Introduction: As a hop scout for G.S. Long during the 2018 growing season I had the responsibilities of scouting hop yards for pests and disease and providing reports to the crop consultant and the farmers we worked for. These reports were used to determine if action was warranted in a specific yard. Each week our hop scouting team worked through roughly 7,000 acres of both conventional and organically grown hops. Scouts are also responsible for care of both a company truck and ATV that see everyday use.

Above shows the bottom of a hop leaf with low levels of Two spotted spider mites; one of the most concerning hop pests. Most management options for spider mites consist of chemical sprays but the lack of available chemistries has led to resistant populations and poor chemical efficacy. We saw mite populations increase as temperatures began to reach 90 degrees consistently. Due to the lack of efficacy of mite sprays the team relied heavily on predator populations to help manage mite populations. The most common mite predators seen were Whirly gig mites, Sethorus and Typhlodromus mites.

Left: This is a hop plant infected with powdery mildew. Downy mildew shows up as black spores on the bottom of leaves, it can leave the plant stunted and discolored and in some cases the infection can work its way up the bine and infect hop cones. Curative coppers were typically used to manage downy after the initial infection.

Left: This is a hop leaf infected with powdery mildew. Some varieties are more susceptible to mildew than others CTZ for example is typically the worst. It is common to see preventative sprays of elemental sulfur in the early season in anticipation of powdery mildew.

Summary: This summer helped me gain a basic understanding of the relationship between growers and crop consultants and how IPM principles come into play in the agricultural industry. I hope to be employed as a consultant in the future and I think my experience this summer gave me a strong foundation of knowledge in which to use to move forward. I found it particularly valuable to be able to present reports directly to growers and hear their feedback concerning both pest management and their overall thoughts on factors such as spray timings and fertigation. It was also very beneficial to be able to work directly under a crop consultant with over 20 years of experience, if there was ever a question I needed answered my supervisor was always very willing to help. The people at GSL pride themselves on continuing education for both themselves and new hires. I think the experience I gained this summer will prove very