B

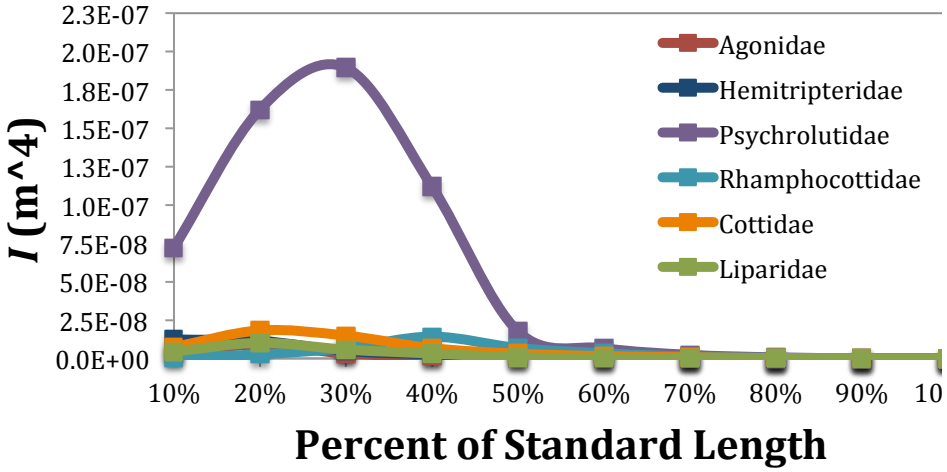

Fig. 5: Second moment of area (*I*) as it increases along the standard length of the body

Each graph in A represents the average *I* values at each 10% interval for the family. Tl

families are graphed on the same axes in B. Hemitripteridae decreases its second mom

of area starting from 10% standard length, whereas the other five families increase

second moment of area until about 30% standard length and then decrease. The tails at

the ends of the graphs indicate that *I* values are substantially smaller at the posterior er

of the body than the anterior.

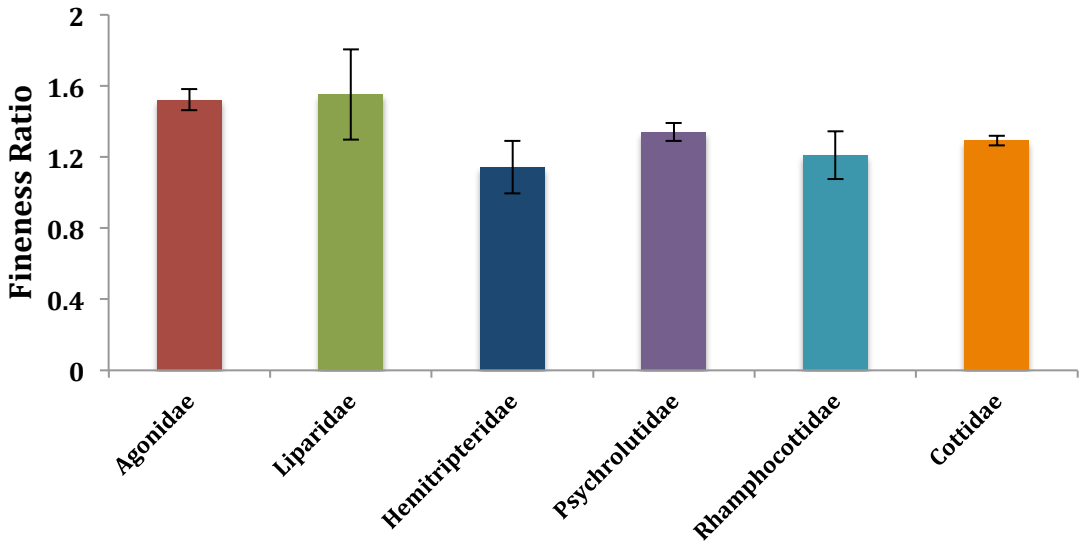

Fig. 6: Average maximum fineness ratio (body width/body depth) for each family showing standard error of the mean in error bars. Maximum ratio was based on highest values taken along 10% intervals of the standard length of the body. Univariate ANOVA showed no significance among families ($F_{5,65}$=1.145, p=0.3458).

