Appendix S1. (1) Scatterplot of *Cryptantha muricata* abundance across three community types in the San Dimas Experiment Forest; (2) The San Dimas Experimental Forest located within the Angeles National Forest of Southern California; (3 and 4) Summary of linear mixed effects models testing biomass variables and allocation variables at final harvest (112 d) for *Cryptantha muricata*.



1. Scatterplot of *Cryptantha muricata* abundance across three community types in the San Dimas Experimental Forest. Each point represents a site with symbols to indicate community type. Axis 1 and axis 2 explain 68% and 28% of the variance, respectively. Symbol size is proportional to *C. muricata’s* abundance across all community types. Circle encloses the presence of *C. muricata,* which is found only in the non-native grass community identified by non-metric multidimensional scaling ordination.



2. (A) The San Dimas Experimental Forest located within the Angeles National Forest of Southern California. Each of seven lines represents one transect on southwest-facing slopes toward Bell Canyon and one transect on northeast-facing slopes toward the West Fork of San Dimas Canyon. (B) Representative random location of sites along a transect line. Along each transect, micro-plots are located at 40-m intervals at random offsets from the transect line. To minimize the effects of human disturbance and non-native populations along the roadside, a starting distance of 50 m was used.

3. Summary of linear mixed effects models testing biomass variables at final

harvest (112 d) for *Cryptantha muricata*.

|  |  |  |
| --- | --- | --- |
|  | *F* | *P* |
| Total Biomass  |  |  |
| Treatment 2, 22 |  9.046 |  **<0.001** |
| Site 1, 22 |  0.072 | 0.790 |
| Treatment x Site 2, 22 |  0.092 |  0.912 |
|  |  |  |
| Stem Biomass |   |   |
| Treatment 2, 22 |  10.841 |  **<0.001** |
| Site 1, 22 |  0.043 |  0.837 |
| Treatment x Site 2, 22 |  0.114 |  0.892 |
|  |  |  |
| Root Biomass |   |   |
| Treatment 2, 22 |  5.824 |  **0.009** |
| Site 1, 22 |  0.185 |  0.670 |
| Treatment x Site 2, 22 |  0.187 |  0.830 |
|  |  |  |
| Leaf Biomass |   |   |
| Treatment 2, 22 |  6.049 |  **0.008** |
| Site 1, 22 |  0.169 |  0.684 |
| Treatment x Site 2, 22 |  0.105 |  0.900 |
|  |  |  |
| Leaf Area |   |   |
| Treatment 2, 22 |  8.185 |  **0.002** |
| Site 1, 22 |  0.001 |  0.966 |
| Treatment x Site 2, 22 |  0.156 |  0.855 |
|  |  |  |
| Reproductive Biomass |   |   |
| Treatment 2, 22 |  16.028 | **<0.0001** |
| Site 1, 22 |  0.219 |  0.644 |
| Treatment x Site 2, 22 |  0.390 |  0.681 |

*Note*: Data were log-transformed for all growth variables except Leaf Area.

4. Summary of linear mixed effects models testing allocation variables at final

harvest (112 d) for *Cryptantha muricata*.

|  |  |  |
| --- | --- | --- |
|  | *F* | *P* |
| (SMR) Stem Mass Ratio  |  |  |
| Treatment 2, 22 |  6.133 |  **0.007** |
| Site 1, 22 |  3.626 | 0.070 |
| Treatment x Site 2, 22 |  1.732 |  0.200 |
|  |  |  |
| (RMR) Root Mass Ratio |   |   |
| Treatment 2, 22 |  1.240 | 0.308 |
| Site 1, 22 |  0.950 |  0.340 |
| Treatment x Site 2, 22 |  1.308 |  0.290 |
|  |  |  |
| (LMR) Leaf Mass Ratio |   |   |
| Treatment 2, 22 |  7.421 |  **0.003** |
| Site 1, 22 |  1.125 |  0.300 |
| Treatment x Site 2, 22 |  0.023 |  0.976 |
|  |  |  |
| (LAR) Leaf Area Ratio |   |   |
| Treatment 2, 22 |  0.998 | 0.386 |
| Site 1, 22 |  0.004 |  0.947 |
| Treatment x Site 2, 22 |  0.095 |  0.908 |
|  |  |  |
| (SLM) Specific Lead Mass |   |   |
| Treatment 2, 22 |  1.362 | 0.276 |
| Site 1, 22 |  0.171 |  0.682 |
| Treatment x Site 2, 22 |  0.027 |  0.972 |
|  |  |  |
| (RA) Reproductive Allocation |   |   |
| Treatment 2, 22 |  3.408 |  **0.040** |
| Site 1, 22 |  1.213 |  0.281 |
| Treatment x Site 2, 22 |  0.103 |  0.902 |

*Note*: Data were log-transformed for Specific Leaf Mass and Reproductive Allocation.