



Why Should I Foliar Feed Biology?

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In the last *Ground Work* we gave some pointers for foliar fertilization regarding what to spray and when to spray it. One of the “what” items was to add our live microbial product **SP-1™** every time you foliar feed.

To fully understand why live microbes are critical to foliar success, let’s review how beneficial biology functions on the plant surface. The plant habitat colonized by the microbes is termed the phyllosphere. These above-ground plant surfaces are colonized by a variety of bacteria, yeasts and fungi. Bacteria are easily the most populous inhabitant.

Carbon sources and nutrients on the leaves feed these microbes. The sources of food come from exudates (mainly sugars and carbohydrates) within the stem and leaves. This relationship is mutually beneficial, just like soil microbes interact with roots and their excretions. By applying a combination of microbes, nutrients, and food sources in a balanced foliar program, you can create the ideal environment for microbial populations in the phyllosphere to thrive and do their job helping your crop.

Using AgriEnergy Resources’ **SP-1™** when foliar feeding accelerates nutrient

cycling into the plant. Some suspension fertilizers are not 100% plant available. Breaking them down microbially may allow more of the nutrients to be absorbed through the leaf tissues.

It is also beneficial to include **SP-1™** in foliar products which are true solutions. Here the organisms can buffer salts, acidity, or ammonium, making the foliar recipe "safer" and more effective over a wider range of environmental conditions.

A question that is often asked is "If I'm doing multiple foliars, do I need to include **SP-1™** every time?" Our answer is "Yes, as often as possible". The reality for organisms on a plant leaf or stem is that they live in a very volatile environment. Extremes of temperature and moisture are constantly occurring which can affect the microbial population with rapid swings on a weekly basis. An intentional foliar plan to reinoculate with microbes several times over the growing season can prolong beneficial microbial activity by smoothing out these peaks and valleys.

To summarize, these are some of the benefits when including **SP-1™** in foliar feeding programs:

- Increase colonization of your crop with beneficial microbes
- Increase mutually beneficial interactions between microbes and your plants
- Accelerate nutrient cycling
- Make foliar nutrient recipes "safer"
- Maintain beneficial microbial populations
- ***Improve your bottom line!***

*If you grow fruit or vegetables that may be consumed raw, please discontinue the use of live microbes, such as **SP-1™**, four weeks before harvest.*