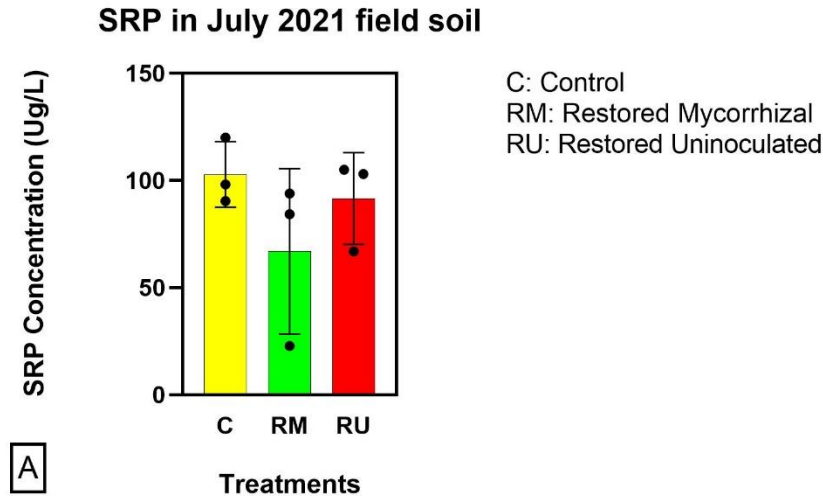
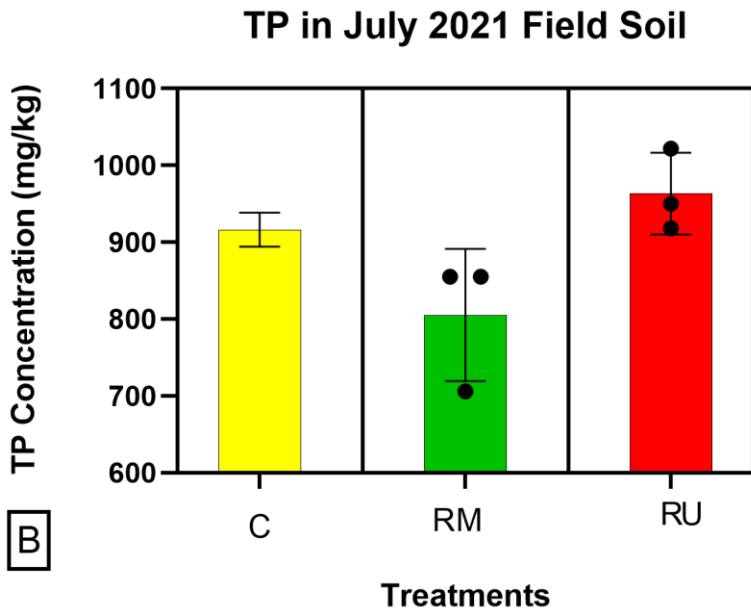


