

Table 1. Constant model parameters

Parameters	Definition and unit
τ_w	Development time of worms in human host (day)
μ_w	Worm natural mortality (/day)
h	Eggs excreted (/worm pair/gram feces)
μ_z	Patent and latent snail death rate (/day)
σ	Cercarial production (/sporocyst/day)
α	Schistosome acquired (/cercaria/m ² contact)
ρ	Snail infection (/miracidium/m ² surface water)
γ	Spatial index representing the degree to which water contact and cercarial distribution converge
ξ	Spatial index representing the degree to which susceptible snail and miracidial distribution converge
g_0	Mean fecal output (g)
β	Fraction of eggs entering the environment due to agricultural fertilization practice
A_h	Snail habitat (m ²)
A_s	Surface water area (m ²)
n_i	Number of people in group i