



## Washington State, USA Blueberry Farm

A 15-acre blueberry farm in central Washington State was treated for bush yellowing and the die off of plants. Salt was the culprit for these issues. Compost was the main source of salt while agricultural chemicals also contributed. Total soluble salts of soil samples ranged from 900-1,600 ppm prior to treatment. The blueberries are irrigated by drip and overhead spray.

#### **Basis of Treatment**

**ByoSoil**® products include a unique blend of a number of components designed to correct soil problems and provide basic nutrient requirements of plants and crops. The primary ingredients include a proprietary humic acid extract, a blend of N-P-K nutrients, essential soil microbes, and **ByoGon**® − a proprietary microbial biostimulant.

The product is scientifically designed to restore and maintain naturally beneficial microbial colonies in multiple soil environments. **ByoSoil**® is engineered with nine enhanced plant beneficial soil microbes and is assimilated by plants on a cellular level. This advanced formulas increases natural biological activity, detoxifies soil from contaminants, accelerates root development for critical nutrient storage, protects against pathogenic diseases, and transports valuable nutrients from the soil into the cell membrane of the plant.

**ByoSoil**® contains an advanced biostimulant (4% v/v) (Byo-Gon) alkaloid compound that is derived from plant extracts, primarily aloe vera and kelp. This patented component provides for microbial stimulation that functions at a subenzymatic level – naturally increasing biological activity and facilitating beneficial microbial outcomes.



### **Treatment**

Both *ByoSoil*® 200 and 100 were used for this application. Three applications were done during the summer 2011.

- 1. The 1<sup>st</sup> application was done in early May 2011 **ByoSoil**® 200 at 2.5 gallons/acre.
- 2. The 2<sup>nd</sup> application was done in mid July 2011 a combination of **ByoSoil**® 200 and 100 was used to spot treat smaller, yellow bushes.
- 3. The 3<sup>rd</sup> application was done in early August 2011 a combination of **ByoSoil**® 200 and 100 were used at a rate of 1.5 gallons/acre for the 200 and 0.5 gallons/acre for the 100.

The total cost of the **ByoSoil**® application for the summer was ~\$1,300.

### **Product Results**

- No die off of any blueberry brushes during the 2011 summer expected to loss 200 plants.
- Prior to treatment, leaf yellowing was common with 80% of the bushes early in the growing season. After the *ByoSoil*® application, leaf yellowing was eliminated.
- The farm hired an agricultural consultant during the 2010 summer multiple tests were run with nutrients and mineral supplements with minimal success.
- The farmer has repeatedly commented that since **ByoSoil**® the bushes have a "vigor" of growth.

# **Summary**

The farmer has seen a significant impact with the *ByoSoil*®. The health of his bushes has dramatically improved. An order for 200-300 new bushes was cancelled in mid summer because of the turnaround in plant growth. His path forward is to continue with the *ByoSoil*® on the blueberries but experiment with it on his other crops (apples and grapes).