**Plant Community Response (RQ3)**

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Master’s Thesis Research, 2025  
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**RQ 3: Does the identity of an AMF isolate introduced into a community affect plant community structure (diversity or composition)?**

This research question investigates the effect of AMF isolate identity (treatment) on plant community response.

1. **Repositories**

/RQ3\_PlantCommunityResponse/ – All files required to reproduce the analysis

/Analysis/ – All scripts to reproduce statistical analysis and generate visuals

1. **Data Descriptions (located in /RQ3\_PlantCommunityResponse/)**

| **File Name** | **Description** |
| --- | --- |
| MasterCopy\_Biomass\_2024 | Contains aboveground host biomass, for each individual host within a mesocosm |

1. **How to Use**

Open the appropriate R Markdown file and use the corresponding dataset(s) to reproduce the analysis. Run the code from top to bottom.

| **R Markdown File** | **Corresponding Data Files** |
| --- | --- |
| RQ3PlantCommunityResponse\_Markdown.Rmd | MasterCopy\_Biomass\_2024 |

1. **Dependencies**

R version 4.3.2

1. **Data Reference**

| **Variable** | **Description** |
| --- | --- |
| biomass | Aboveground host biomass (g) |
| treatment | AMF isolate identity (Control, DAOM 197198, DAOM 240448, DAOM 240720) |
| species | Host plant species (*Gaillardia aristata, Festuca idahoensis, Bromus tectorum, Taraxacum officinale*) |
| mesocosm\_id | Unique identifier for each mesocosm (experimental unit) |
| sample\_id | Unique identifier for each individual host within a mesocosm |