

Supplemental Figure 13: Developmentally insightful correlations between leaf development traits. A) Pairwise correlations between leaf size ("TermLfSize" and "LatLfSize") and leaf complexity ("CompPri," "CompInt," "CompSec," "CompRachis," and "CompAll"). Besides the high correlations within leaf size and leaf complexity traits, there is significant negative correlation between size and complexity. The least significant negative correlation (LatLfSize x CompPri, r = 1-0.33) is significant at a level of p = 0.0046 (two-tailed, n = 72). The correlation suggests that overall blade area in a leaf is not modulated through complexity, as any additional leaflets are on average smaller. This has implications for resource allocation at the level of the leaf, but also between different parts of the plant, as complexity only modulates the dissection of the leaf rather than its overall blade area. B) Pairwise correlations between absolute stomatal density on the adaxial side of the cotyledon ("CotStom") and epidermal pavement cell size ("CotPaveArea") and count ("Cot-PaveCnt"). The negative correlation between CotStom and CotPaveArea, and the positive correlation between CotStom and CotPaveCnt, suggests that as pavement cell size increases, stomatal density decreases. The least significant correlation between two traits of each class (CotPaveArea x CotStom, r = -0.44) is significant at a level of p = 0.00011 (two-tailed, n = 72). This has implications for mechanisms by which stomatal spacing is modulated in this population, which may not be directly through stomatal patterning, but rather changes in epidermal pavement cell size.

0.0

CotPaveCnt

0.0 0.4

-0.6

0.0 0.4