberries. Fertilizers were applied at equivalent nitrogen loading rates of 10 lbs. per acre. Applications were split across five dates from May to July. There was also an untreated control block for comparison.

TRIAL



blueberries

FIGURE 1: FERTILIZER EFFECTS ON YIELD

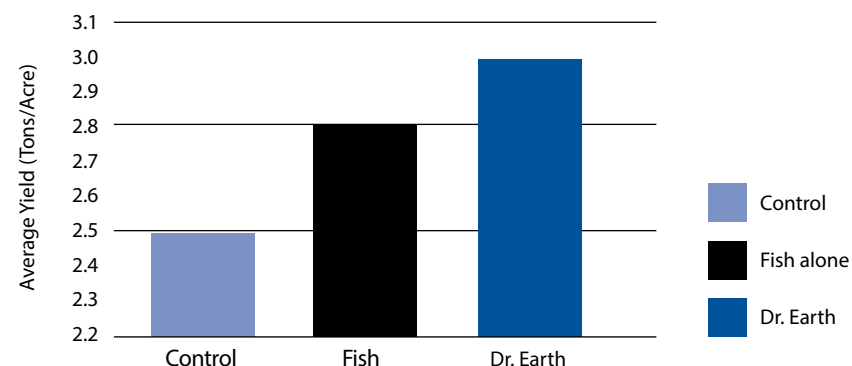
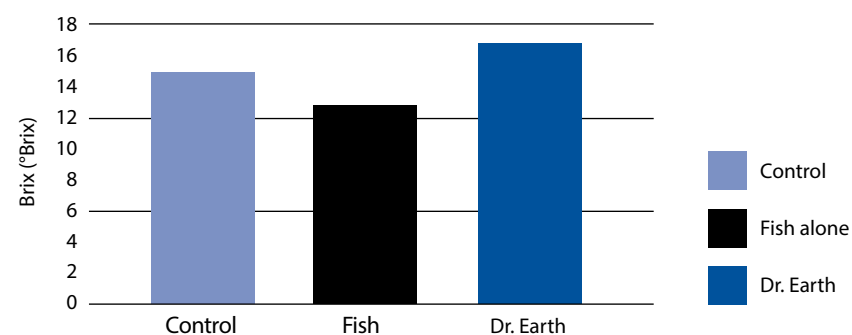


FIGURE 2: FERTILIZER EFFECTS ON BERRY BRIX



RESULTS:

Greater yield in weight and overall production.

Brix level was much higher at the time of harvest.

Results: Trials demonstrated that when the Dr. Earth liquid fertilizer was applied it supported greater blueberry production by weight and Brix content. Results showed that when Dr. Earth was applied, blueberry yield per acre was greater than when compared to the same nitrogen loading rate of fish fertilizer and the untreated control. Additionally, the Brix level was greater at harvest relative to that observed in the fish fertilizer treatment.

The Highest Level[®] because it matters.



The sustainable zero waste cycle matters because it makes a difference in all of our lives. It matters because we need to take action today to make a difference in the lives of those yet to be born.

Highly Micronized for Immediate Bio-Availablity and Plant Root Absorption.

Dr. Earth liquid fertilizers provide a full spectrum of nutrition for the living soil and the plants in it. They are highly micronized for maximum bio-availability. Microbial action and physical digestive break-down are more effectively facilitated because of the microscopic size of the organic particles. The smaller a molecule is reduced to, the more bio-available it becomes, because microbes can immediately digest it, and convert it into a soluble, and usable molecule that “plant root hairs” can identify and absorb, just like how our bodies break-down food in our stomach and digestive system to extract the nutrition from it.

The process of nutrient exchange between plants and liquid solutions in the soil is known as ion exchange or cation exchange capacity (CEC) of the soil. Plant nutrients have a tendency to get mostly adsorbed onto the surfaces of the roots cell walls meristematic regions, which are the actively growing tips of a plants roots (the root hairs). This is how nutrients are mostly absorbed by growing plants. Micronization and bio-availability matter greatly for fast results.

Plant Nutrition from the Supermarket

Plants thrive when fertilized with rich blends of nutrition containing soluble carbon compounds, simple and complex carbohydrates, a full variety of amino, humic, and fulvic acids, in addition to the full spectrum of macro and micro nutrients. The source of nutrition comes from so many different sources in the supermarket that the nutrient content of our liquid fertilizers is very broad by its nature, it may come from kale to carrots, to whole fruits, seafood, poultry and meats in their human grade form, the fillet of fish, the full chicken breast, the whole lobster, lamb chops, all the high quality human grade ingredients that we would pay top dollar for in supermarkets, imagine using such high quality inputs for plant growth. Our fertilizers are the highest quality simply because of the vast bio-diverse ingredients they are derived from. If you have seen it in the supermarket then it's in our fertilizers. We're proud to be GMO free, pathogen-free, and chemical free - which addresses food safety concerns for all growers and gardeners. Dr. Earth has been handcrafted with the highest level of integrity for over 27 years.

University and third-party trials prove that using Dr. Earth organic liquid fertilizers significantly increases crop production, crop yields, crop quality, and greater crop nutritional value. Liquids should never replace feeding the soil with solid organic matter because of its slow and steady release of nutrition and physical soil building properties. A combination of solids and liquids grows the best plants.

“What we eat is the highest level of the sustainability cycle.”

-Milo Lou Shammass, Founder & Formulator



serving a higher purpose



preserving our planet

P.O. BOX 460, Winters, CA 95694

DR. EARTH®

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