



## WHY CHOOSE MICROBEBIO®

In order to develop the very best product line, **MicrobeBio®** was formed by a collective team of top soil microbiologists from around the world, all of whom came together to give their best to this line, in order to formulate our proprietary microbial formula, much like microbes do for their host plant.

Our 2 core beliefs are Sustainable and Regenerative Agriculture, and we have followed the disciplines of both for over 2 decades, developing and refining proven technologies with great passion, and giving those technologies the ‘staying power’ and consistency they need to truly make a difference.

Firmly rooted (pun intended) in the promotion of biological farming, or “microbe farming”, techniques, this philosophy states that plants and their specific microorganisms co-evolved right from the beginning. Thus, in order to thrive and reach their full potential in both growth and production, all plants in a non-native soil must be paired with their familiar microbial partners.

Our core team consists of various experts in the field of microbiology and plant pathology, agronomic consultants and a large, multi-national network of distributors. Together, and with great pride, our team not only creates but also distributes our products and represents **MicrobeBio®** to the world. It is also a point of pride that **MicrobeBio®** products have an efficacy that’s been proven and verified in private laboratories, by extensive university testing and by the accreditation of various 3rd part users. Our affiliates around the globe represent a company with products that greatly improve soil health, and significantly increase plant vigor.

Indeed, for farmers worldwide, the guesswork of trial-and-error has been eliminated when it comes to soil inoculation on a microbial level, as they use our almost 1500 strains of unique, proprietary microbes from our culture laboratory. As we learn from nature, and also our valued partners, **MicrobeBio®** is both honored and humbled to be a cog in the sustainability movement wheel.



## **SIGNIFICANT ADVANCEMENTS IN BIO-PRODUCTS**

Unfortunately, bio-product advancement has slowed to a crawl in the last few decades due to the efficacy of synthetic or chemical products. Also, 3 of the major inoculants being used today were first discovered in the 18th and 19th century, including *Trichoderma* in 1794, *Bacillus Subtilis* in 1872 and, since the early days of the Egyptian empire, *Mycorrhizae*.

At **MicrobeBio®** we're changing this paradigm. With more than 50+ of our proprietary strains are new microbiology discoveries, which scientific breakthroughs have allowed us to combine in a stable form to produce first-of-their-kind products that the agricultural market has never seen before. In fact, no other product anywhere has our unique combination of newly discovered enzymes, hormones, chemicals and strains.

The reason we do what we do, and our starting premise when we began **MicrobeBio®**, is this; in combination, *several different microbes can make a much bigger, better and*

*more effective difference than a single microbe working alone.* With microbes working in tandem, their unique enzymes and chemicals greatly increase terpene levels and, concomitantly, provide an industry staying power and high efficacy that sets **MicrobeBio®** products apart.

## **WHAT MAKES MICROBEBIO® DIFFERENT?**

The difference between **MicrobeBio®** and other products starts with Sustainability and Simplicity. Application of our soil microbe products, which grow and propagate profusely in the soil, is only needed once every crop cycle and, with perennial crops, 1X per every 6 months. Constant applications aren't needed because our products contain no animal digestive system or plant residue microbes, greatly reducing multiple applications and the time, labor and expense that goes with them.

## **SOIL MICROBES**

With more than 50+ unique varieties of soil microbes, our species are meant to grow abundantly from the start, stabilizing themselves and creating huge colonies of beneficial bacteria, fungi and actinomycetes up to 100,000,000 strong in every gram of soil, as opposed to the average of 3,000 to 10,000 per gram of soil for other products.

## **HEALTHY SOIL**

Thick white roots mean one thing; *healthy plants due to healthy soil conditions.* Without them, excellent production simply can't happen, and that's why **MicrobeBio®** products were initially designed (and have a great efficacy) to remedy a wide variety of soil health problems. Once inoculation has occurred with **MicrobeBio®**, you can rest assured that, during the full duration of the crop cycle, plant roots will stay totally white and fibrous.

## **RESISTANCE TO PESTICIDES**

We're proud to say that, because of their rapid propagation of fungi and bacteria into soil aggregates, our products are the first of their kind with a resistance to insecticides, herbicides and non-systemic fungicides. In short, our products grow faster than both natural and/or synthetic elements.

## **THE FULL SPECTRUM NATURAL MINERALS AND TRACE ELEMENTS**

The full spectrum natural minerals and trace elements are discovered for providing the ideal biological life. **MicrobeBio®** demonstrates that soil and crops enhanced with full range natural minerals and trace components develop crops better than those developed exclusively with regular composts.



