7.3.10 *Liriomyza sativae* (Mujica et al.)

1. Development Time

Stage: Eggs	Stage: Larvae	Stage: Pupae	Stage: Female	Stage: Male
Model: logit	Model: logit	Model: logit	Model: logit	Model: logit
Slope: 35.11	Slope: 17.33	Slope: 53.53	Slope: 2.01	Slope: 1.56

2. Development Rate

Stage: Eggs
Model 2: SharpeDeMichelle 2
Parameters : p=0.411 To=295.9 Tl=179.804 Th=313.431 Ha=16312.606 Hl=-1180.651 Hh=526984.333
Formula: $y \sim (p*(x/(To))*e^{(Ha/1.987)*((1/To)-(1/x))})/(1+e^{(Hl/1.987)*((1/Tl)-(1/x))}+e^{(Hh/1.987)*((1/Th)-(1/x))})$

Stage: Larvae
Model 46: Janish 1
Parameters: Dmin=2.743 Topt=33.519 K=0.118
Formula: $y \sim 2/(Dmin*(e^{K*(x-Topt)}+e^{(-K)*(x-Topt)}))$

Stage: Pupae
Model 1: SharpeDeMichelle 1
Parameters: p=0.049 To=288.52 Tl=284.349 Th=308.51 Ha=16661.255 Hl=-192502.313 Hh=25785.133
Formula: $y \sim (p*(x/(To))*e^{(Ha/1.987)*((1/To)-(1/x))})/(1+e^{(Hl/1.987)*((1/Tl)-(1/x))}+e^{(Hh/1.987)*((1/Th)-(1/x))})$

3. Senescence

Stage: Female
Model 25: Exponential Simple
Parameters: b1=0.028 b2=0.057
Formula: $y \sim b1*e^{(b2*x)}$

Stage: Male
Model 56: Hilbert & Logan 3
Parameters: trid=384432.141 Tmax=38.567 Tmin=21.1 D=159910855.531 Dt=0.017 Smin=0.233
Formula: $y \sim trid*(((x- Tmin)^2)/((x-Tmin)^2+D)-e^{-(Tmax-(x-Tmin))/Dt})+Smin$

4. Mortality

Stage: Eggs Model 1: Quadratic Parameters: a=0.001 b=-0.071 c=1.19 Formula: $y \sim a * x^2 + b * x + c$
Stage: Larvae Model 1: Quadratic Parameters: a=0.002 b=-0.083 c=0.977 Formula: $y \sim a * x^2 + b * x + c$
Stage: Pupae Model 26: Wang 1 Parameters: Topt=24.724 B=2.945 H=0.077 Formula: $y \sim 1 - H/(e^{(1+e^{-(x-Topt)/B})*(1+e^{-(Topt-x)/B})})$

5. Total Oviposition

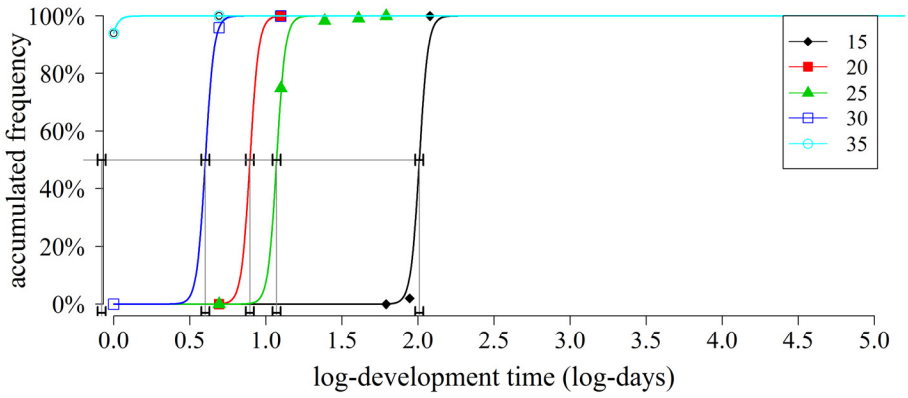
Stage: Female Model 22: Polynomial 12 Parameters: b1=-64.662 b2=-1.334 b3=32.137 Formula: $y \sim e^{(b1 + b2*x + b3*log(x))}$

