

# AGRICULTURAL TREATMENTS



## CASE HISTORY

# Field Test of SOIL-BAC™ and ORGANIC PLUS™



### DATE

Summer 2018

### LOCATION

Kumamoto Prefecture, Japan

### CORTEC®/BIONETIX® REPRESENTATIVE

Far East International Inc.

### CUSTOMER

Soybean Farmer

### PRODUCT

SOIL-BAC™

ORGANIC PLUS™

### PROBLEM

A farmer with approximately 12 acres of fields planted soybeans and potherb mustard in two crops per year. Two crops in one season put great stress on the soil. This continuous stress resulted in a production rate of only about 30 percent for all fields.

### APPLICATION

A half-acre of one particularly impaired field was chosen for the test. A trial of SOIL-BAC™ and ORGANIC PLUS™ started on this part in the spring to see if it would be possible to suppress replant failure. Special attention was paid to the changes in soil structure and oxygen, as well as to the natural mineral deficiencies that were thought to have been caused by excessive fertilizers and pesticides applications. In mid-June, 1.3 liters of ORGANIC PLUS™ and 1 kg of SOIL-BAC™ were applied per 0.25 acre in the test field.





## CONCLUSION

As a result of product applications, soil structure in the test zone changed to more stable and finer aggregates (soil bag analysis). Changes in soil structure resulted in a higher oxygen content of the soil. ORGANIC PLUS™ also promoted the immunity of the crops and the growth of useful soil microorganisms. No mold-like microorganisms were growing on the test field. There were fewer weeds, and these could be easily pulled out due to soil structure improvement.

By August 30<sup>th</sup>, there was no trouble with soybean growth in the test zone. The germination rate was extremely good despite abnormally high outside temperatures. Growth was normal with no hindrances.

Because of excessive drought as well as soybean blight in other fields, roughly 7 acres of soybeans were destroyed outside the test zone. These soybeans withered, with a replant failure of approximately 40 percent. Considering this devastating result, it was remarkable that there was no trouble with growth and that the soybeans did not wither in the same environment in the test zone.

The farmer(s) also noted that when using SOIL-BAC™ and ORGANIC PLUS™, the number of buds and nodes was higher than in the untested area. The highest replant failure in the non-trial area led to 60 percent of the production amount being discarded in one field, causing the farmer to be very surprised by the efficacy of SOIL-BAC™ and ORGANIC PLUS™ in the test areas. The final yield in the area tested with SOIL-BAC™ and ORGANIC PLUS™ was 100 percent.