

Table 6: Model comparison for cold adaptation using likelihood ratio tests for 69 species.

Within-species predictors	Species-level predictors	AIC	Log-likelihood	<i>P</i>
ln(temperature), (ln(temperature)) ²		132.00	-61.00	—
ln(temperature), (ln(temperature)) ²	Mean ln(temperature)	120.89	-54.44	<0.001
ln(temperature), (ln(temperature)) ²	Mean ln(temperature), developmental mode	113.50	-49.74	0.002
ln(temperature), (ln(temperature)) ²	Mean ln(temperature), developmental mode, mean ln(temperature) x developmental mode	115.14	-49.57	0.559

Using a random intercepts model (Eq. 4, main text; repeated as Eq. 7 in S.I. Table 8, below) as a baseline, we tested whether some of the species-level variation in intercepts can be explained by the mean ln(test temperature) for each species and/or a species' developmental mode (lecithotrophic vs. planktotrophic). Reported values are for variable-added-last likelihood ratio tests. See Fig 4.