7.3.6 *Acraea acerata* (Okonya et al.)

1. Development Time

Stage: Eggs	Stage: Larvae	Stage: Pupae	Stage: Female	Stage: Male
Model: cloglog	Model: logit	Model: logit	Model: probit	Model: cloglog
Slope: 9.62	Slope: 10.83	Slope: 24.44	Slope: 1.11	Slope: 1.5

2. Development Rate

Stage: Eggs Model 26: Tb Model Parameters: sy=0.031 b=0.264 Tb=7.107 DTb=4.4 Formula: $y \sim sy*e^{(b*(x-Tb)-e^{b*(x-Tb)/DTb})}$
Stage: Larvae Model 46: Janish 1 Parameters: Dmin=15.734 Topt=28.467 K=0.152 Formula: $y \sim 2/(Dmin*(e^{K*(x-Topt)}+e^{(-K)*(x-T\text{-}opt)}))$
Stage: Pupae Model 46: Janish 1 Parameters: Dmin=4.198 Topt=30.371 K=0.144 Formula: $y \sim 2/(Dmin*(e^{K*(x-Topt)}+e^{(-K)*(x-T\text{-}opt)}))$

3. Senescence

Stage: Female Model 25: Exponential Simple Parameters: b1=0.063 b2=0.059 Formula: $y \sim b1*e^{(b2*x)}$
Stage: Male Model 25: Exponential Simple Parameters: b1=0.045 b2=0.067 Formula: $y \sim b1*e^{(b2*x)}$

4. Mortality

Stage: Eggs Model 39: Weibull Parameters: a=0 b=24.99 nn=7.126 Formula: $y \sim a*(abs(x - b))^{nn}$
Stage: Larvae Model 39: Weibull Parameters: a=0.001 b=24.959 nn=2.944 Formula: $y \sim a*(abs(x - b))^{nn}$
Stage: Pupae Model 31: Wang 6 Parameters: Tl=17.719 Th=31.285 B=0.705 H=2.254 Formula: $y \sim 1 - H/(e^{(1+e^{-(x-Tl)/B})*(1+e^{-(Th-x)/B})})$

