

Additional File 1: Parameter values for the model of the mosquito feeding cycle

Table S1: Parameter values for the model of the mosquito feeding cycle

Parameter	Value
Initial proportion of vectors infected	0.078
Initial proportion of vectors infectious	0.015[1]
Extrinsic incubation period	14**[2-4]
Human blood index	0.97[5]
Proportion of mosquitoes host-seeking on the same day as oviposting	0.313
Probability that the mosquito successfully bites chosen host	0.95
Probability that the mosquito escapes host and finds a resting place after biting	0.95
Probability of a mosquito successfully laying eggs given that it has rested	0.88
Probability of mosquito successfully resting after finding a resting site	0.99
Duration of the resting period of the vector	3[4, 6]
Maximum proportion of day spent host-seeking by vector	0.33
Probability that the mosquito survives the feeding cycle	0.623
Probability that the mosquito successfully bites chosen non-human host	0.95
Probability that the mosquito escapes non-human host and finds a resting place after biting	0.95
Probability of mosquito successfully resting after finding a resting site	0.99
Proportion of encounters on un-protected animals vs. protected animals	1

**Note: detailed description of parameters used in the entomological model can be found in Chitnis 2008[7] and Chitnis 2012[4]. All values based on Chitnis 2012[4] unless otherwise noted.*

References

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