6. Relative Oviposition

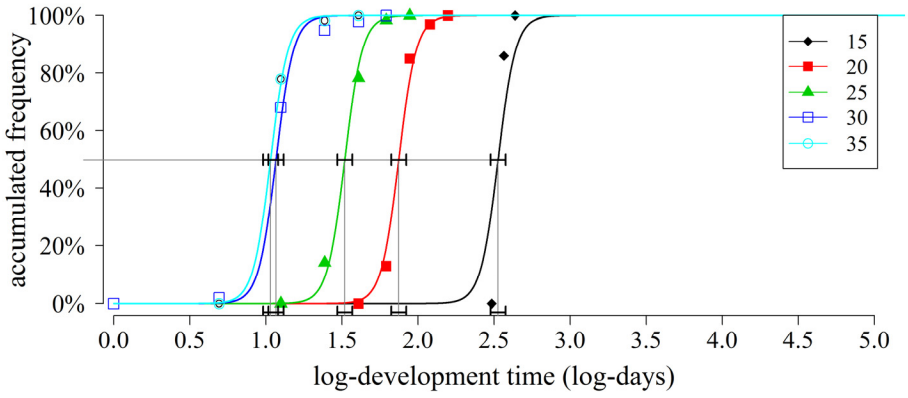
Stage: Female Model 2: Gamma Parameters: a=2.801 b=3.486 Formula: y ~ pgamma(x, a, b)

