JABB OF THE CAROLINAS

Symbiont Beauveria bassiana

SBb 2.5

Seed Inoculant

Biological Seed Inoculant

SBb 2.5 utilizes a natural, **symbiotic fungus, *Beauveria bassiana*,** that lives in the **soil**, **roots**, **stems**, and **leaves**. JABB strains are isolated from plants, for plants. Once plants are inoculated with **SBb 2.5**, a symbiotic relationship begins immediately as the plant grows, extending colonies throughout the plant.

SBb 2.5 is applied at planting with no target disease or insect specified. There is no singular mode of action, rather a response to plant activity favoring its host. Upon germination, **SBb 2.5** is activated and trans-locates via the xylem and phloem forming an integrated network that works with plant cells, other beneficial organisms, and the environment. This symbiotic partnership elevates the plant's natural ability to resist pathogens and seasonal stressors, which reduces necessity of single chemical solutions that can harm other beneficial living residents.

Direct contact with seed is preferred to assure plant entry at germination. Applied on, under, or atop of seed allows **SBb 2.5** competitive preference to initial plant roots where *Beauveria bassiana* becomes a **premier symbiotic endophyte** within the plant.

As an endophyte:

- Inhibits soil borne plant pathogens
- Improves nutrient uptake as the rhizophagy cycle is optimized
- Offers competitive exclusion from soil-borne pathogens
- Increases uniform germination and stand
- Enhances microbial diversity
- Higher plant immune status
- Increases Brix values for more photosynthesis
- Increases chlorophyll
- Enhances plant defense
- Improves standability
- Improves quality at harvest
- Improves storage
- Decreases mycotoxins at harvest
    - Trials from 2016-2021 indicate treated crops have sub-threshold levels of aflatoxin, vomitoxin, and fumonisin compared to untreated crops.

SBb 2.5 – Inoculant

For production of corn, soybeans, wheat, forages, tuber, vegetable crops, and ornamentals

Promotes plant and soil health among other beneficial microbes

Active Ingredient: 1% Beauveria bassiana

Ingredients: soybean oil and adjuvant, 99% total 100%.

NOTE: store below 90° F and avoid overexposure to sunlight

SBb 2.5 Inoculant with seed lubricant

For production of corn, soybeans, wheat, forages, tuber, and vegetable crops

SBb 2.5 contains a beneficial microbial that forms an essential symbiotic relationship enhancing plants and soil when established early in plant growth. Active Ingredient Beauveria bassiana .5 %

1 acre treatment of SBb 2.5 -- 2 ounces of 80/20 seed lubricant (mineral talc and graphite)

NOTE: store in a facility that is below 90° F

Produced by Jabb of the Carolinas
302 E Brown St., Pine Level, NC 27568
www.jabbspe.com

Application Rates

For best results, apply in direct contact with seed.

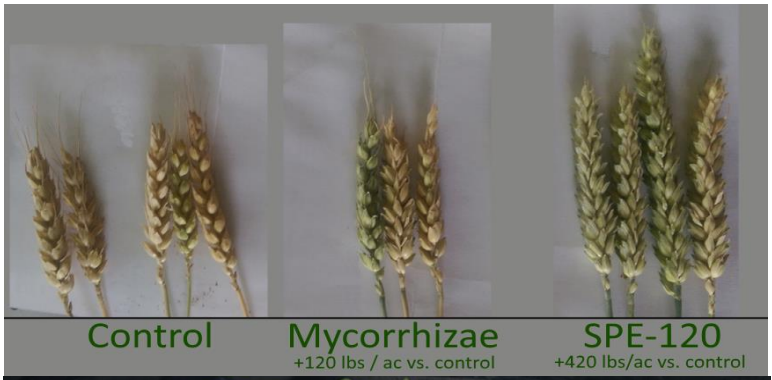
SBb 2.5 Liquid Inoculant:
Apply 1 oz/acre

SBb 2.5 Inoculant with seed lubricant:
Apply 2 oz/acre of 80/20 seed lubricant (mineral talc and graphite)

For organic crop production please review SPE-120.

Functionality

B. bassiana was found in abundance in native prairies to woodlands, however, was altered by migration of man in a quest for food. Ecologically, the partnership of plant and *B. bassiana*, like other special relationships, was threatened by cultural practices. Tillage, alteration of species, and chemical solutions, offered removing crop impairments, and unfortunately, beneficial organisms. Without the host plant, organisms like *B. bassiana* are exposed and unprotected in the environment, becoming vulnerable toward extinction.



Plants evolved with endophytes, and their presence is necessary for plants to thrive. The symbiotic relationship between *B. bassiana* and plants formed millions of years ago. JABB brings the technology wilderness skillfully perfected to a biological restoration period in food production. **SBb 2.5** acts as a primer for other beneficial soil organisms to return by affording the valued crop its partner helping the plant to mitigate pathogens and seasonal stressors. Current practices offer singular chemistry for targeted solutions. **SBb 2.5** offers biological restoration for a longer, more sustainable solution. The biochemicals produced by plant host and symbiont must be compatible for both to survive; beneficial for both to thrive. By reducing suppressive practices, organisms favorable for soil health will return. **SBb 2.5 inoculate** assures symbiosis presence within its host for sustainability of soil health allowing crops to reach full potential.

Beneficial organisms in our cropping system and food chain, can greatly reduce the likelihood of harmful toxins, ie. mycotoxins. Thus, longevity of stored products improves without additional cost. Animals fed harvested grains produced from inoculated crops do better. Fewer internal disturbances mean healthier livestock. **SBb 2.5** offers the foods community, regardless of farm size, the right technology for seed, crop, soils, environment, and safety.

SBb 2.5 symbiosis within the plant permits a natural progression of other desirable soil organisms.

No other natural inoculate offers its living host the diversity of compatible metabolites utilized throughout the plant more efficiently for health, immunity, and vigor.

JABB
OF THE CAROLINAS

SPE-120
Soil and Plant Enhancer

SBb2.5
Seed Innoculant

Manufacture by JABB of the Carolinas, 302 E. Brown St, Pine Level, North Carolina 27568 JABBSPE.com