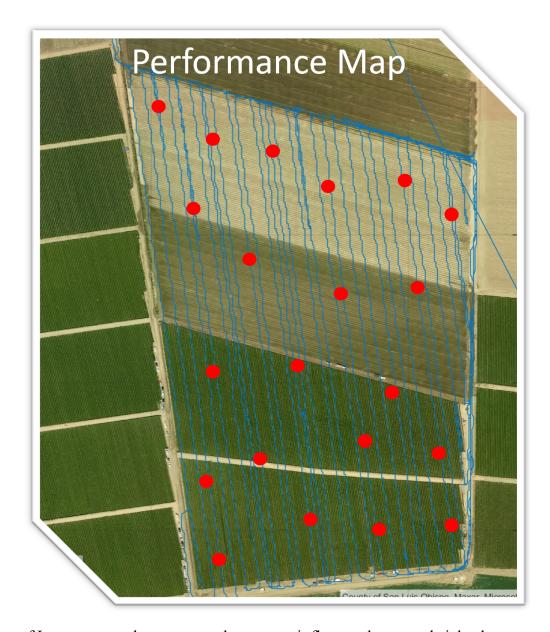
## Infield Lygus bug monitoring

The performance of the widely used bug vacuum depends on three parameters: tractor speed, vacuum air flow, and distance between the vacuum to plant. This project monitors those parameters and the amount of Lygus removed in real time. The data is used to create a bug vacuum performance map (Figure 1). This level of Lygus bug monitoring allows for a more targeted pest management strategy.



**Figure 1.** The amount of Lygus removed, tractor speed, vacuum air flow, and vacuum height above canopy are measured. The tractor path is shown as blue lines and measured parameters that exceed recommended thresholds are shown as red dots.