7. Development Time

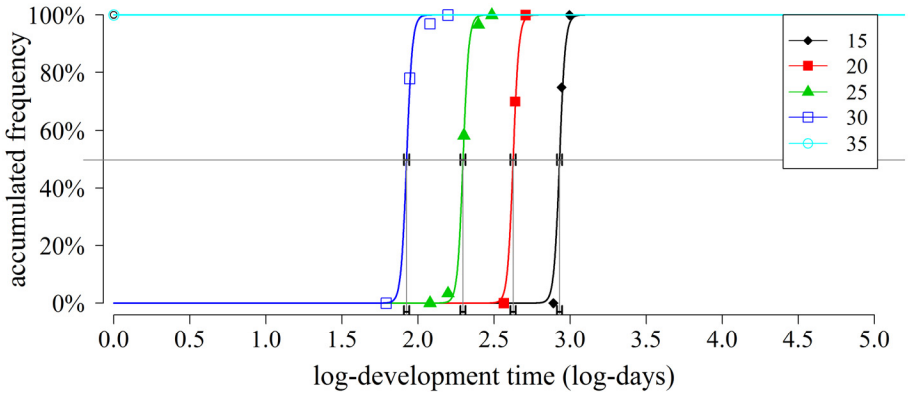
Eggs



Larvae

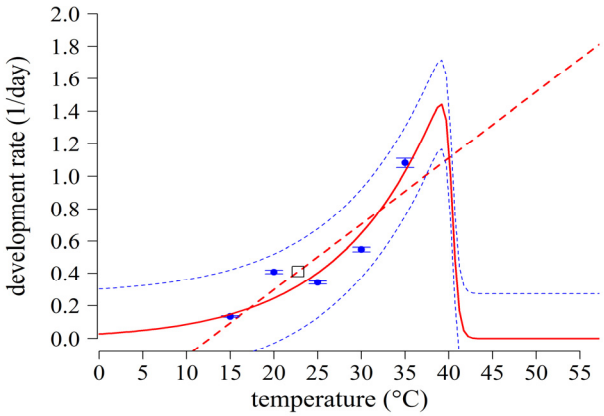


Pupae

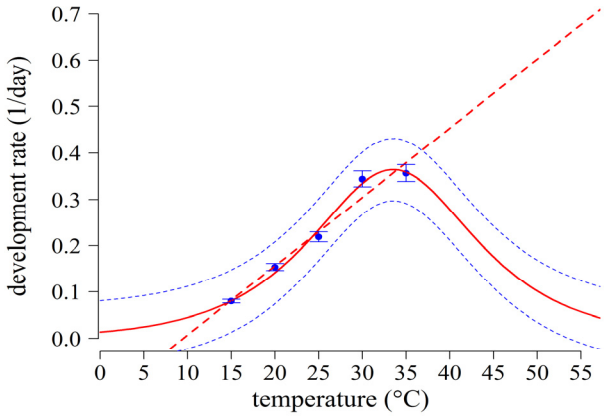


8. Development Rate

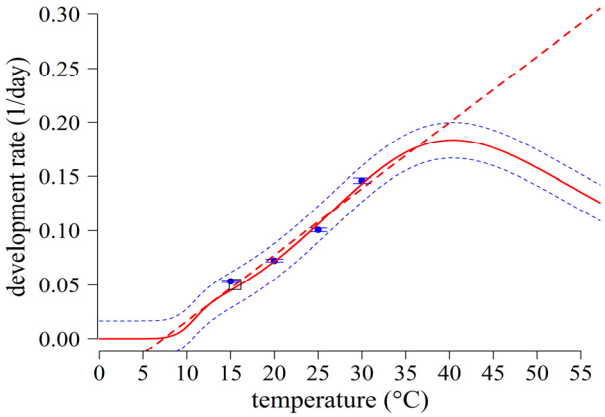
Eggs



Larvae

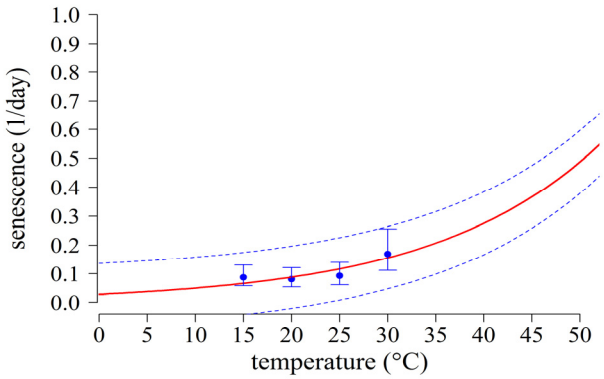