5. Total Oviposition

Stage: Female

Model 1: Quadratic

Parameters: a=-1 b=57.979 c=-717.165

Formula: $y \sim a*x^2 + b*x + c$

6. Relative Oviposition

Stage: Female

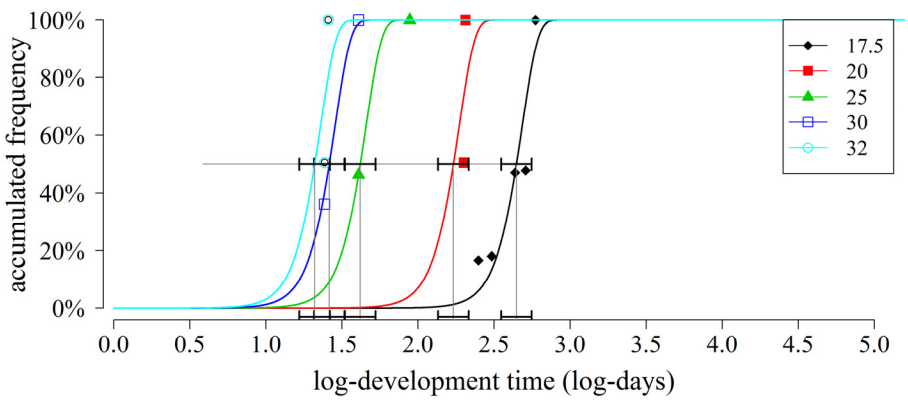
Model 2: Gamma

Parameters: a=2.845 b=1.419

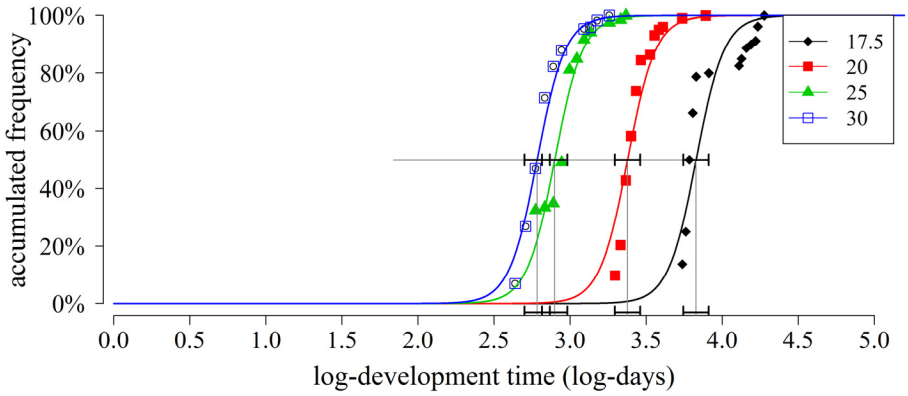
Formula: y ~ pgamma(x, a, b)

