Table 3: Phylogenetic Signal:picate

| TraitName | K | pval | pval.fdr |
| --- | --- | --- | --- |
| % Whole Aboveground Boron in dry mass | 2.64 | <0.001 | <0.01 |
| % Whole Aboveground Calcium in dry mass | 2.46 | <0.001 | <0.01 |
| % Whole Aboveground Nitrogen in dry mass | 1.81 | <0.001 | <0.01 |
| Leaf shape | 1.47 | <0.001 | <0.01 |
| Leaf carbon (C) isotope signature (delta 13C) | 1.40 | <0.01 | 0.014 |
| % Whole Aboveground Sulfur in dry mass | 1.04 | <0.01 | 0.015 |
| % Whole Aboveground Potassium in dry mass | 0.98 | <0.01 | 0.013 |
| Leaf water content per leaf dry mass (not saturated) | 0.77 | <0.01 | 0.026 |
| Leaf dry mass per leaf fresh mass | 0.73 | <0.01 | 0.013 |
| % Whole Aboveground Magnesium in dry mass | 0.72 | <0.01 | 0.033 |
| Seed dry mass | 0.71 | 0.141 | 0.245 |
| Seed dry mass (Local) | 0.67 | 0.112 | 0.214 |
| Leaf perimeter per area (Local) | 0.65 | 0.034 | 0.096 |
| Leaflet number per leaf | 0.63 | 0.165 | 0.248 |
| % Whole Aboveground Carbon in dry mass | 0.62 | <0.01 | 0.031 |
| Leaf nitrogen (N) content per leaf dry mass | 0.57 | 0.013 | 0.047 |
| Stomata conductance per leaf area | 0.55 | 0.154 | 0.245 |
| Leaf area per leaf dry mass (petiole excluded) (Local) | 0.50 | 0.029 | 0.092 |
| % Whole Aboveground Manganese in dry mass | 0.49 | 0.06 | 0.141 |
| % Whole Aboveground Copper in dry mass | 0.47 | 0.037 | 0.096 |
| Leaf nitrogen (N) isotope signature (delta 15N) | 0.46 | 0.032 | 0.096 |
| % Whole Aboveground Iron in dry mass | 0.45 | 0.191 | 0.277 |
| % Whole Aboveground Sodium in dry mass | 0.44 | 0.158 | 0.245 |
| Fine root tissue density | 0.42 | 0.149 | 0.245 |
| Leaf area per leaf dry mass (petiole included) | 0.41 | 0.057 | 0.14 |
| Leaf photosynthesis rate per leaf dry mass | 0.41 | 0.069 | 0.153 |
| Leaf area per leaf dry mass (petiole undefined) | 0.40 | 0.073 | 0.153 |
| Leaf area per leaf dry mass (petiole excluded) | 0.37 | 0.098 | 0.196 |
| % Whole Aboveground Aluminum in dry mass | 0.34 | 0.268 | 0.374 |
| Fine root diameter | 0.34 | 0.133 | 0.243 |
| % Whole Aboveground Zinc in dry mass | 0.33 | 0.285 | 0.374 |
| Leaf photosynthesis rate per leaf area | 0.32 | 0.347 | 0.429 |
| Stomata conductance per leaf dry mass | 0.30 | 0.297 | 0.378 |
| Leaf fresh mass | 0.27 | 0.469 | 0.533 |
| Leaf laminar area (Local) | 0.26 | 0.416 | 0.499 |
| Plant height vegetative | 0.26 | 0.282 | 0.374 |
| % Whole Aboveground Phosphorus in dry mass | 0.25 | 0.44 | 0.513 |
| Leaf perimeter per area times leaf laminar length (Local) | 0.21 | 0.682 | 0.705 |
| Leaf dry mass (single leaf) | 0.21 | 0.688 | 0.705 |
| Leaf area (petiole included) | 0.21 | 0.521 | 0.576 |
| Plant height generative | 0.17 | 0.67 | 0.705 |
| Average plant height at maturity (USDA) | 0.09 | 0.908 | 0.908 |