

## **Demonstration Update**

# Improving Quality and Quantity of Yield in Walnut Production

**Crop/Variety:** Chandler Walnuts

**Location:** Durham, CA (2014)

**Investigator:** Anthony Duttle, Product Development

Representative, Aquatrols

#### Objective

Demonstrate the effects of WaterMaxx2 on improving water infiltration, distribution, retention on the growth and production of walnuts.

### Set Up

This is the second year of a four year study initiated in 2013 on a 12 year old grove. The grove is irrigated with impact sprinklers. Water quality is generally good but can vary slightly with the source. The soil is a clay loam with a heavy clay sub-layer, with a soil pH of 7.1. The grove is bordered by rice fields on two sides and has typically been affected by subsoil moisture saturation when the rice is flooded. The total yield was collected from each treatment block, then processed and evaluated for yield and quality.

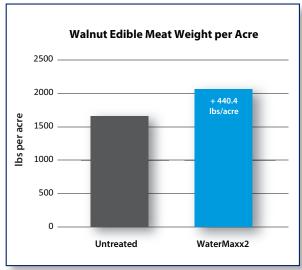
#### **Application**

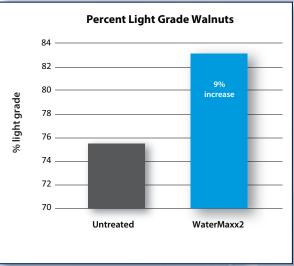
WaterMaxx2 was applied at two quarts per acre on April 14, 2014, followed by 4 applications of one quart at monthly intervals.

#### Results

By improving the infiltration, distribution and retention of moisture in the soil profile, WaterMaxx2 positively impacted the growing environment and yield in 2014. The WaterMaxx2 treated block had an increase of 440 pounds per acre, or 18%, in edible meat weights over the untreated plots based on commercial harvest data. WaterMaxx2 also improved the quality of the crop by providing a 9% increase in color grade from amber lights to light.

Improving the growing environment improved the quantity and quality of yield in 2014. At \$2.05 per pound for edible meat weight, a yield increase of 440 lbs resulted in an increase of \$902 on a \$60 per acre investment of WaterMaxx2. WaterMaxx2 also improved the grower's bottom line.





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Results may vary depending upon soil, climate and other conditions.