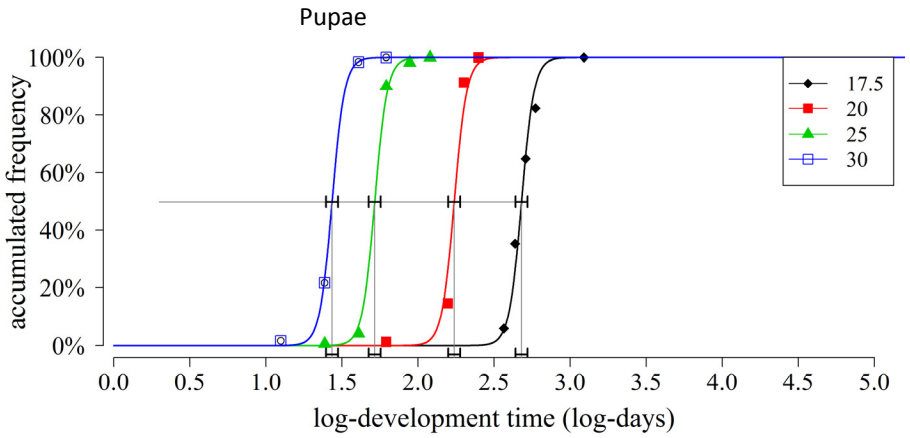
7. Development Time

Egg

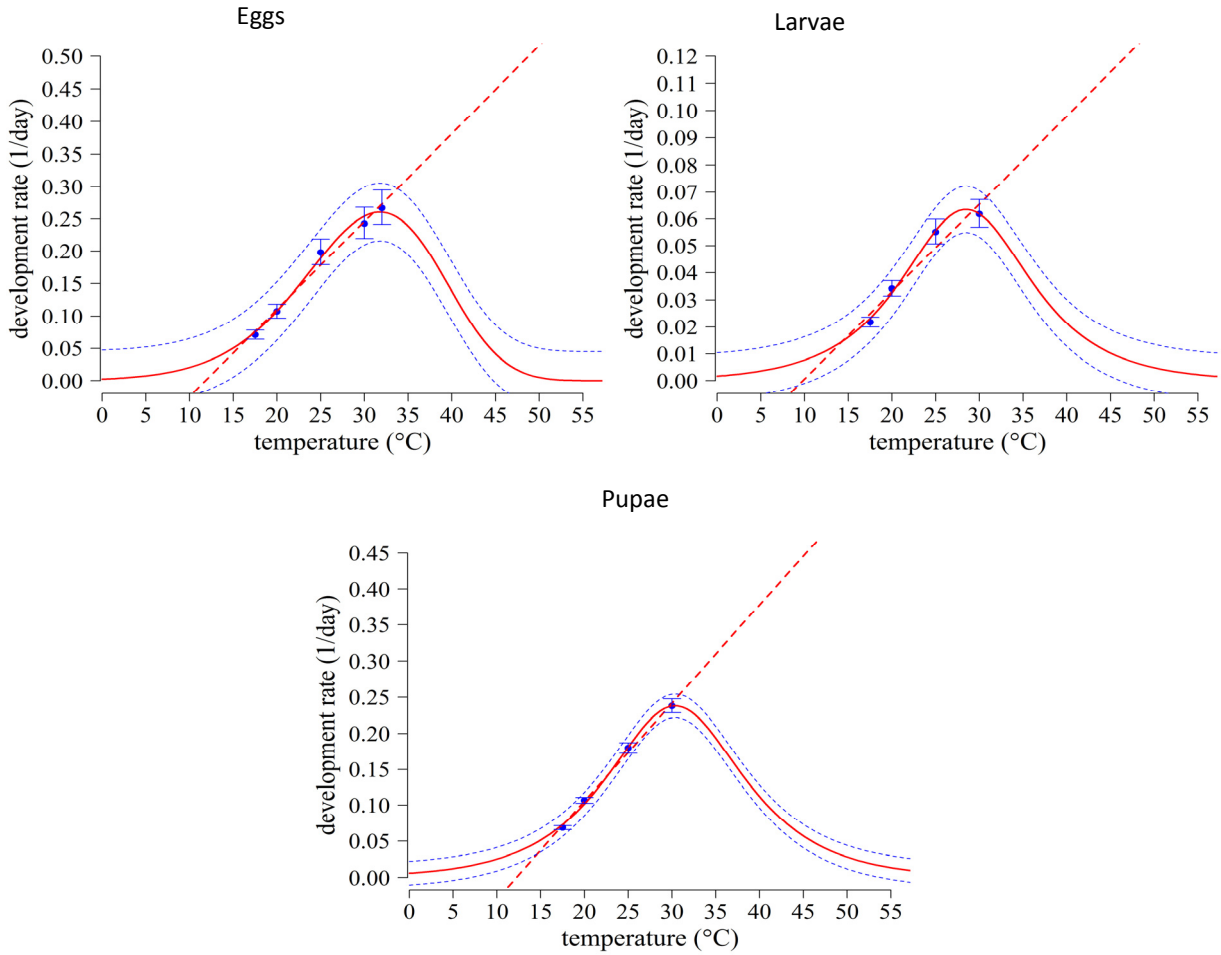


Larvae

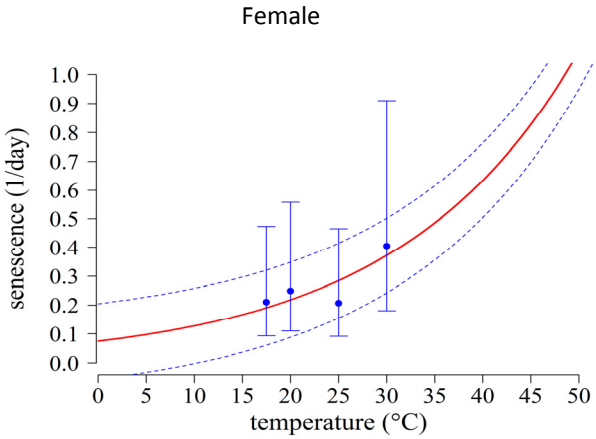


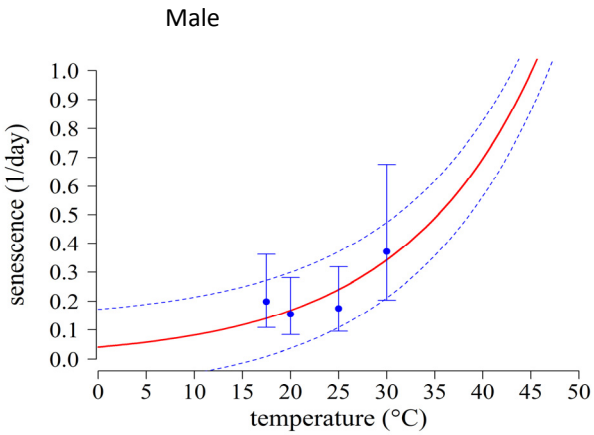


8. Development Rate

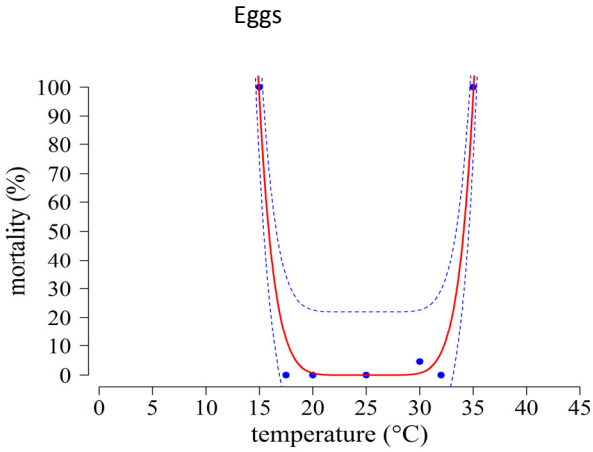


