

## **Holiday Notice**

We are thankful for another fruitful year and for having all of you as our customers. We send holiday greetings to you and yours, and say a prayer for safe travels and warm family time together.

The SoilBiotics offices will close at 1 p.m. on Wednesday, November 24 and be closed Thursday and Friday, November 25 and 26.

## **Still Time to Save!**

You can save on inputs next spring by applying **Soil Boost** this fall. **Soil Boost** can help reduce the amount of applied nutrient needed by chelating existing soil nutrients, making them more available to plants next spring. With fertilizer at all-time highs, this just makes financial sense, plus it helps overall soil health.

<u>Now through the end of day, November 30, 2021</u>, we are offering a special Fall discount of 5% off any order for Soil Boost, regardless of order size. No other discounts apply to this special offer. Soil Boost is available in 50 lb. bags or 1-ton bulk bags.

**Don't Miss This Opportunity!** 

## This Month's Humic Feature

## **Breaking It Down - Chelation**

The application of humic substance is known to effect soil chemical reactions. These groups of complex organic acids have been proven to be involved in three specific chemical reactions. (1) Electrostatic (columbic) attraction (2) Complex formation or chelation, and (3) water bridging.

**Electrically charged** sites on humic substances function to dissolve and bind trace minerals. This is termed chelation. **Chelation of plant micronutrients** such as iron, copper, zinc, magnesium and calcium reduce toxicity, prevent leaching, and increase the uptake rate by plant roots. The chelation process also increases the mass flow of micronutrient mineral elements to the roots.

**Water bridging** is an important function of humic and fulvic acids. Water bridging improves the mobility of macronutrients (NPK) through the soil solution to the root. The humic substances will grab and hold onto the newly applied fertilizer just as it frees up minerals already in the soil.