



Double M Orchards Internship

Quincy, Washington
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Summer 2014

Introduction

During the summer of 2014, I worked with Double M Orchards in growing and producing ~650 acres of apples and cherries. My responsibilities throughout this process were to: monitor various tests on the orchard, develop crop profiles for various blocks over time, develop an effective system for crop load estimation in various cherry varieties, and develop a holistic understanding of all factors required to operate an orchard effectively.



Extenday trial to measure if increases in yield and harvest date timing were significant enough to justify costs



Shade Cloth trial in Honeycrisp in order to measure reduction in sunburn



Helicopters used to remove rainfall from cherries to prevent bursting, used alongside trial to measure efficacy of Parka and Rainguard

Responsibilities

Above is a picture of my desk while out in the orchard taking samples of this years growth to monitor the efficacy of various fungicides in the control of Powdery Mildew. Pictured below is an example of the powdery mildew we were looking to eliminate, commonly found in the most recent year of growth in the inner canopy of the tree.



Depicted below are the two types of sprayers that were under examination during my internship. We sought to measure the efficacy of a new Electrostatic Sprayer in comparison to our conventionally used spray applicators in the orchard. The Electrostatic Sprayer was unique in that it runs an electrical charge through the spray which increases the adhesive properties of the spray and decreases droplet size. Our goal was to observe whether this new applicator had greater spray efficacy using different types of sprays, if it reduced management costs, and if it would improve orchard management practices.

Electrostatic Sprayer



Conventional Sprayer



Summary

My experience at this orchard was an excellent introduction towards my career path of orchard management. Without having any prior experience with working in an orchard setting, this internship was an excellent way to explore the responsibilities required of an individual that is interested in this career. We experienced several challenges that depicted how challenging operating an orchard can be if environmental conditions are not entirely favorable. This internship also translated some of the ideas taught at WSU and also gave me valuable life experience that could not readily be taught in the classroom. I would like to thank everyone at Double M Orchards for a wonderful internship and all of the valuable information that I was able to take away from this experience.