MicroFoliar

Biological Performance on Every Leaf

MicroFoliar is a biologically activated foliar spray developed to support plant health, performance, and stress resilience from the top down. Designed to enhance the phyllosphere—the microbial ecosystem of the leaf surface—MicroFoliar introduces a diverse community of beneficial microbes, fermentation byproducts, and natural organic acids to optimize leaf function and nutrient assimilation.

By improving nutrient uptake, enhancing photosynthesis, and supporting the plant's natural immunity, MicroFoliar strengthens crops through every growth stage, especially under conditions of stress or high nutrient demand.

Key Benefits of MicroFoliar

- ✓ **Enhances Photosynthesis and Leaf Efficiency**
  Promotes higher chlorophyll density and improves leaf-level metabolism, leading to increased light-use efficiency, stronger biomass accumulation, and more vigorous plant growth.
- ✓ **Supports a Healthy Leaf Microbiome**
  Introduces beneficial microbes that rapidly colonize the leaf surface, creating microbial competition that suppresses common foliar pathogens and supports a balanced phyllosphere.

- ✓ **Stimulates Natural Plant Immunity**
  Fermentation-derived metabolites act as biological elicitors, triggering natural defense responses that improve plant resilience against environmental and biological stressors.
- ✓ **Boosts Nutrient Uptake Through Foliar Surfaces**
  Contains fulvic acid and small-chain organic acids that act as natural chelators, increasing the solubility and mobility of minerals and improving nutrient absorption into plant tissues.
- ✓ **Improves Crop Recovery and Stress Tolerance**
  Microbial metabolites and enzymes help modulate oxidative stress and promote metabolic recovery after heat, drought, or mechanical damage.
- ✓ **Clean, Safe, and Compatible**
  Residue-free, bee-safe, and compatible with most low-salt biological foliar inputs, MicroFoliar is suitable for use in conventional, organic, and regenerative cropping systems.

This product is fermented with:

- **Lactobacillus spp.** – Produce lactic acid and antimicrobial peptides that suppress foliar pathogens and create a favourable leaf environment.
- **Photosynthetic Bacteria** – Use sunlight and CO_2 to produce beneficial metabolites and biomass, aiding leaf-level microbial stability and light-use efficiency.
- **Yeasts** – Contribute vitamins and enzymes while building microbial resilience and colonization.
- **Fermentation Metabolites** – A rich mixture of naturally occurring organic acids, amino acids, vitamins, and signalling molecules that stimulate plant responses.
- **Fulvic Acid** – A powerful organic acid that improves foliar nutrient uptake, chelates trace elements, and enhances nutrient mobility within the plant.

Application Guidelines*

Dilution Rate:

- 10–20 mL per 1 L of water (1.0–2.0%)
- Spray to full leaf wetness using boom sprayers, handheld applicators, or aerial misting systems.

Timing:

- Use throughout the crop cycle:
  - Early vegetative growth
  - Pre-flowering
  - Fruit or tuber bulking stages
- Reapply every **7–14 days**, especially following weather stress or during rapid growth phases.

Compatibility:

- Compatible with most low-salt foliar nutrients, biologicals, and soft chemistries. Avoid high-pH or oxidizing agents. Conduct a jar test before tank mixing.

For your specific requirements, please contact your Multikraft specialist.

Where to Use MicroFoliar

MicroFoliar is suited to a wide range of cropping systems where leaf health, nutrient efficiency, and plant resilience are critical to performance. It is especially beneficial in systems where biological inputs are valued, and where crops experience stress from environmental conditions or high production intensity.

Use MicroFoliar in the following production systems:

- **Broadacre Crops**
  Ideal for cereals, legumes, oilseeds, and other row crops during vegetative growth, flowering, or grain fill stages to enhance photosynthesis, nutrient uptake, and resilience under high demand.
- **Vegetables and Herbs**
  Supports leafy greens, brassicas, baby leaf, and herb crops by strengthening the phyllosphere, improving chlorophyll function, and reducing the risk of foliar diseases.
- **Tree Crops and Vines**
  For citrus, avocado, macadamia, grapes, and other perennial crops, MicroFoliar improves canopy function, fruit set, and recovery from stress events such as pruning, drought, or pest pressure.

- **Protected Cropping Systems**
  Including greenhouses, tunnels, and vertical farms where microbial balance and non-residual inputs are critical. Helps improve nutrient delivery in high-intensity, controlled environments.
- **Transplant and Nursery Production**
  Assists young plants and seedlings in establishing robust leaf and shoot development while mitigating transplant shock.
- **Organic and Regenerative Farms**
  Fits seamlessly into programs focused on natural inputs, microbial diversity, and soil-plant system health. A valuable tool for growers seeking to reduce chemical reliance and build system resilience.

Product Specs

- **Pack Sizes:** 20L | 1000L
- **Storage:** Store in a cool, shaded area. Once opened, use within 6–12 months.

Ready to Lead with Leaf Health?

MicroFoliar offers a biologically sophisticated approach to foliar nutrition and plant health. By combining the benefits of microbial colonization, fermentation-derived metabolites, and natural organic acids, it supports enhanced plant function, improved nutrient use efficiency, and greater stress resilience—all without the need for synthetic inputs or chemical residue.

MicroFoliar is ideal for growers seeking a modern, biologically active foliar solution to elevate plant performance from the leaf up.