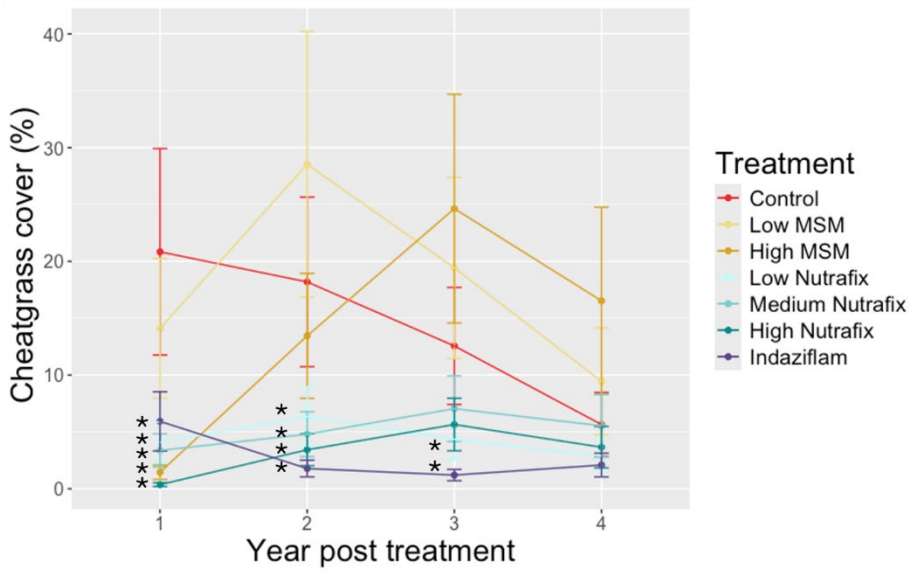

Figure 1: Change in cheatgrass cover (%) by treatment averaged across sites. Note indaziflam is the active ingredient of Rejurva. Treatments were applied in fall 2020 or 2021 to semi-arid grasslands in southwestern Montana. Ocular cover of all species present was recorded to the nearest 1% annually during peak biomass for three years following application. Cheatgrass cover and the corresponding standard error were predicted from the emmeans pairwise comparisons. * indicates a significant difference (a = 0.05) from the non-treated controls.

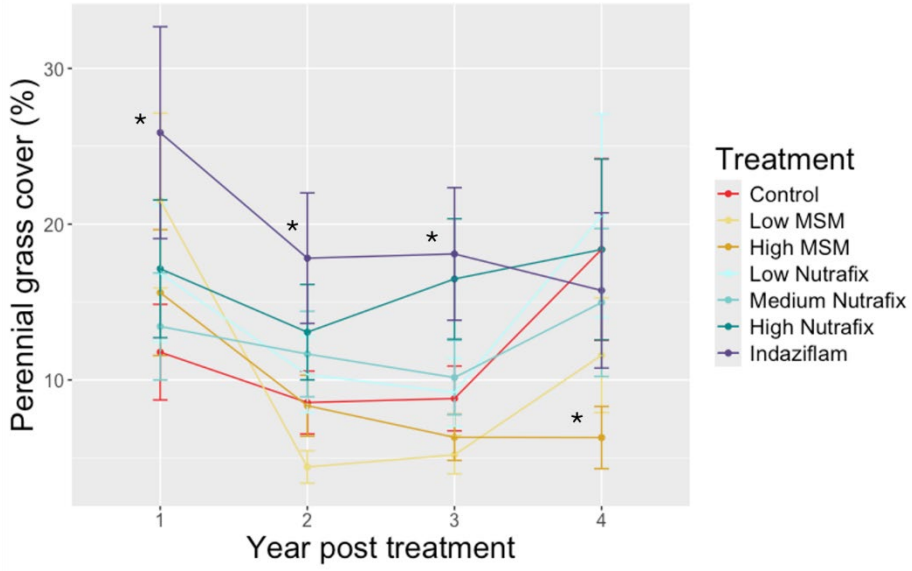

Figure 2: Change in perennial grass cover (%) by treatment averaged across sites. Note indaziflam is the active ingredient of Rejurva. Treatments were applied in fall 2020 or 2021 to semi-arid grasslands in southwestern Montana. Ocular cover of all species present was recorded to the nearest 1% annually during peak biomass for three years following application. Perennial grass cover and the corresponding standard error were predicted from the emmeans pairwise comparisons. * indicates a significant difference (a = 0.05) from the non-treated controls.

