LIGHTWEIGHT
SIMPATISTIC,
SUSTAINABLE &
COST EFFICIENT
**Using Conventional Fertilizer**

- Lifeless toxin soil
- Low yield and nutrients
- Unhealthy, flavorless fruits and vegetables
- Increase salinity, lock up nutrients and carbon from plants
- Increase need for pesticides and fungicides
- Lock out water. Toxic to life in soil

**Using MicrobeBio**

- Healthy sustainable soil
- High yield, healthy, flavorful fruits and vegetables
- Neutralize soil salinity, increase nutrient and carbon in soil
- Increase resistance to disease, bug infestation, reduce need for pesticides and fungicides
- Improve soil aeration, water holding capacity and foster symbiotic life
MICROBEBIO® RHIZO ACTIVATOR™

MicrobeBio® Rhizo Activator is an all-natural and organic granular fertilizer that was designed to exclusively stimulate plant root growth. Rhizo Activator is packed full of essential Macro and Micro nutrients that are crucial to superior plant growth, and delivers these nutrients in a form that is consistently available for the plant’s immediate use. Rhizo Activator contains primary and secondary nutrients, along with organic matter with available nitrogen sources, as well as bio-stimulants and advanced biological humic and fulvic acids. This combination of organic and mineral elements establishes the fundamental food sources needed in order to stimulate the colonization of beneficial soil microbes, regardless of the crop or condition of the soil.
Once MicrobeBio® Rhizo Activator is applied to the soil, millions upon millions of these beneficial bacteria and microbes begin to make their way to the plant root zone to develop and form a fully functional extended network of fine filaments that covers over several hundred times more soil area. This establishes and forms a symbiotic relationship, colonizing the plant's root zone and providing it with a greater increase in water and nutrient absorption efficiency. With the increase in the plant’s root mass, this allows for the plant to reach more of the beneficial nutrients and water that would have otherwise been unavailable for use without having used Rhizo Activator. The plant will also show improved drought tolerance and have much lower irrigation requirements. Rhizo Activator will strengthen the entire plant’s root system, allowing the plant to grow stronger, bigger and more vigorous. This leads to generating a higher yield and better protects against pests, disease and unfavorable environmental conditions. Rhizo Activator greatly enhances bio-geochemical processes such as the Carbon Cycle, Nitrogen Cycle, Mineralization, as well as Decomposition. It gives the soil the ability to better hold, convert, stabilize and increase the nitrogen. Rhizo Activator ensures the absorption of the available bio-stimulants and helps to fight the nutrient deterioration in nearby sources of water. This is because our product was designed to break down slowly in conjunction of response produced by the plant, rather than merely dissolving in water. This results in a major reduction of groundwater leaching and excess runoff of nutrients. MicrobeBio Rhizo Activator is an all-around environmentally friendly agricultural product that majorly minimizes nutrient pollution.
MicrobeBio® Nature Foliar is an all organic and all-natural Plant Foliar Fertilizer that was designed and created to better support the Symbiotic Cycle in plants. Nature Foliar is a naturally derived plant growth promoter, which acts specifically as a photosynthesis enhancer. It helps to optimize and prolong the opening of the stomata on the leaves of the plant, which greatly enhances photosynthesis for longer periods of time, leading to a greater crop yield. It increases the rates of cell division, which leads to the development of larger root and shoot mass. When sprayed on the plant during its growth periods,
it activates the secondary messengers to enhance enzymatic activities and increases the BRIX levels within the fruits.

Nature Foliar influences the mineral uptake from the soil and increases the permeability to water solutions. This enhances the plant's overall capacity to retain moisture. Through the biological process of translocation, these nutrients and minerals play a crucial role in better supporting plant development and growth. As Nature Foliar works to increase the efficiency of plant photosynthesis, it turns the glucose and nutrients, along with the complex Carbon Molecules into a useable form of fuel that the plant can then use. The plants uptake nutrients from these sources, they will then thrive and flourish vigorously throughout the entire growing season.

When the photosynthesis process is running smoothly, your crops are building more sugars. A plant will send over 60% of its sugar through the root, an increase in photosynthesis will allow the plant to send more sugar to the rhizosphere, which is the soil surround the roots. These additional sugars, along with the plant’s increase in respiration from photosynthesis will then stimulate more microbial activity within the root zone. The microbes use these sugars to more effectively preform their job of breaking down mineral nutrients for your plant to use. This allows the plant to build more complex compounds, which maximizes yield and greatly increases its resistance to pests and disease.

