## **Figures**



Figure 1: Map of study site for Research Question 1 located at collaborating producer Amy Cox's property. Control indicates plots where there are no climate treatments present, OTC indicates plots with open top chambers, and OTC+ROS indicates treatments with open top chambers and rain out shelters. Plots with a shaded fill were treated with Rejuvra in August 2022. Plots are 2 m<sup>2</sup> with 1 m buffer space between plots.





Figure 2. Photo of the open top chambers (OTCs) (on left) and open top chambers and rain out shelters (ROSs) (on right) for Objective 1.

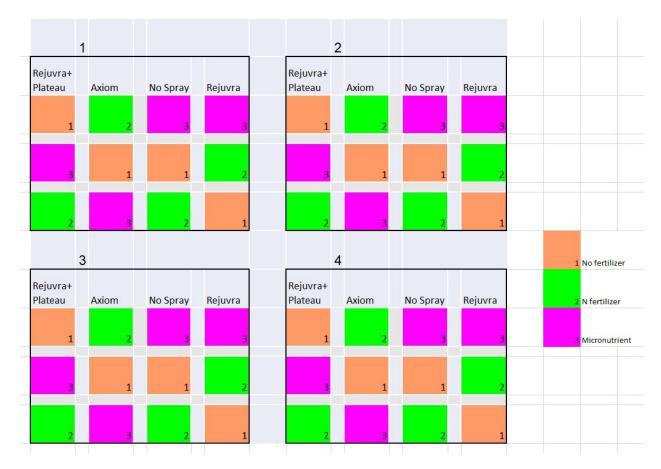


Figure 3: Map of study sites for Research Question 2 located at collaborating producers Kendra Lane, Evan Melton, and John Josepho's properties. All sites are set up on this layout. Plots are 10 ft by 10 ft with 2.5 ft buffers between. Herbicides were applied in columns. Three fertilizer treatments were as follows: 1) No fertilizer, 2) NPK fertilizer, and 3) Micronutrient (Nutrafix).

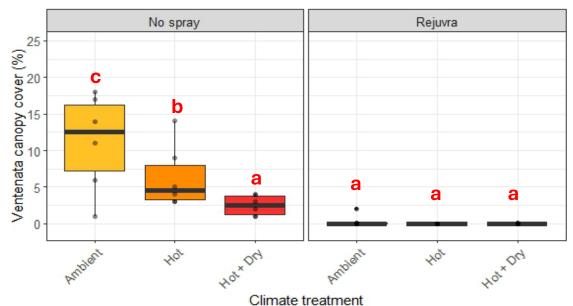


Figure 4: *Ventenata dubia* percent cover among climate and herbicide treatments. Two nonsprayed climate treatments (Hot and Hot+Dry) showed strong evidence of lower ventenata cover relative to the ambient (non-treated) climate (p<0.01). The Rejuvra herbicide treatment reduced ventenata cover in all treatments (p<0.01). Letters denote results of Tukey HSD pairwise comparisons, where different letters indicate significant differences (p = 0.05).

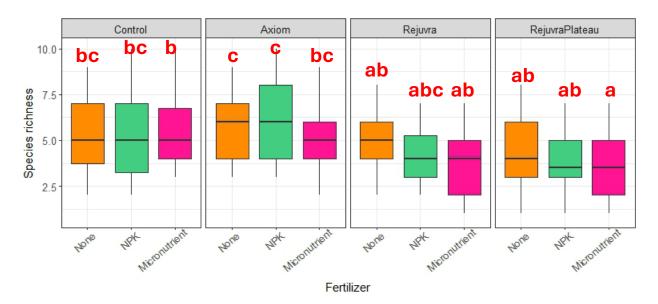


Figure 5: Species richness among herbicide and fertilizer treatments. Richness did not vary within herbicide treatments based on fertilizer (p > 0.1). Rejuvra + Plateau combined with Nutrafix fertilizer had decreased richness relative to the control (p < 0.01). Letters denote results of Tukey HSD pairwise comparisons, where different letters indicate significant differences (p = 0.05).

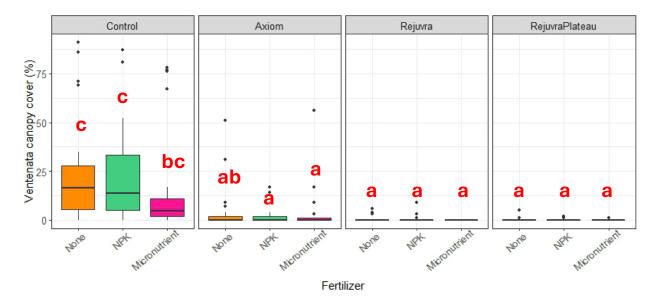


Figure 6: Ventenata dubia percent cover among climate and herbicide treatments. All herbicide treatments reduced ventenata cover relative to the non-sprayed control (p < 0.01), however there was no impact of fertilizer treatments (p > 0.1). Letters denote results of Tukey HSD pairwise comparisons, where different letters indicate significant differences (p = 0.05).