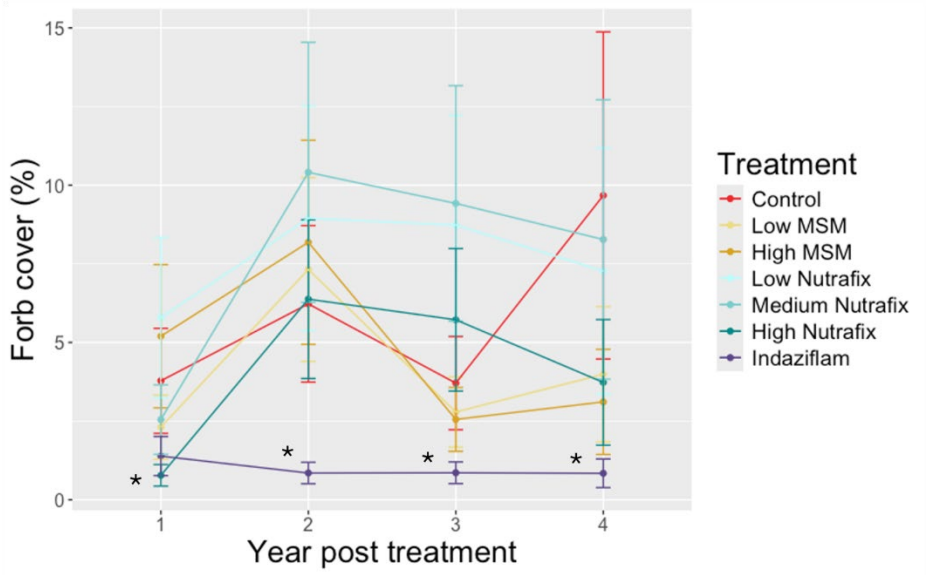

Figure 3: Change in forb cover (%) by treatment averaged across sites. Note indaziflam is the active ingredient of Rejurva. Treatments were applied in fall 2020 or 2021 to semi-arid grasslands in southwestern Montana. Ocular cover of all species present was recorded to the nearest 1% annually during peak biomass for three years following application. Forb cover and the corresponding standard error were predicted from the emmeans pairwise comparisons. * indicates a significant difference (a = 0.05) from the non-treated controls.