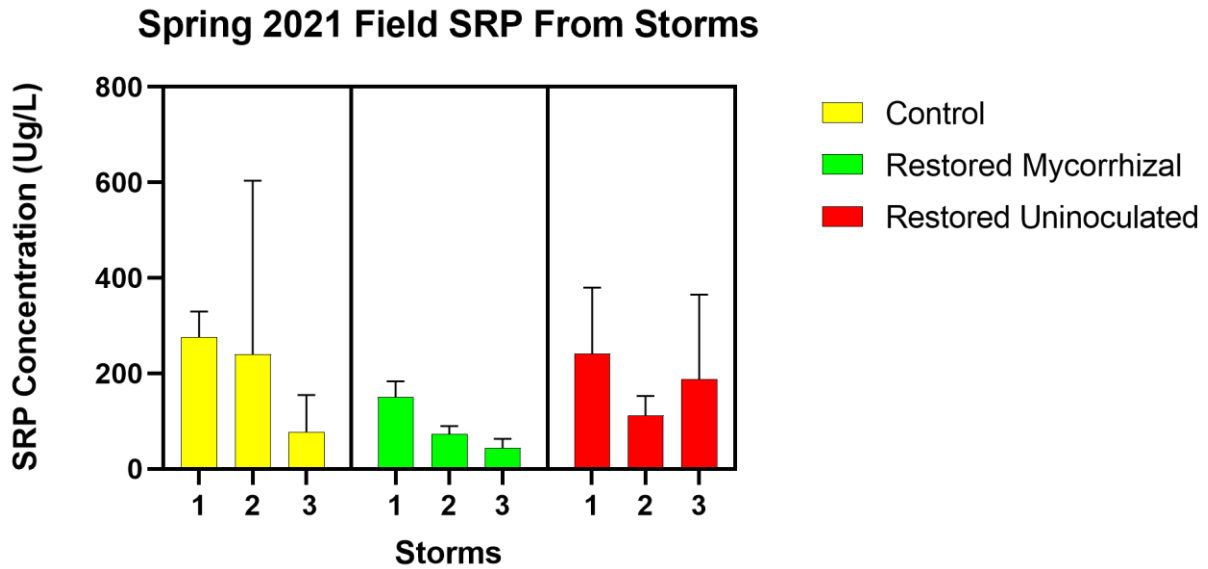
Figures and Tables



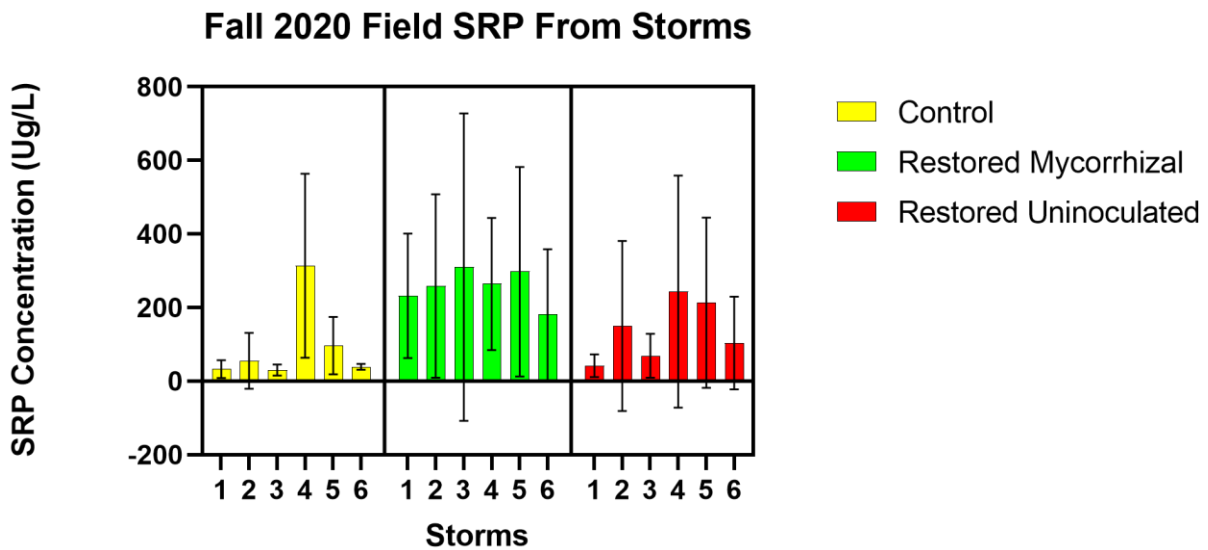
**Figure 8A.** Soluble Reactive Phosphorus (SRP) in July 2021 soil water from field soil. There is a trend that the restored mycorrhizal plot has the lower concentration, and the control has the highest. There is no statistically significant difference between treatment.



**Figure 8B.** P in July 2021 pilot treatment soil. P value of .014 indicates that there is a significant difference between two treatments. A post test indicates the significant difference is between the restored mycorrhizal and restored uninoculated ( $p = .0407$ ) plots. The inoculated plot has a lower concentration of TP.

