**Description of Additional Supplementary Files**

File Name: Specimen Data

Description: Data and voucher IDs for specimens measured in this study.

File Name: Supplementary Data 1

Description: Pairwise comparisons of individual species’ ontogenetic trajectory slopes, exacted from a Homogenity of Slopes (HOS) test. The comparison pair (Species 1, Species 2), along with the test statistic (TestStat), significance value (Pval), degrees of freedom (df), and raw value for each species’ slope (Slope1, Slope2) is provided for “Ameridelphia” and Australidelphia.

File Name: Supplementary Data 2

Description: Pairwise comparisons of individual species’ ontogenetic trajectory slopes, exacted from a Homogenity of Slopes (HOS) test. The comparison pair (Species 1, Species 2), along with the test statistic (TestStat), significance value (Pval), degrees of freedom (df), and raw value for each species’ slope (Slope1, Slope2) is provided for dietary groups, Animalivory, Herbivory and Omnivory.