Nature Foliar has been scientifically proven to promote seed germination which increases both germination rate and germination potential, increasing the flowering number. It also promotes the growth of roots, stems, and leaves. Nature Foliar has been proven to increase crop precocity and improve its quality. It improves the plant’s seed setting rate as well as grain rate. Nature foliar has been shown to promote plant tissue water absorption as well as the absorption of many different essential mineral elements.
MICROBEBIO® HYDRO ACTIVATOR™

MicrobeBio® Hydro Activator is an all organic liquid fertilizer that was designed to promote the fruiting period and dramatically increase the brix levels of produce. Hydro Activator promotes earlier flowering and leads to larger blooms and fruit. Using Hydro Activator will greatly increase the quality of the produce and slow the aging process. MicrobeBio hydro activator is created with more that forty mineral elements, organic proteins and essential amino acids that are made available for plants to uptake during the different stages of growth. It is packed full of the essential Macro and Micronutrients that are crucial for superior plant growth and development. You will see a major improvement in produce quality when using MicrobeBio hydro activator – produce will look fresher, have healthier greener leaves, and will be significantly tastier, and have an increase in storage time.
MICROBEBIO® AQUA ACTIVATOR™

Macronutrients that will lead to superior plant growth and development. It will increase the uptake of the plant nutrients, enhancing its resistance to both diseases and pathogens. It will also aid in better nutrient cycling which...
greatly improves the soil’s structure, maximizing root growth and better retaining soil moisture. Aqua Activator solubilizes minerals and will stabilize nitrogen in the soil. When using Aqua Activator, it greatly enhances the plant’s root system and creates miles of fungal filaments, reducing the amount of water needed. Aqua Activator can be used on any crop, as it works to regenerate the soil’s tilth to make it less dependent on chemical fertilizers and pesticides. It works to increase the plant’s water retention, while detoxing the unwanted and unfavorable elements. MicrobeBio® Aqua Activator better aids in fighting against pests, plant disease as well as harsh or extremely environmental aspects. This product easy to use and is a highly effective economical alternative to the toxic and caustic compounds commonly seen in today’s market.
MicrobeBio® Nature Vigor is all-natural and derived of one hundred percent organic materials. This Soil Amendment was designed and created to break down and increase the organic matter within the soil, all while freeing trapped carbon and other vital nutrients. It consists of numerous beneficial compounds
of microorganisms and bacteria, as well as active carbon molecules to better serve as a nutrient source for the soil’s biology. It also contains humic acids which chelates and facilitates the transfer of nutrients to the plant. Nature Vigor is a plant treatment that was designed for Agriculture and Horticulture purposes, as well as Commercial. You can even use Nature Vigor for your home and garden needs. We consider Nature Vigor a bio-stimulant product, or even called a Pro-Biotic because it introduces many species of beneficial bacteria and microorganisms. This product energizes the pre-existing microbiology of the soil and enhances the stimulation and production of the newly added beneficial microbes. Nature Vigor increases the plant nutrient uptake, which greatly enhances the plants resistance to diseases and pathogens. This leads to an increase in blooms and much bigger fruits that taste better, all while needing less maintenance.
MicrobeBio® Nature Vigor also works to balance the soil’s pH levels and greatly reduce the uptake of sodium, aluminum and other metals that negatively effect plants and buffers the soil with organic biopolymers, thus preventing tie up of nutrients and trace elements. It is packed full of amino acids, which are the very basic building blocks of proteins for plants, while other fertilizers do not contain them. Our sustained microbial formulation is essentially a Super-Humic acid soluble powder providing energy rich matters that increases microbial growth. It allows the soil to gather and retain the nutrients, along with moisture. Through the process of Quorum sensing, our formulation of microbes attaches themselves to the plant’s seeds and roots. This enhances the communication with the plants through the signaling molecules. The microbes improve the soil’s structure by binding the soil particles together. This releases a by-product known as Exo-Polysaccharides (EPS), which essentially acts as a glue-like substance, binding minerals and particles to one another. EPS also improves the soil’s water retention capacity, allowing the plants to better withstand drought like conditions by growing more leaves and longer roots, while using less water.
MicrobeBio has now created a full line of exclusive bio-rationals that regulates and controls those unwanted pests and plant diseases, all while adding intrinsic value and giving peace of mind to the growers. We give a sustainable and safe solution to using harmful chemical alternatives by creating this line that consists of MicrobeBio fungicides and nematicides. As we know, synthetic and chemical pesticides severely damage the environment, the soil, as well as the people who are around them. Many of the synthetic and chemical pesticides can linger in the environment, even long after it has been applied to the soil. Use of these sorts of pesticides completely strip and diminish the soil of any nutrients that would be naturally found. They especially have a negative impact on the surrounding microorganisms that can build healthy soils. Research conducted has consistently shown that the residue of these toxic pesticides leaked into one third of the food produced. This alone can cause extreme health complications when consuming these virulent produce.