## WHAT ARE THE MAIN DIFFERENCES BETWEEN OTHER MICROBIAL INOCULANTS AND MICROBEBIO®?

As a whole, our industry has grown disappointed and disillusioned with 'bio products'. The reason is simple; *the evident, and historical, sub-par results and efficacy of current microbial inoculants*. As mentioned earlier, bio-product advancements have mostly been in a "holding pattern" for decades due to synthetic fertilizers, the reliance on microbe strains discovered in the 18th and 19th centuries, and their maddening efficacy of synthetic and/or chemical products.

With the more than 50+ unique strains found in **MicrobeBio®** products (an industry first), growers get better, faster results than with fertilization, with greatly improved results over traditional synthetic fertilizers and nutrient management programs. For example, a 200% increase in root biomass in 30 days, something unheard of and unachievable with any other available product. Our microbes quickly grow in the soil because they aren't derived from plant residue or animal intestines, allowing enzymes and metabolites to form that aren't seen with other products. As we mentioned before, this is because a diverse group of unique and different microbes working together can produce a much higher efficacy level than a single, high quantity group of 1 type of microbe can achieve on its own.

## THE ACTION MODE OF MICROBEBIO®

When **MicrobeBio®** microbes are applied to the soil, they immediately begin to colonize the rhizosphere or 'root zone' of your plants, multiplying at a prodigious rate in the first 48 hours and producing literally trillions of microbes. Within 10 to 15 days any small carbon particles in the rhizosphere will be turned into insoluble, microscopic particles of nutritious humus. It is recommended that carbon be added to the soil as a nutritive, which will combine with the microbes to form a 'biofilm' around the roots. Enzymes, hormones, chemicals and other signaling molecules will be the result of this biofilm, due to the "saprophytes" found in **MicrobeBio®**.

Similar to what earthworms accomplish, saprophytes break down carbon, turning it into nutrient-rich humus at a faster rate, increasing macro and micro-nutrient absorption while using less water, and increasing quality and yield due to higher terpene levels produced from larger, stronger, healthier root masses.

No other product on the market today causes such a rapid formation of terpenes, humus formation and mineralization, as well as root growth and yield increase, than **MicrobeBio®**. This is due to the more than microbes found in our proprietary combination, giving **MicrobeBio®** products efficacy unmatched, even in side-by-side trials.

#### **THE MAIN BENEFITS OF USING MICROBEBIO®**

- Nitrogen Fixation at a Biological Level - Microorganisms assimilate nitrogen in the atmosphere into organic compounds.
- Solubilization of Phosphates - Phosphates bound in the soil are solubilized, allowing plants to more easily uptake them.
- Mineralization and Immobilization - Healthy plant hormones are increased, as well as the storage of soil carbon, greatly increasing nitrate nitrogen availability to plants. This creates a nutrient reservoir plants can access, comprised of organic bio-stimulants in the soil.
- Production of Phytohormones - Using bacteria, **MicrobeBio® Nature Vigor** significantly reduces the salinity of your soil, enhancing it greatly.
- Balancing the pH of your Soil - The organic bio-stimulants found in **MicrobeBio® Nature Vigor** make your soil more porous, even under extreme environmental conditions, allowing for better aeration, infiltration and drainage of the soil. Leaching is also greatly reduced due to buffering of the pH, as well as improving aggregation of soil particles.
- Increased Saprophytic Competence - The microbes in **MicrobeBio® Nature Vigor** are helped by saprophytes, which consume dead and decomposing matter. This allows

**MicrobeBio®** products to perform better as it allows our microbes to better compete with both native soil microbes and other organic bio-stimulants.



#### **THE ADDITIONAL BENEFITS OF USING MICROBEBIO®**

- Increased efficiency of chemical, fertilizers and other amendments
- Yield increase of up to 200%
- Chelation of soil nutrients
- Greatly improved uptake of plant nutrients, including nitrogen, phosphorous and sulfur
- Significant reduction in the need for nitrogen-based fertilizers (Up to 80% and higher)
- Mineral solubilization
- Soil structure is greatly improved
- Biological activity in the soil greatly increased

- Soil is transformed into a reservoir for N, P, S and Zn
- Drought resistance increased and water use decreased due to improved capacity of soil to hold water
- Significant increase in organic matter
- Significant increase carbon level in soil.
- Nutrients bound in the soil are unlocked and released
- pH in alkaline or acidic conditions is better Regulated
- Radiation, heavy metals and other toxins are better remediated
- Nutrient uptake is significantly increased due to chelation, producing healthier crops, a more productive life cycle and better yields.
- BRIX level greatly increased
- Sweetness of fruits greatly increased
- Flower production greatly increased in flowering plants
- Cut flowers stay fresher for a longer period of time

#### BENEFITS OF **MICROBEBIO®**:

- Ability to live harmoniously with native strains
- With new water alone, growth rates increase exponentially
- Health of the soil is dramatically and constantly increased
- Root and plant growth improved dramatically