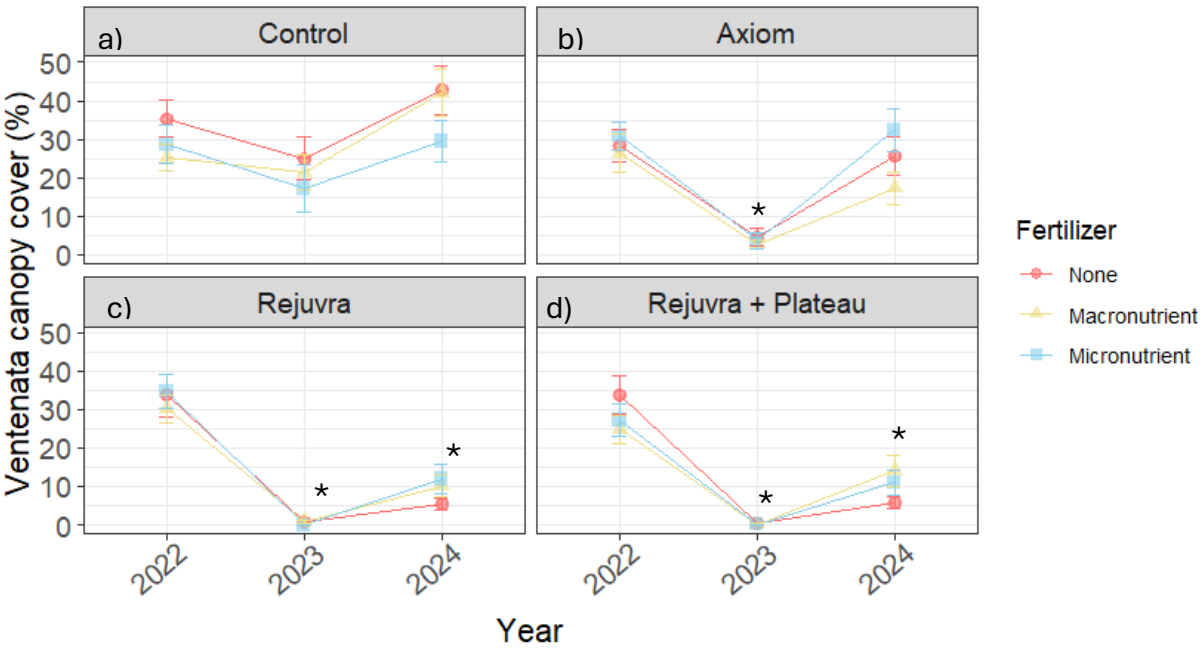

Figure 4: Ventenata percent canopy cover over three years (2022-2024) and three fertilizer treatments (None, Macronutrient, Micronutrient) in four herbicide treatments a) Control, b) Axiom, c) Rejuvra, and d) Rejuvra + Plateau. 2022 is before treatment. Each panel represents one herbicide

treatment, where the points are the mean percent canopy cover of ventenata, where the bars represent standard error, asterisks (*) indicate when an herbicide treatment (Control, Axiom, Rejuvra, and Rejuvra + Plateau) differed from its pre-treatment value (2022) within herbicide treatments ($p < 0.05$). There were no differences among fertilizer treatments ($p= 0.19$).

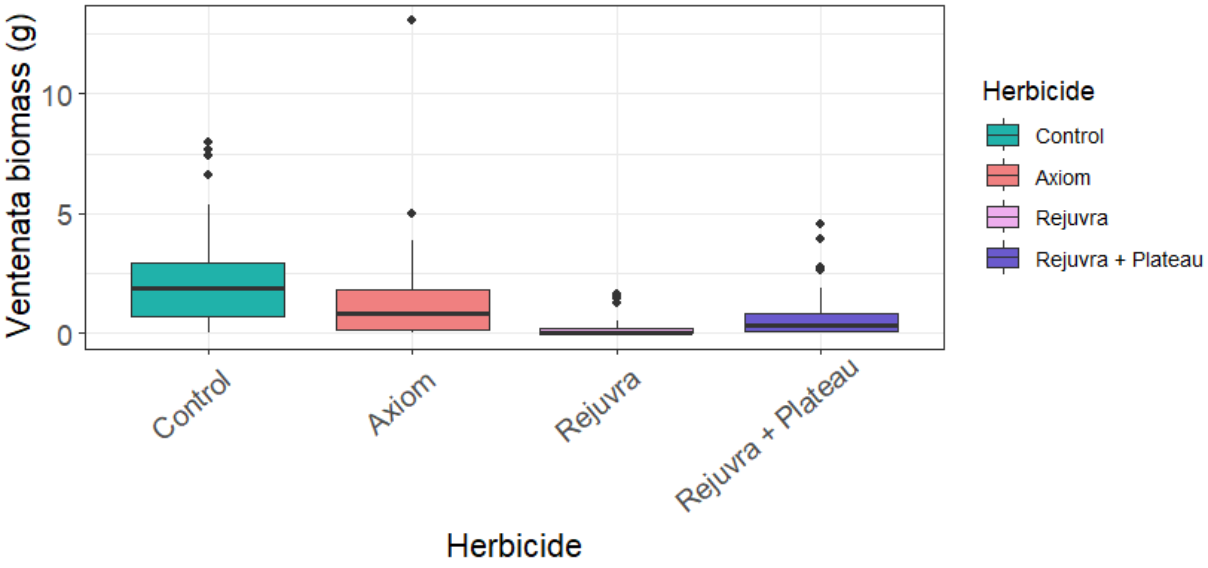

Figure 5: Ventenata biomass (g) among four herbicide treatments (Control, Axiom, Rejuvra, and Rejuvra + Plateau). Biomass was collected in 2024. Boxes are the interquartile range, the horizontal line indicates the median, whiskers reach the span of 95% of the data, points are outliers, and letters are the compact letter display of Tukey-Kramer pairwise comparisons ($p <0.05$). Ventenata biomass (g) did not differ between the Control and Axiom treatments ($p = 0.07$) but was lower in the Rejuvra ($p < 0.01$) and Rejuvra + Plateau ($p < 0.01$) relative to the Control.

