**Results S1**: AICc and ΔAICc values for Model Selection for modes of evolution for PGLS Model, using Instar as the predictor variable, as Model Selection found Instar to be most important or significantly most important:

Term codes for Evolutionary Rate Model for phylogenetic correlation in PGLS: Brownian (Brownian motion model in Felsenstein 1985) = A, Blomberg (ACDC model; covariance matrix defined in Blomberg et al. 2003) = B, Pagel (covariance matrix defined in Freckleton et al. 2002) = C, Grafen (covariance matrix defined in Grafen 1989) = D, Martins (covariance matrix defined in Martins & Hansen 1997) = E. We did not test an Ornstein-Uhlenbeck model, as it is used for continuous characters, and our predictor variables are all categorical (Graber 2013).

**Significant Results are bolded, if not significant, but most important, they are *bold italicized***

|  |  |  |  |
| --- | --- | --- | --- |
| **Term** | **AICC** | **Δ** | **Weight** |
| ***A*** | ***246.23*** | ***0.00*** | ***0.43*** |
| *B* | 246.74 | 0.51 | 0.34 |
| *C* | 247.98 | 1.76 | 0.18 |
| *D* | 251.95 | 5.73 | 0.02 |
| *E* | 251.95 | 5.73 | 0.02 |

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