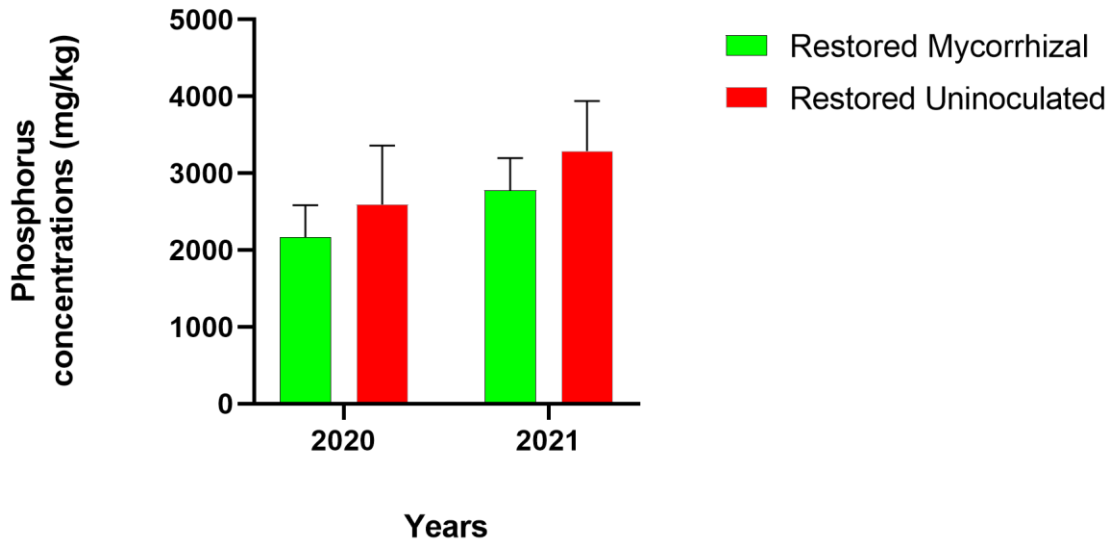


**Figure 9.** SRP concentrations from field pilot plots in spring 2021 rainstorms. There is no statistically significant difference between treatments.



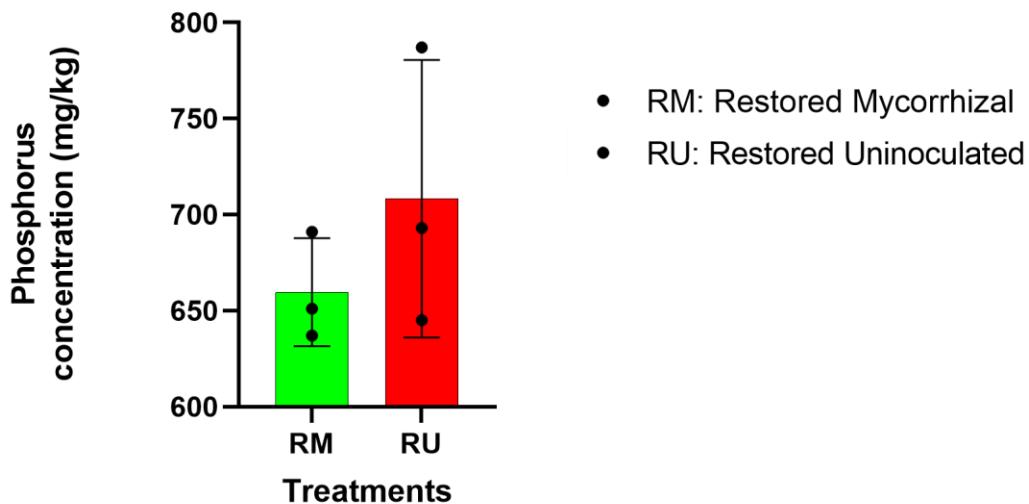
**Figure 10.** SRP concentrations from field pilot plots in fall 2020 rainstorms. There is no statistically significant difference between treatments. The trend indicates that RM have higher concentration of SRP while the control has the lowest.