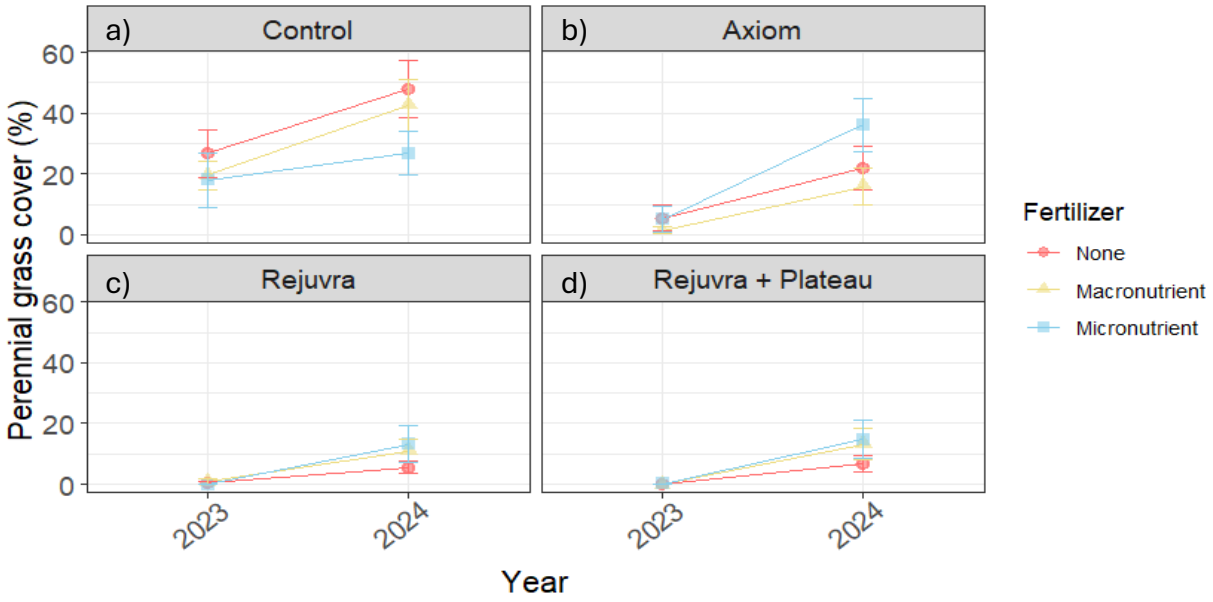

Figure 6: Perennial grass percent canopy cover over two years (2023-2024) and three fertilizer treatments (None, Macronutrient, Micronutrient) in four herbicide treatments a) Control, b) Axiom, c) Rejuvra, and d) Rejuvra + Plateau. Each panel represents one herbicide treatment, where the points are the mean percent canopy cover of ventenata, where the bars represent standard error. Perennial grass cover was not impacted by fertilizer (p = 0.11), herbicide (p = 0.32), nor year (p = 0.90).

