



Increasing Fruit Brix – with Microbial Help

MetaGrow™ microbe products help increase the brix of berries, grapes and other fruit.

Brix is a measure of the dissolved solids in a liquid (1 degree brix = 1% sugar and other dissolved solids). A relatively high brix indicates a healthy, resilient plant and high-quality produce. Higher brix is particularly valued in fruit – where customers appreciate sweetness and flavor.

How do Microbes Increase Fruit Brix?

- Microbes help plants procure nutrients – as needed. Calcium, Boron, Magnesium, Iron, Manganese and Zinc are particularly important. The timing and balance of nutrient availability is critical to high quality fruit maturation. We have found this is a “Plant Directed and Microbe Delivered” process.
- Microbes produce a great variety of bio-stimulants, metabolites, enzymes, hormones and vitamins. Rather than trying to outsmart the plant and provide specific (expensive) compounds, you can trust microbes to perform these functions. Growers have demonstrated success with integrated biological fertility programs, which provide balanced nutrition and a highly diverse, thriving microbial community.
- These microbial pathways happen both in the soil rhizosphere, and in and on the plant foliage (phyllosphere).
- Microbes support photosynthesis processes. When a plant captures more sunlight and produces more carbohydrates, it sends more of this energy to the soil microbiome via root exudates. In exchange, the microbes provide requested nutrients.
- A healthy soil microbiome also alleviates pressure from pathogens and abiotic stress. This improved plant health enables higher efficiency at procuring nutrients and expressing genetic potential.

Plant Nutrition
Plant Directed and
Microbe Delivered

Recommendation

Apply **MetaGrow 5X+** (or **MetaGrow ST**) broad spectrum microbial inoculants, both to the soil (e.g. drip feeding 50 oz./acre **MetaGrow 5X+** monthly), and by foliar spray. Also apply microbe food – **MetaGrow MFOOD** at 0.4 lbs/acre with each soil application, and other microbial food sources including fish hydrolysate, seaweed, and molasses.