### P in Willow Leaves From July Year 1 & 2



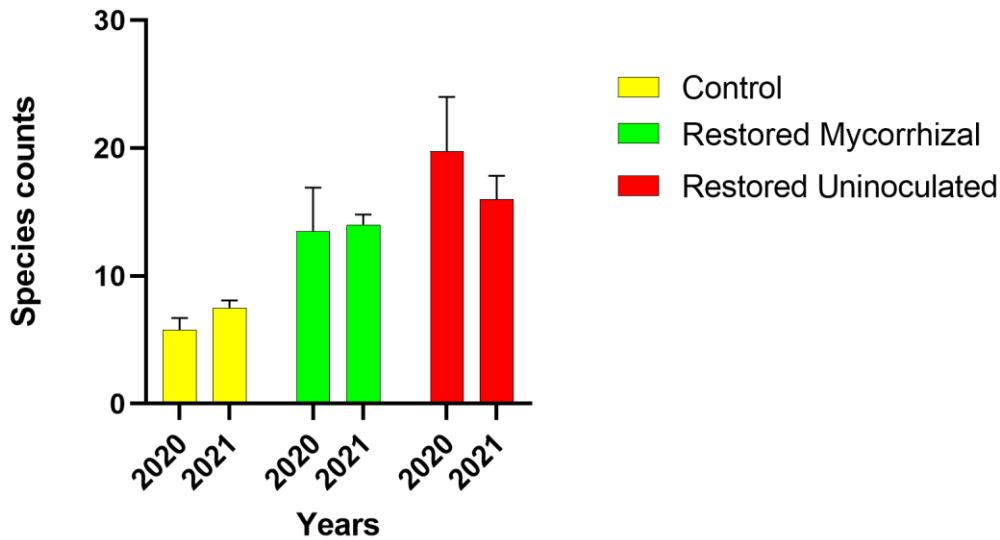
**Figure 11.** P concentrations in willow leaves. There is no statistically significant difference between treatments or years. It appears that P concentrations rose in year 2 across both treatments.

### Coppiced Willow From March 2021



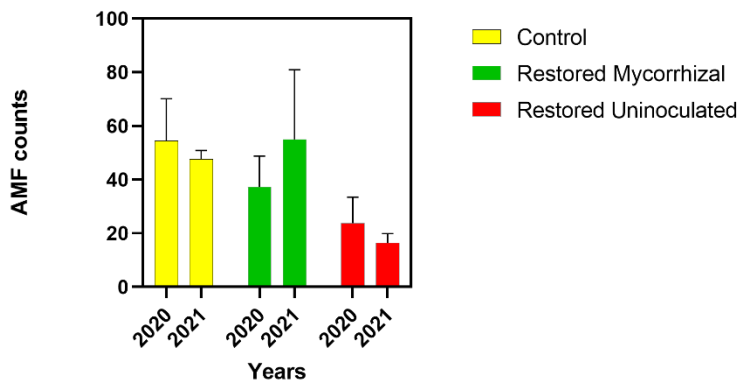
**Figure 12.** P concentrations in coppiced saplings from March 2021 of year 1. There is no statistically significant difference between treatments. However the RU willows seem to have uptaken more P than the RM willows.