MicrobeBio Bio-rationals are derived from all natural sources, and provide superior pest and plant disease control when compared to the chemical or synthetically derived pesticides. Because our products are naturally derived and sustained, they will cause little to no harm, keeping the soil of plants and produce healthy and vigorous. Healthy soil establishes an environment that is rich in fertile grounds that can cultivate the beneficial microorganisms that are essential to the plant. Our Bio-rationals are nontoxic, and are completely safe to use around humans and animals, which greatly reduces the health risk involved when applying chemical pesticides.

Each and every one of our products is all natural and consists entirely of non-toxic elements. Regardless of what sort of insect, fungus, or nematode you are trying to rid your plants of, MicrobeBio products can take care of it harmlessly and efficiently, doing a greater job than any chemical pesticide out there.

You can use MicrobeBio Bio-rational in any environment, with any condition of soil, in any temperature. They do not require refrigerated storage, and have extended shelf life stability. All of MicrobeBio products are extremely user friendly, and are compatible with in-tank mixes.
The Benefits

- Green Fury spores germinate on the surface of insect hosts and penetrate through the cuticle,
- spreading systemically and causing death to the host.
- Green Fury makes toxins that target insect larvae when eaten. Insects die as spores and gut bacteria proliferate in the body.
- No residues and no withholding period after application.

Non-pathogenic bacterium that is found naturally in the soil.
MICROBEBIO® GREEN FURY™

Microbebio® Green Fury™ contains a wide range of advantageous microorganisms brimming with smaller scale living being mix is known to improve and adjust the soil’s environment. These natural improve the proficiency of the plant's digestion and increment plant resilience to physical and organic anxieties while advancing brisk recuperation. It can likewise bolster the general plant's force by improving the viability of supplement assimilation and nutrients uptake. It can break up insoluble minerals and fix nitrogen while improving the plant root development. Green Fury's valuable living beneficial microbes ward off unsafe pathogens and bacteria that attack the rhizosphere. Green Furry makes a protein precious crystal inside the spore that is harmful when devoured by specific bugs. This one of a kind bacterium hinders the arrangement of the bug's stomach that shields it from its own stomach related juices. It infiltrates the bug stomach, which at that point slaughters it through harming of the stomach substance and the spores themselves. Green Furry is harmless to birds, fish, and warm-blooded creatures because of their acidic gut conditions which could nullify the microbes' impact. Water-use proficiency is improved because of expanded natural matter. There is no requirement for exceptional dealing with, this is a profoundly successful, prudent green option in contrast to caustic/harmful mixes. Green fury is recommended to be applied directly to the infected areas to prevent population flare-up. Green Fury parasitic fungi grow naturally in soils throughout the world and cause disease in various insects by acting as a parasitoid. When the insects come in contact with the fungi, the hyphae germinate and penetrate the cuticle. The fungus then develops inside the body, eventually killing the insect after a few days. This lethal effect is aided by the production of insecticidal cyclic peptides, an exudate from the hyphae. The way nature intended as a nature way to balance life.
The Benefits

- Delivers fast, effective control of common pests including aphids, army worm, beetles, caterpillars, fruit flies, mites and thrips and hundreds more with a quick knockdown.
- Made from botanically-derived active ingredient Pyrethrin.
- Naturally breaks down in sunlight. Can be applied the same day fruits and veggies are picked.
- Can be used on most types of fruits & vegetables.
- For use in Certified organic farm, barns, dairies, and poultry houses.
MICROBEBIO® BIORATIONAL X6™

Biorational X6™ is a broad-spectrum insecticide formula that contains natural ingredients for controlling a wide range of common household pests. Biorational X6™ active ingredient is unsynthesized pure pyrethrum; a botanical insecticide derived from chrysanthemum flowers. Biorational X6™ has shown to be effective against ants, roaches, and stored product pests and is safe for use in food and non-food handling establishments.
The Benefits

- Promotes growth and enhances the beneficial bacteria and phosphorus fixing bacteria to reproduce and decompose organic matter, leading to increased amounts of nutrients for the plant’s use.
- Produces inhibitory organic acids, enzymes and other compounds that inhibit the growth of harmful fungi and molds.
-Removes any existing pathogenic binding sites by covering the surface of the plant’s entire root system.
MICROBEBIO® BIOFUNGICIDES X4™

Biofungicide X4 contains the biotype Trichoderma, which better protects against pathogenic plant fungi such as:
- Fusarium oxysporum f.sp.lycopersici
- F. o. f.sp. cubense
- F. o. f.sp. dianthi
- Rhizoctonia solani
- Sclerotium rolfsii
- Sclerotinia sclerotiorum,
- Pythium ultimum,
- Phytophthora infestans
- P. nicotianae.

