



# Microbial Supplement for Explosive Flowers, Fruits, & Green Leaves

Mikro-BW contains two exceptional strains of soil microbes – *Bacillus Subtilis & Bacillus Amyloliquefaciens* – carefully cultivated and selected for their strength, resilience, adaptiveness to new environments, and all around effectiveness in diverse growing conditions.

When applied to soil, these beneficial bacteria form colonies around the root system and actively assist plant growth through nitrogen assimilation and conversion of fixed nutrients into readily available forms. Alternatively, when applied to leaves, the Bacillus bacteria form thin bio-coatings that obstruct pathogens.

Bacillus propagation is initiated when they come into contact with organic matter. Mikro-BW contains non-microbial organic matter in addition to microbes such as amino acid, humic acid, fulvic acid, and kelp extract for exactly this purpose. The non-microbial elements serve as a source of nutrition for plants as well as microbes, helping them survive and propagate.

## Precisely How do these Individual Non-Microbial Elements of Mikro-BW Aid Microbes and Plants?

- -Amino Acid (AA): Once absorbed by leaves or soils, the amino acid in Mikro-BW helps plants save the energy required to produce additional AA, allowing plants to focus on photosynthesis. AA is the precursor of IAA (Indoe-3-acetic acid), which engages in plant growth metabolism. AA helps increase photosynthesis, protein synthesis, microbial population, and fruit formation.
- **-Kelp Extract**: Kelp extract is a treasure chest of fully chelated micro-nutrients- nutrients that do not need further processing in order to be readily available and absorbable by plants. It contains growth hormones such as auxins, cytokinins, tetaines, and gibbelerins. Kelp extract boosts growth of larger, fresher, sweeter fruits, and helps increase crop yields.

-Humic/Fulvic Acid: These acids make soils fertile by enhancing CEC (cation exchange capacity), increasing water retention, and binding & releasing insoluble metal ions and carbon dioxide when plants need them for photosynthesis. Iron and magnesium ions are indispensable to photosynthesis and fulvic acid transports these ions from the soil to plant cells through the chelate effect, leading to activation of photosynthesis.

# Versatile & Innovative Application Method

Soil microbes are not commonly applied to non-root areas. Similarly, growth-promoting microbial products are not commonly used in foliar applications. However, extensive research shows that floral and foliar applications of certain soil microbes can significantly increase plant/crop yields, fruit weight, shoot length/diameter, root mass, etc.

Despite this research, most organic fertilizers are designed to use a single application method: either applied directly to soils/growing beds *or* applied to leaves. Just one or the other. However, plants are versatile and absorb nutrients through their roots *and* through their leaves. Effective fertilizers need to cater to this versatility and be designed to be applied in both ways – foliar *and* soil. With this in mind, Microbial Applications has developed Mikro-BW, a microbial supplement that can be applied to soils, leaves, and hydro systems.

Mikro-BW is one the first microbial biofertilizers to target both soils and leaves. Its soil application helps with growth and its foliar application helps deter pests and pathogens. Reduce growing concerns while effectively boosting plant growth with Mikro-BW.



#### **PURPOSE OF PRODUCT**

Mikro-BW is meticulously designed to boost the growth and health of microbial colonies in the rhizosphere. It converts fixed nutrients into readily available forms, thereby increasing the availability of N-P-K and trace minerals for immediate absorption by plants. Combined application with conventional N-P-K fertilizers can accelerate and/or improve outcomes.

#### **DIRECTIONS**

- . Creating the Blend: Shake the Mikro-BW bottle well, then mix with tap or distilled water following the recommended mix ratio.
- Soil Drench: Drench the root area of plants/crops with the blend.
- . Hydroponics: Nourish the plants with the recommended ratio once a week.
- . Foliar Application: Pour the blend into a sprayer, then spray evenly across both sides of plant leaves.
- . Broadcast: When using a hose-end sprayer, pour the Mikro-BW extract (without mixing with water) into the sprayer tank, set the dial to '2 tbsp (1 fl.oz.)/gal', then evenly spray the target area with a steady walking pace.
- . Do not apply under hot, direct sunlight, especially when applying Mikro-BW using Foliar or Broadcast methods.

#### APPLICATION QUANTITY

- . Seed Spray: 0.5 gal/acre, 1-2 applications
- . General Growth: 1 gal/acre, 3-4 applications
- . Crop Yield: 2 gal/acre, 2-3 applications
- . Fruit: 2 gal/acre, 2-3 applications
- . Flower: 5.0 ml/gal of water, 2-3 applications

#### **CONTAINS NON-PLANT FOOD INGREDIENTS**

#### **Active Ingredients**

1.5% ...... Rhizobacteria Spores

Inert Ingredients	
6.0%	Kelp Extract derived from
	ascophyllum nodosum
	(microbe food)
1.0%	Amino Acid (microbe food)
3.0%	Humic Acid derived from
	leonardite
1.5%	Fulvic Acid derived from
	leonardite
87%	Inactive / Water

### **Microorganisms**

60,000,000 cfu/ml... Bacillus Subtilis 60.000,000 cfu/ml... Bacillus Amyloliquefaciens

#### **STORAGE**

Store Mikro-BW (extract or blended) in a fresh and shady area.

#### **CAUTION**

Do not inhale or drink. Avoid direct contact with eyes and skin. KEEP OUT OF REACH OF CHILDREN.

#### **AVAILABLE SIZES**

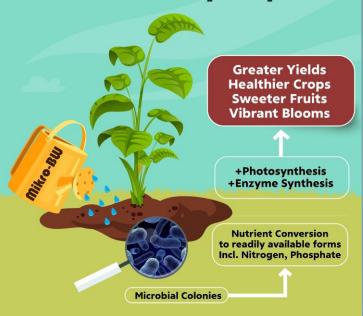
. Twin Neck Bottle: 8oz, 16oz . Jug / Pail : 1 gal., 2.5 gal.



### **Soil Drench / Foliar Spray**



### **Soil Drench / Hydroponics**



### APPLICATION METHODS & THEIR EFFECTS

### ADVANCED COATING **TECHNOLOGY**

**ACT (Advanced Coating** Technology) enables microbes in **Mikro-BW** to stay dormant for longer periods of time even in concentrated solutions with high amounts of nutrition, while increasing the wake-up rate of microbes upon application.

Don't waste any more of your time, energy, and money on microbes that will never wake up or are already dead!

**Advanced Coating Technology** applied to Mikro-BW





Flawed Coating 2

(or Non-Coating)

#### **Upon Application**