### Species Counts in July of Year 1 & 2

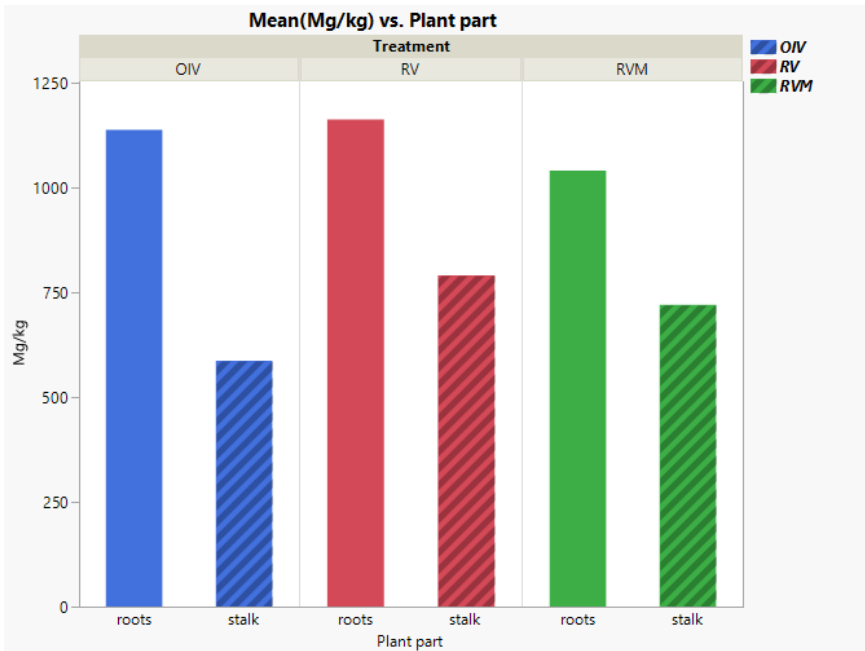


**Figure 13.** Plant species counts in July of year 1 & 2. Plant species richness in July of both years is statistically significant between treatments ( $p < 0.0001$ ) between controlled & both restored plots but not statistically significantly different between years. There is a statistically significant difference between the inoculated & uninoculated restored plots ( $p = 0.0139$ ); there is statistically significant difference between the inoculated & control plots ( $p < 0.0001$ ).

### Mycorrhizal Counts in the Field 2020-2021

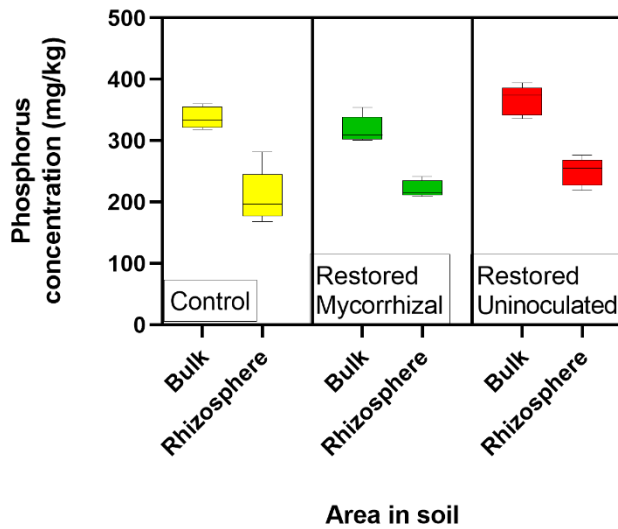


**Figure 14.** Endomycorrhizal (AMF) Mycorrhizal counts in July 2020 & 2021 from the field. There is a statistically significant difference between treatments ( $p = .0021$ ); between the control & restored uninoculated ( $p = 0.0023$ ) & between restored mycorrhizal vs. restored uninoculated ( $p = 0.0149$ ). There is no statistical difference between years.



**Figure 15.** P concentration below ground and above ground form biomass. Across all treatments the P concentration in the roots was statistically significantly greater than in the stems (p varies between .0003 and .0055).

### Phosphorus Concentrations in Mesocosm Experiment



**Figure 16.** P concentrations in rhizosphere soil from Mesocosm experiments. There is a statistically significant difference between soil areas (rhizosphere vs. bulk) across all treatments ( $p = .033$ ). There is also a statistically significant difference in Mehlich extracted P between the overall mycorrhizal and uninoculated treatments ( $p = .033$ ). Specifically the Mehlich extracted P was lower in the mycorrhizal than in the uninoculated treatments.