Biofungicide X4 prevents and controls the colonization of diverse plant pathogens.

Biofungicide X4 consists of our unique blend of diverse beneficial microbes, all of which greatly enhance the soil life. These microbial strains work harmoniously and synergistically together in order to aid in superior plant uptake, enhance the plant’s vigor, and continuous stimulate the microbial and biodiversity within the soil.

Biofungicide X4 contains $2 \times 10^{11}$ total spores per pound ($4 \times 10^{8}$ spores per gram) with over 85% viability to rapidly establish in 24 hours and provide stable long lasting effects, thereby reducing fungicide applications. Typical dose rates are 250 grams per 100 liters of water. Biofungicide X4 does not require additional coadjuvants and does not require refrigeration; can be stored up to a temperature of 60°F (15°C) with a one-year shelf life stability.
The Benefits

- Superior plant uptake, allowing the plant to receive even more nutrients.
- Greatly improved plant vigor.
- Continuously stimulates microbial and bio-diverse activity within the soil.
- Aids in increased drought tolerance.
- Overall increase plant productivity and performance.
MICROBEBIO® BIOFUNGICIDE X5™

MicrobeBio Biofungicide X5 is our latest developed bio-fungicidal product, and can’t be compared to other Bacillus based biofungicides. We have now included hydro-lipophilic balance (HLB) along with the ionic charges of the emulsified concentrated formula, allowing the active ingredient to better reach the site of action, and adheres the plant’s leaf surface and structures. It can then penetrate the foliar mesophyll, resulting in a localized systemic action. Because of this new and improved process, Biofungicide X5 has a much significantly greater efficacy than other products. Biofungicide X5 has a wide spectrum of action against plant pathogens such as:

- Black Sigatoka (Mycosphaerella figiensis)
- Sheath blight of Rice (Rhizoctonia solani)
- Late Blight (Phytopthora infestans)
- Anthracnosis (Colletotrichum gloesporioides)
- Grey Mildew Disease (Ramularia areola)
- Powdery Mildew (Oidium spp.)
- Downy Mildew (Pernospora sparsa)
- Coffee Rust (Hemileia vastatrix).

Also controls bacteria, such as:

- Ralstonia solanacearum that causes Bacterial Wilt
- Burkholderia glumae causing Panicle Blight of Rice
- Black Leg produced by Erwinia carotovora.

Biofungicide X5 contains over fifty of our specialized and unique combinations of beneficial microbes. These microbes work harmoniously together to better the entirely of the plant.
MICROBEBIO®
BIONEMATICIDE X1™

Bionematicides X1 contains the biotype Purpureocillium lilacinum, which controls and regulates many different types of plant pathogenic nematodes, such as:
- Ditylenchus sp.
- Helicotylenchus sp.
- Meloidogyne sp.
- Radopholus sp.
- Pratylenchus sp.
- Rotylenchulus sp.
- Tylenchus sp.

Bionematicide X1 parasitizes all of the reproductive stages of plant pathogenic nematodes, specifically focused on the eggs and females. The under acidic pH conditions produces a toxin that attacks the nervous system of the nematodes and causes deformations and destruction of the ovaries, which reduces egg fertility. This reduces the nematode population, which greatly protects the plant’s root system. By adding this layer of protection, the roots can develop and grow freely into a healthy root system. While Bionematicide X1 rids the plant of pathogenic nematodes, it in turn promotes the reproduction and growth of beneficial nematodes, along with phosphorus and nitrogen fixing microorganisms, allowing the plant to absorb more nutrients by the healthier grown root system.

Bionematicide X1 contains over fifty unique and individualized strains of highly concentrated beneficial microbial spores. These microbes aid in superior nutrient uptake, improve plant vigor, and continuously stimulates microbial and biodiversity activity in the soil. These microbes better a plant’s drought tolerance as well as increase plant performance.

Bionematicides X1 contains a minimum spore concentration of 2 x 10^9 spores per gram with greater than 85% viability. Bionematicides X1 does not require additional coadjutants and its formulation protects the active ingredient from adverse conditions such as pH 2-13 and hard waters of <150 ppm, and can be stored up to a temperature of 68°F (20°C) with a one-year shelf life stability.
100% ORGANIC