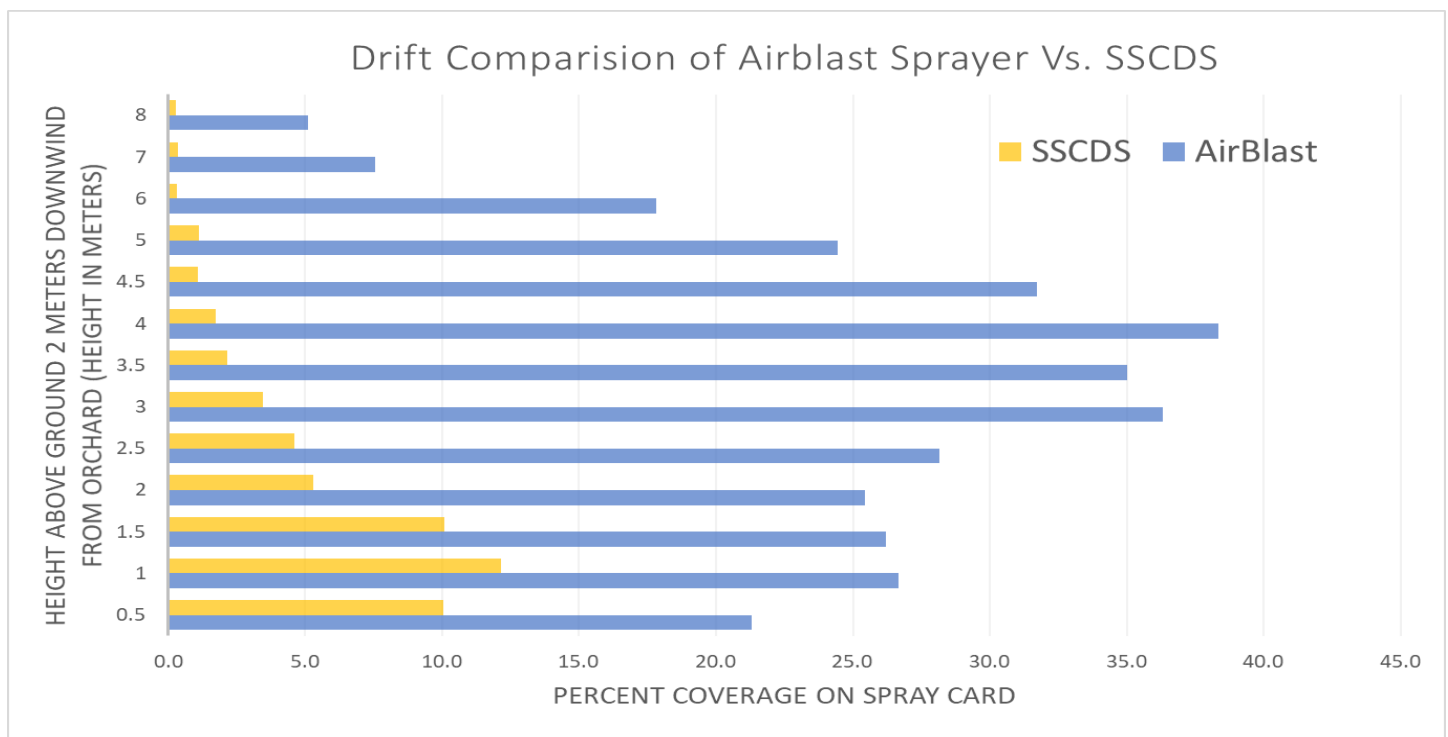


Spray Drift Post:

Exciting news from the SSCDS research team! We have finished collecting data for the first ever spray drift study using a solid set delivery system. With the help from Mark Ledebuhr of Application Insight, we were able to collect data from the SSCDS system and compare it to an air blast sprayer. In order to conduct this study, an SSCDS system was installed on the four outer rows of the research orchard adjacent to a large empty field to allow for the spray to be carried downwind from the intended targets. These rows are Honeycrisp trees trained to slender spindle with an average height of 2.5 meters. These rows were chosen because of the small stature of the tree and small canopy volume. In addition to the location, the applications were made on days when the environmental conditions would simulate a risky drift situation. In order to collect samples four drift poles were set up two meters downwind from the dripline of the outer most row of the orchard (as seen in the photo below).



These poles were used to collect chemical samples every half meter up to eight meters in the air (roughly 24 feet). At the time of the application the SSCDS system was run at the same rate per acre as the air blast sprayer (roughly 70 gallons per acre). Water sensitive papers were also placed every half meter from the ground up to 8 meters. This setup was used in all of the replications collected in the field. The graph below shows the preliminary data collected from this experiment.



Take Home Message: SSCDS coverage was reduced twofold at heights of 0.5 – 1.5 meters and 10-15 fold at 2-8 meters, compared to the airblast sprayer. Note that the increase in drift found above 2.5 meters using the air blast sprayer is spray applied above the tallest apple trees in the planting meaning that it is all drift. More information from this study will be coming in the next few months.