

# **Helping a Blueberry Farm in Washington State**

A 15-acre blueberry farm in central Washington State was treated for bush yellowing and plant die-off. The farm hired an agricultural consultant during the previous summer to address the problems. Multiple tests were run with nutrients and mineral supplements with minimal success.

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 were irrigated by drip and overhead spray.

#### **Basis of Treatment**

ByoGrow products include a unique blend of components designed to correct soil problems and provide basic nutrient requirements of plants and crops. The primary ingredients in ByoGrow include a proprietary humic acid extract, essential soil microbes, and a proprietary microbial biostimulant. ByoGrow NPK also contains a blend of N-P-K nutrients. For excessively salty soil, ByoDetox is used to bind salt first and then allow ByoGrow to more effectively work.

ByoGrow is scientifically designed to restore and maintain naturally beneficial microbial colonies in multiple soil environments. This advanced formula 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. ByoGrow also contains an advanced biostimulant alkaloid compound 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 *ByoDetox* and *ByoGrow* were used for this application. Three applications were done during the summer.

- 1. The 1<sup>st</sup> application was in early May with *ByoDetox* at 2.5 gallons/acre.
- 2. The 2<sup>nd</sup> application was in mid-July with a combination of *ByoDetox* and *ByoGrow* was used to spot treat smaller, yellow bushes.
- 3. The 3<sup>rd</sup> application was done in early August with a combination of *ByoDetox* and *ByoGrow* were used at a rate of 1.5 gallons/acre and 0.5 gallons/acre, respectively.

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

#### Results

- No die-off of any blueberry brushes during the 2011 summer (had expected to lose 200 plants).
- Prior to treatment, leaf yellowing was common with 80% of the bushes early in the growing season. After the *ByoGrow* application, leaf yellowing was eliminated.
- The farmer has repeatedly commented that since ByoGrow the bushes have a "vigor" of growth.

## **Summary**

The farmer has seen a significant impact with *ByoGrow*. 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 *ByoGrow* on the blueberries but experiment with it on his other crops (apples and grapes).