**Table 4: Summary of simple linear regression models for predicting leaf herbivory and pathogen damage**1

| **Treatment & Data Set** | **Leaf Functional Traits** | **Estimate** | **R2*adj*** | ***F*-statistic** | ***p*-value*2*** |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Herbivory - Total* | Anthocyanins (ACI) | -0.100 | 0.007 | 2.498 | ns |  |
| Leaf Thickness (LT) (µm) | **0.013** | **0.081** | **19.453** | **\*\*\*\*** |  |
| Leaf Punch Strength (LPS)(N mm-1) | -0.500 | -0.002 | 0.628 | ns |  |
| Leaf Mass per Area (LMA)(mg/mm) | 328.824 | -0.001 | 0.842 | ns |  |
| Shannon Diversity Index | -0.225 | 0.007 | 2.477 | ns |  |
| *Pathogen - Total* | Anthocyanins (ACI) | **-0.116** | **0.034** | **14.343** | **\*\*\*** |  |
| Leaf Thickness (LT) (µm) | -0.001 | -0.001 | 0.496 | ns |  |
| Leaf Punch Strength (LPS)(N mm-1) | **-1.963** | **0.078** | **33.319** | **\*\*\*\*** |  |
| Leaf Mass per Area (LMA)(mg/mm) | **-645.450** | **0.030** | **12.601** | **\*\*\*** |  |
| Shannon Diversity Index | **0.235** | **0.015** | **6.896** | **\*\*** |  |
| *Herbivory - E-high* | Anthocyanins (ACI) | -0.074 | -0.002 | 0.745 | ns |  |
| Leaf Thickness (LT) (µm) | **0.015** | **0.091** | **11.403** | **\*\*** |  |
| Leaf Punch Strength (LPS)(N mm-1) | 0.456 | -0.007 | 0.251 | ns |  |
| Leaf Mass per Area (LMA)(mg/mm) | 647.937 | 0.006 | 1.593 | ns |  |
| Shannon Diversity Index | 0.361 | 0.024 | 3.553 | ns |  |
| *Herbivory - E-low* | Anthocyanins (ACI) | -0.156 | 0.019 | 2.978 | ns |  |
| Leaf Thickness (LT) (µm) | **0.011** | **0.067** | **8.412** | **\*\*** |  |
| Leaf Punch Strength (LPS)(N mm-1) | -1.339 | 0.015 | 2.559 | ns |  |
| Leaf Mass per Area (LMA)(mg/mm) | 162.335 | -0.009 | 0.113 | ns |  |
| Shannon Diversity Index | **-0.881** | **0.138** | **17.702** | **\*\*\*\*** |  |
| *Pathogen - E-high* | Anthocyanins (ACI) | **-0.165** | **0.069** | **15.079** | **\*\*\*** |  |
| Leaf Thickness (LT) (µm) | **-0.006** | **0.019** | **4.690** | **\*** |  |
| Leaf Punch Strength (LPS)(N mm-1) | **-2.017** | **0.075** | **16.253** | **\*\*\*\*** |  |
| Leaf Mass per Area (LMA)(mg/mm) | **-845.088** | **0.050** | **11.014** | **\*\*** |  |
| Shannon Diversity Index | **0.288** | **0.031** | **7.108** | **\*\*** |  |
| *Pathogen - E-low* | Anthocyanins (ACI) | -0.068 | 0.007 | 2.329 | ns |  |
| Leaf Thickness (LT) (µm) | 0.003 | -0.001 | 0.891 | ns |  |
| Leaf Punch Strength (LPS)(N mm-1) | **-1.922** | **0.080** | **17.562** | **\*\*\*\*** |  |
| Leaf Mass per Area (LMA)(mg/mm) | **-526.136** | **0.016** | **4.032** | **\*** |  |
| Shannon Diversity Index | 0.041 | -0.005 | 0.060 | ns |  |
| Positive correlation denoted by upward light green arrow, negative correlation by downward light orange arrow. | | | | | | |
| *1*Models are separated by treatment and data set evaluated. | | | | | | |
| *2*Significance levels are represented by *ns* (not significant) and asterisks [*p* < .05 (\*), *p* < .01 (\*\*), *p* < .001 (\*\*\*), *p* < .001 (\*\*\*), and *p* < .0001 (\*\*\*\*)]. | | | | | | |