Pupae

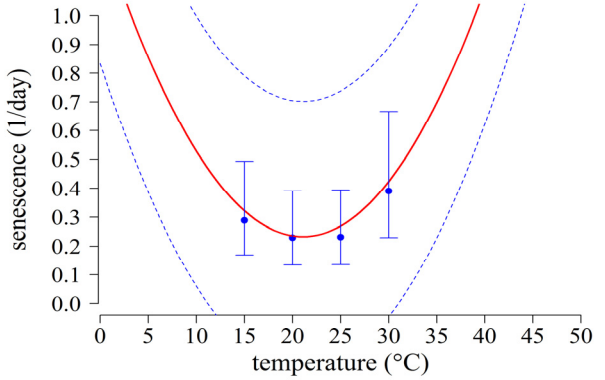


9. Senescence

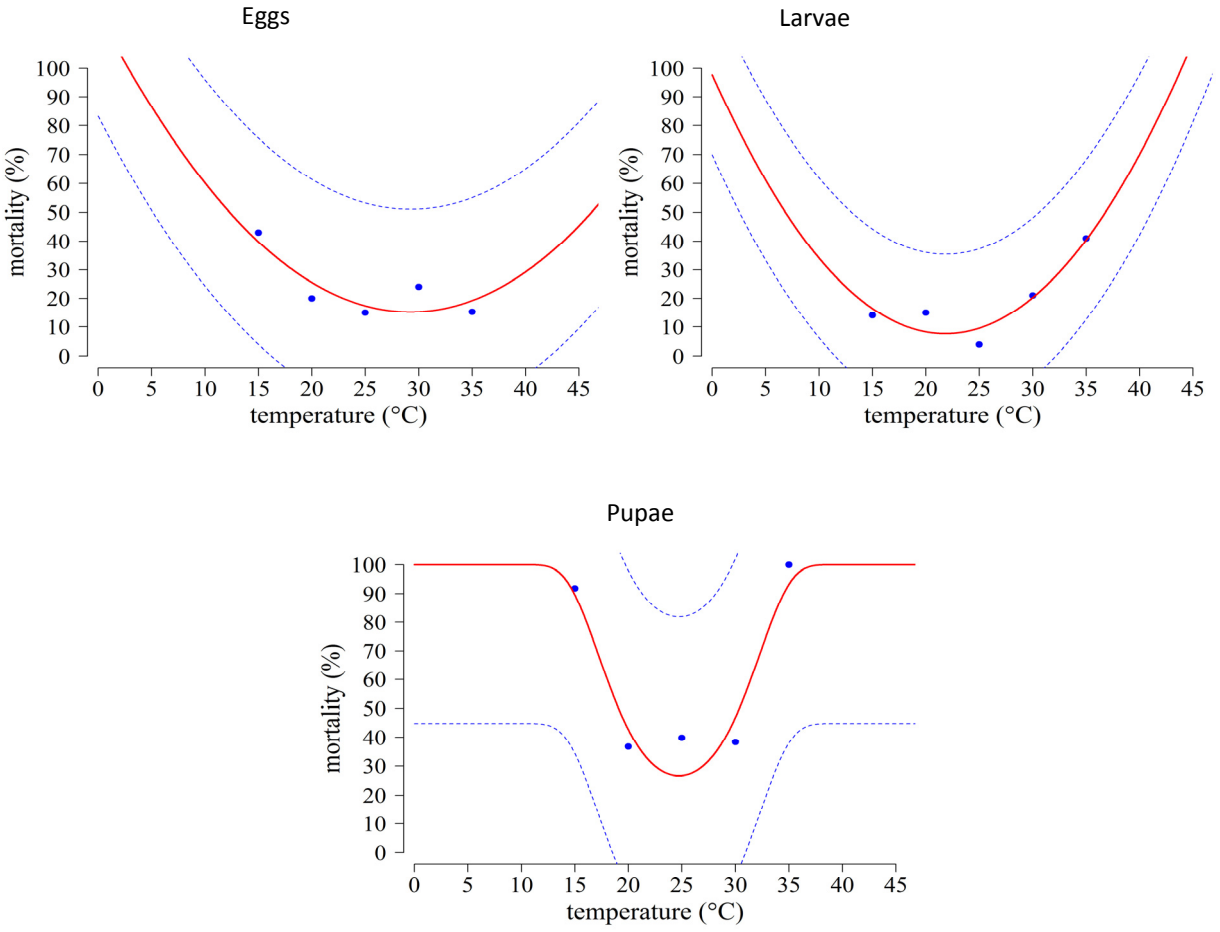
Female



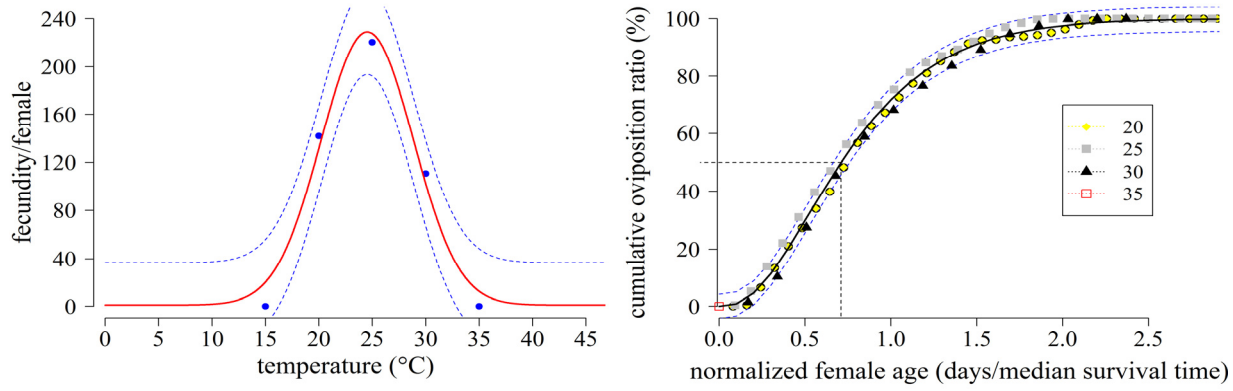
Male



10. Mortality



11. Total and Relative Oviposition



12. Estimated life table parameters using deterministic simulation