

Table S1. Comparison of the different models for the analysis of the relationships between frustule size and shape asymmetry of *E. bilunaris*.

Function	Formula (general)	Formula (specific)	AIC
linear	$y = ax + b$	$y = 26267x + 3069.7$	1.69e07
quadratic	$y = ax^2 + bx + c$	$y = 5.14e05x^2 - 68901x + 3684.7$	1.33e07
power law	$y = ax^b + c$	$y = 538.8x^{-0.382}$	1.29e07
exponential	$y = ae^{bx} + c$	$y = 3467.3e^{-15.5x}$	1.47e07