Three Pillars of Sustainable Agriculture By Bio S.I. Technology

Bio S.I. will be presenting at the World Ag Expo on February 12th at 1:45PM in the Seminar Center

Justin, TX (January, 2015) – Soil is the foundation upon which the nation’s entire agricultural and economic system has been built. Soil life is the cement that holds the pillars of sustainability; environmental, economic, and social in place. In order to keep these pillars from falling special attention to and scientific understanding of the soil life must be applied to find the solutions to food security concerns. Healthy soil is host to essential nutrients and microbes that if not replenished season to season, will continue to degrade the quality of crops, and threaten the long-term viability of the land. The Three Pillars of Sustainable Agriculture is a program developed by the soil experts at Bio S.I. Technology (www.biositechnology.com) and is the topic of the seminar taking place at the World Ag Expo’s Seminar Center in Tulare, CA on February 12th at 1:45PM.

Agricultural practices based on non-conservative tillage and over-reliance of pesticides has a devastating effect on soil life and water quality. The three pillars of sustainable agriculture relate to:

- The factors that effect the economic sustainability of a company’s business model such as using efficient inputs which generate a greater return on investment
- The effect farming and conservation practices have on social sustainability and public opinion
- How agricultural practices effect environmental sustainability

Many producers understand that aspiring to be sustainable is a worthy endeavor, but many find it initially, economically challenging. As an agricultural operation becomes more socially sustainable and its practices are held in high regard does not necessarily mean that the farm is economically sustainable. A balance must be reached by using the pillars as a guide. By understanding how soil microbes can help our crops become more efficient we can begin to realize the value of inputs. Eventually producers may be able to reduce inputs so much as to become truly sustainable. Many farmers are practicing clean till farming year round with no cover or soil building crops which usually play a critical role in keeping nutrient levels at a baseline. By leaving little to no plant debris behind, carbon is not properly restored to the soil and the top layer is exposed to harmful wind and weather erosion. Over time, mishandled soil will lose the ability to support plant growth.

“Our presentation at the World Ag Expo will focus on how soil microbes support the three pillars of sustainable agriculture,” says Bio S.I.’s Director of Education Outreach and Field Services, Brandon Boughen, “Diverse soil life is the foundation upon which we can achieve environmental, social and
economic sustainability. This is critically important to the agricultural community as they continue to deal with water availability and carbon sequestration.”

The Bio S.I. seminar will present the science of how soil microbes interact with nutrients in the soil to produce the necessary conditions to sustain healthy tilth and produce superior crops. Additionally, demonstrations of before and after crop results will show how the soil microbes consume enzymes from the plant and in turn produce nutrients for the plant to reabsorb. The relationship between microbes and plants also work to build a root layer that improves water retention and soil ingestion; as humus, created from microbes naturally digesting organic matter, is advantageous to root penetration and development\(^1\).

“This is the process of what nature intended,” says Bio S.I. CEO, Wayne Tucker. “We’re simply using science and years of hands on experience to restore the natural process of recycling nutrients that have been removed from the soil over the last 80-100 years. Our seminar is designed to help various types of crop management from fruits to nuts, grasses and vegetables. It will provide tested data that shows consistent increases in yield and viability.” As we learn more about how microbes interact with the soil on behalf of the plants, the more likely we’ll be to safeguard our food supply far into the future.”

Bio S.I’s knowledge of soil management and understanding sustainable practices will give attendees insight and tools to rebuild the soil humus (carbon), restore soil tilth, and renew microbial diversity naturally and cost effectively. The seminar will provide hand-outs with further educational details.

**About Bio S.I. Technology**

Bio S.I. Technology, LLC is a USDA BioPreferred™ member comprised of a team of experts with decades of experience producing microbial products. Bio S.I produces a full range of microbial inoculants including Bio S.I. Lawn & Garden Formula, Septic Cleanser Formula, Remediation Formula and Jackpot I & II, new all-natural probiotic products formulated to bring beneficial soil borne microbes inside the digestive tracts of livestock and equine. Bio S.I. products can be found at Farm Supply, on line and through a network of distributors around the US. For more information about Bio S.I. Technology, or to purchase their effective formulas, please visit [www.biositechnology.com](http://www.biositechnology.com).

If you would like further information, images, or to schedule an interview with Wayne Tucker or Brandon Boughen, of Bio S.I. Technology, please contact Kevin Oaks at koaks@christiecomm.com or by phone at 805-969-3744.

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\(^1\) [http://www.soilhealth.see.uwa.edu.au/components/fungi](http://www.soilhealth.see.uwa.edu.au/components/fungi)