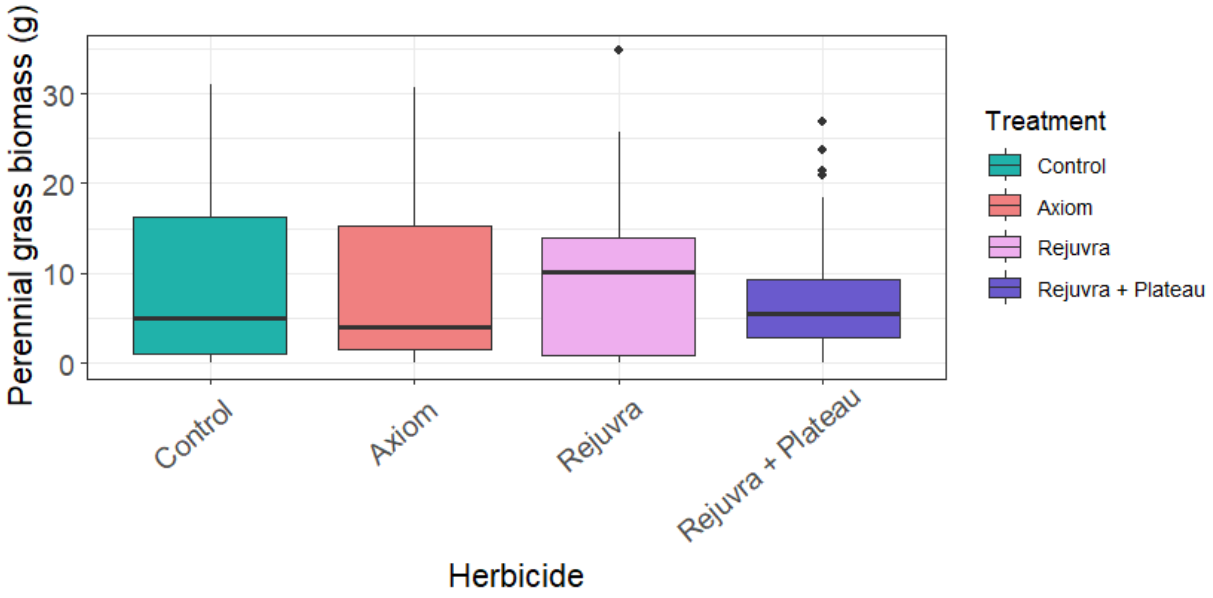

Figure 7: Perennial grass biomass (g) among four herbicide treatments (Control, Axiom, Rejuvra, and Rejuvra + Plateau). Biomass was collected in 2024. Boxes are the interquartile range, the horizontal line indicates the median, whiskers reach the span of 95% of the data, and points are outliers. Perennial grass biomass was not impacted by fertilizer (p = 0.47), nor herbicide (p = 0.96).

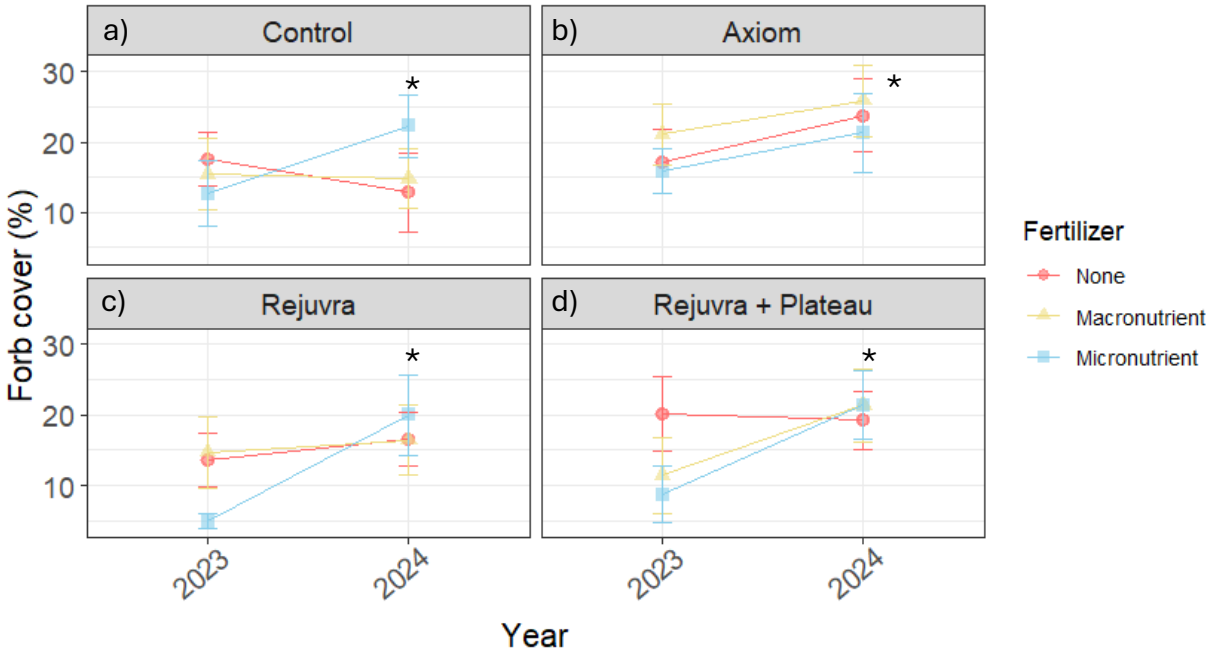

Figure 8: Forb percent canopy cover over two years (2023-2024) and three fertilizer treatments (None, Macronutrient, Micronutrient) in four herbicide treatments a) Control, b) Axiom, c) Rejuvra, and d) Rejuvra + Plateau. Each panel represents one herbicide treatment, where the points are the mean percent canopy cover of ventenata, where the bars represent standard error, asterisks (*) indicate when an herbicide treatment (Control, Axiom, Rejuvra, and Rejuvra + Plateau) differed from its pre-treatment value (2022) within herbicide treatments ($p < 0.05$). Forb percent cover was impacted by herbicide ($p = 0.06$), as well as the interaction between fertilizer and year ($p = 0.02$), though there were no pairwise differences in fertilizer and year detected ($p > 0.56$). All treatments increased in forb cover from 2023-2034 ($p = 0.01$, all).