



**Fig. S1. Histograms of the loadings of prey capture contributions on PC1 from 10,000 replicate datasets with a representative strike per species compared to PC1 loadings obtained from species means (lines).** Our resampling analysis shows that, in general, datasets composed of representative strikes for each of the 6 species agree with the analysis performed on species means calculated from multiple individuals per species and multiple strikes per individual (Fig 4D). We would expect there to be less variation in loadings, especially for jaw ram (green histogram) and suction (pink histogram), in our acanthomorph dataset composed of forty species instead of six. The body ram loadings are shown in blue.