| Symbol         | Value | Definition  |
|----------------|-------|---|
| T              | 200   | Number of time steps in simulation                                      |
| ν              | 10    | Number of mosquito eggs per capita per feeding cycle                    |
| f              | 600   | Number of houses  |
| 1              | 600   | Number of aquatic habitats  |
| ξ              | 4     | Length of the larval stage (in feeding cycles)                          |
| $s_L$          | 0.9   | Mosquito survival between blood feeding (houses) and egg laying         |
| $s_F$          | 0.9   | Mosquito survival between egg laying and blood feeding (houses)         |
| σ              | 3     | Pathogen incubation period in hosts                                     |
| τ              | 1     | Pathogen incubation period in mosquitoes                                |
| $\rho_{max}$   | 5     | Maximum number of time steps for host infectiousness (I)                |
| c <sub>i</sub> |       | Host-to-mosquito transmission efficiency for infectiousness stage $I_i$ |
| b              | 0.75  | Mosquito-to-host transmission efficiency                                |