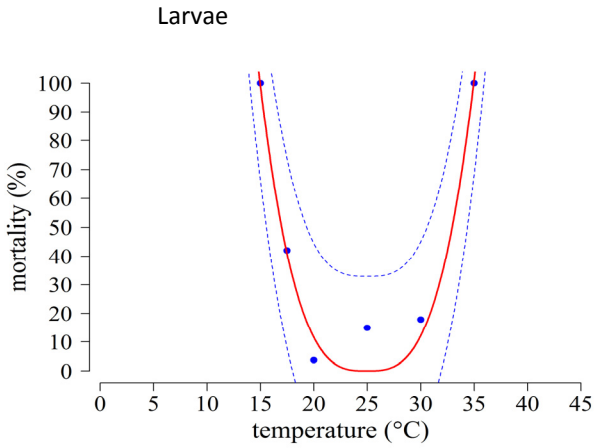
9. Senescence

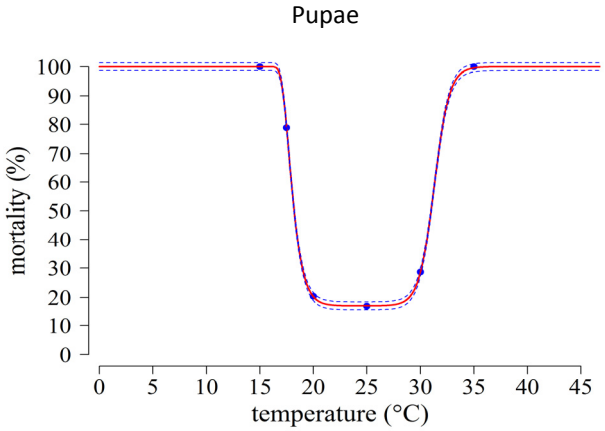




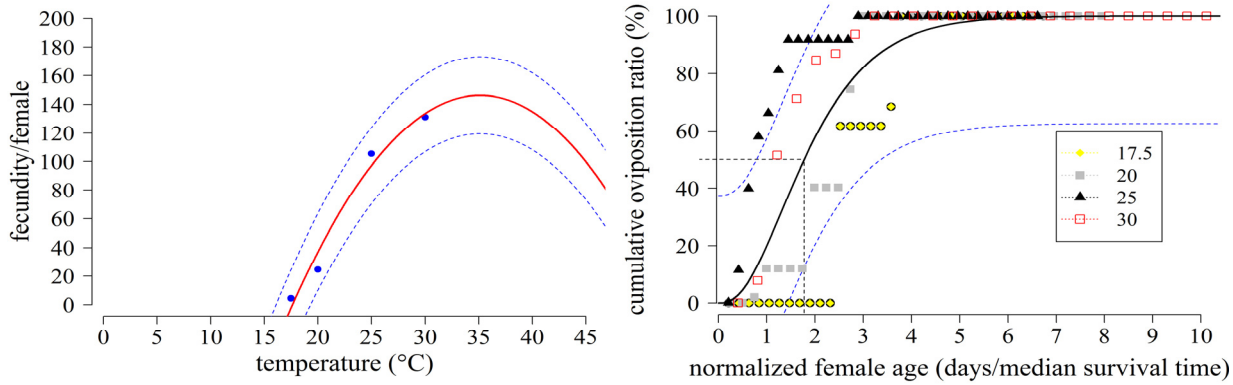
10. Mortality







11. Total and Relative Oviposition



12. Estimated life table parameters using deterministic simulation