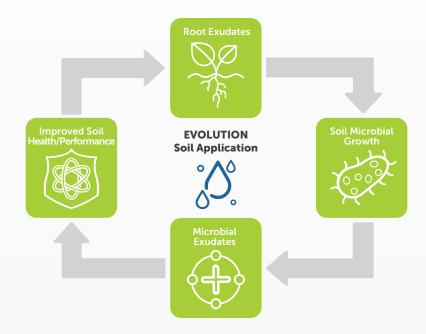




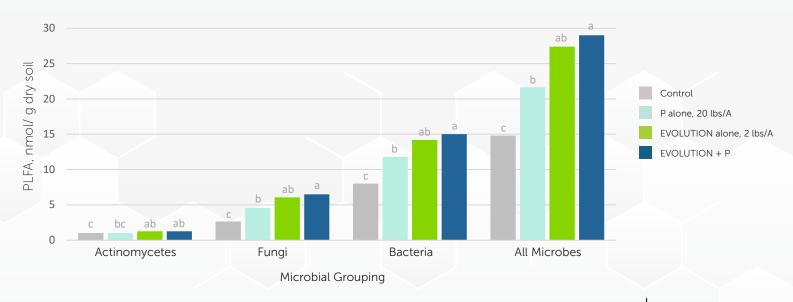
# **Proven to Improve Overall Soil Health**

**EVOLUTION**® enhances native soil microbial activity and improves CEC and water holding capacity to improve the soil health and performance for your crop. This results in plant and root stimulation effects that lead to more root growth, finer root hairs, increased root exudates, and improved mineralization of carbon and nutrients in the root zone. **EVOLUTION**'s positive effects have been proven by replicated science and in field results for over 35 years.



## Stimulates the Activity of Various Soil Microbial Groups

Phospholipids (a part of the cell membrane in all microbes) were measured by a third party to identify the effect of **EVOLUTION** on different soil microbial groups. More phospholipids indicates a higher amount of microbes in the soil.





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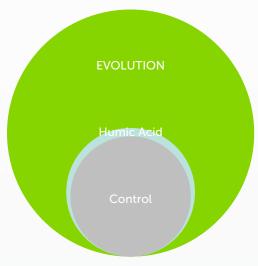


### **Enhances Production of Beneficial Microbial Exudates**

in the Soil Extracellular Enzymes

By stimulating microbial growth, **EVOLUTION** has the effect of stimulating microbial enzyme production and other by-products of microbial growth. The sum of all these activities has a positive impact on soil health, which in turn benefits crop production.

#### **Production of NAG in Soil Study**



N-acetylglucosaminidase (NAG) is an extracellular enzyme produced by various microbes and contributes to the decomposition of cellulose. NAG levels can be an effective measurement of overall soil health.

Activity of NAG, as affected by treatments at Illinois site at 7 DAA. Data are mean ± standard error (n=4).

### **Increases Mineralizable Carbon**

In replicated studies, **EVOLUTION** had the effect of increasing mineralizable carbon. Mineralization is the transformation of carbon from an organic to inorganic form (usually  $CO_2$ ), which is the carbon pool that can be utilized by soil microbes. The increase of this pool indicates a healthy soil with a healthy microbial community.

#### Effect of EVOLUTION on Soil Carbon Pool



Study conducted in Paso Robles, CA, over a four year period.

### Increases Yield through Soil Health

Effect of EVOLUTION on Wine Grape Yield Average Over Four Years



Study conducted in Paso Robles, CA, over a four year period.





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