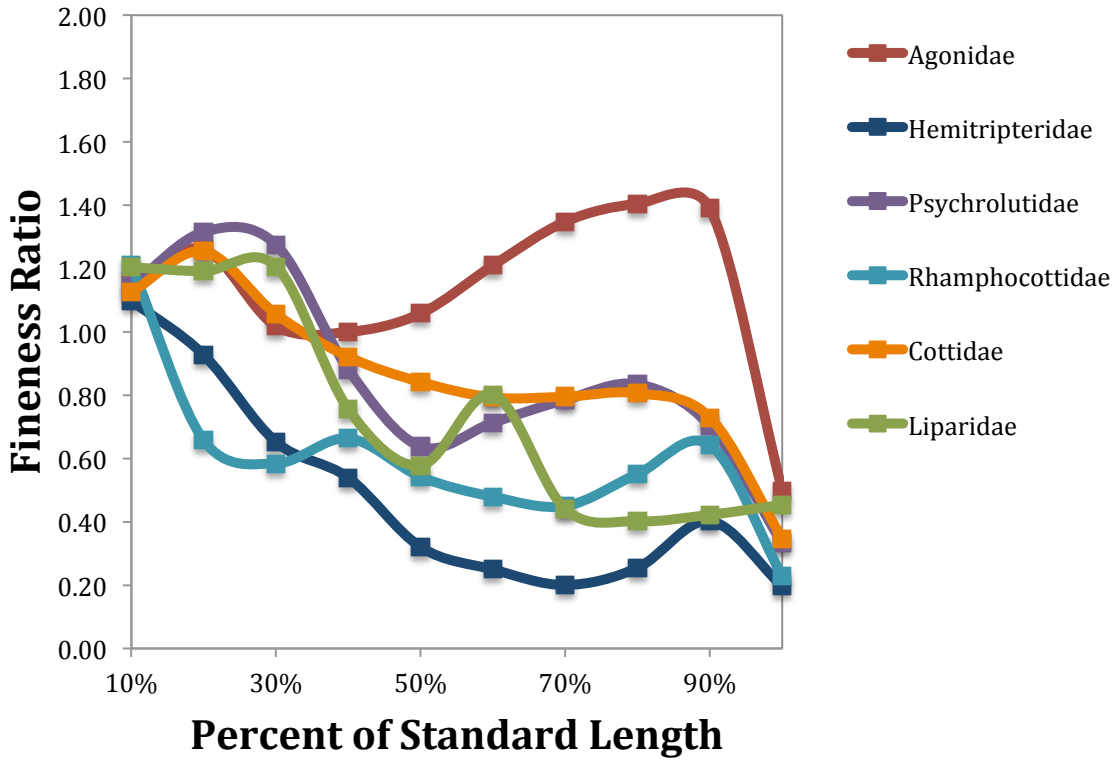

Fig. 7: Aspect Ratio as it increases along the standard length of the body. The graph represents the average ratio (width/depth) at each 10% interval for the family. Aspect ratio of Agonidae increases along the standard length of the body until about 80% standard length, while the other five families decrease along the entire length of the body. Aspect Ratio of Liparidae increases from 80% onward, whereas the other five families show a drastic decline in aspect ratio from 80% to 100% of standard length.

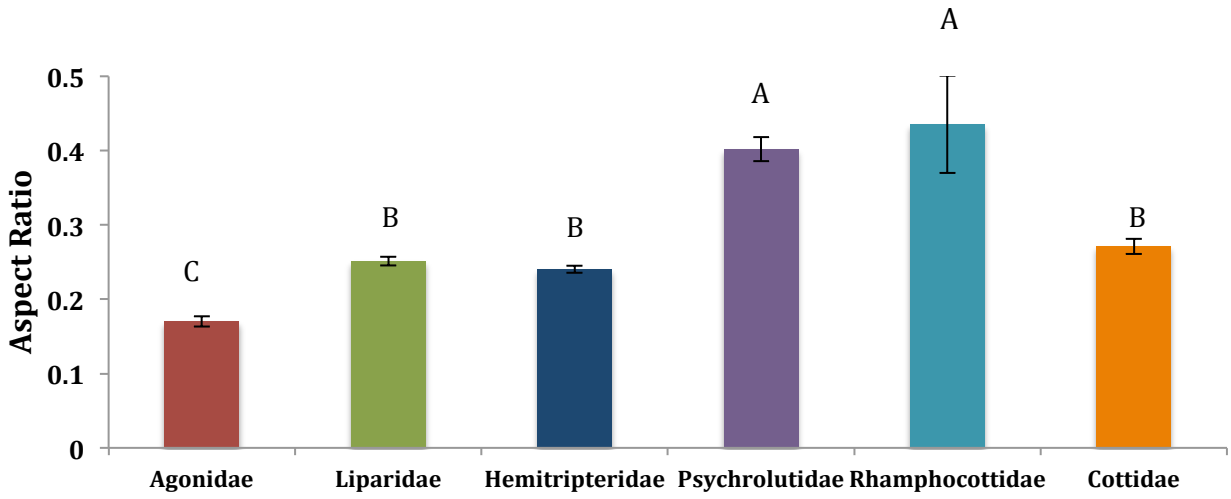

Fig. 8: Average aspect ratio (maximum width/standard length) for each family showing standard error of the mean in error bars. Ratio was based on maximum width and standard length of the body. Letters indicate significant differences between families found in a univariate ANOVA ($F_{5,65}$=32.226, $p<0.0001$).