### DATA

```r
nt <- c(16, 37, 4, 2, 33, 0, 2, 0, 4, 0)
## nt is the mosquito time

mt <- nt + 1

mt1 <- mt[2:9]
mt <- mt[1:8]

## mt is the normalised data nt + one

RR <- c(1.8647197, 1.2197917, 0.6070103, 2.1224952, 0.8369324, 1.0796486, 0.7046447, 0.6938271)

RR <- mean(RR)

## RR is the standardised standard deviation of the temperature.

envF <- function(lambda0, b, kappa, g){
  mtl <- mt1
  mt <- mt
  RR <- RR
  -sum(dpois(mtl, lambda=exp(log(lambda0)+log(mt)+(-1*b*mt+g*RR) ) ,log=T) )
}

### env F is a maximum likelihood function to fit a Poisson Ricker model with a covariate

library(bbmle)

### bbmle is a library with useful functions to fit maximum likelihood models

envfor <- mle2(envF, start=list(lambda0=3.7, b=0.09, g=3.53))

### mle2 is the R command to fit the function envF, envfor the object were parameters are stored

summary(envfor)

### summary is the R command to see the fitted parameters
```