Table 1. Parameter values for eradication model (revised from Sisterson et al. 2004). Default values are indicated by an asterisk.

Parameter	Values
Adults	
Mean % of adults that leave their natal field	10, **55***, 75
Number of eggs per female per day in Bt cotton fields	10
Number of eggs per female per day in non-Bt cotton fields	10
Mean % of adults that die each day	10
Egg-pupae	
Mutation rate (from S to R per allele)	5×10^{-5}
Mean % of SS and RS killed in non-Bt cotton fields	79.2
Mean % of RR killed in non-Bt cotton fields	79.2, **81.3*(10% fitness cost)**
Mean % of SS and RS killed in Bt cotton fields	99.8[a], **100***
Mean % of RR killed in Bt cotton fields	79.2, **83.2*(incomplete R=0.9)**
Development time (degree days)	433
Mean % of larvae that die during overwintering	95
Region	
Initial R allele frequency	0.0001, **0.001***, 0.01
Number of fields	**400*,** 900
Size of fields	15 hectares
Percentage of Bt fields	80, 85, 90, 95, **100***
Percentage of Bt plants in Bt fields	99[a], **100***
Distribution of fields	Random
Carrying capacity per field	4,200,000
Initial overwintering larvae per field	2900, **29,000***, 290,000

[a] 99.8% mortality of RS and SS simulates 100% Bt fields that have 99% Bt cotton plants and 1% non-Bt cotton plants (contaminants); 100% die on the Bt plants, 79.2% die on the non-Bt plants (0.99 X 100% + 0.01 X 79.2% = 99.8%)

Steriles

Release period	May 1-Oct 15 (1st bloom to defoliation)
Frequency of releases in each field	1 per 3 days per field
Sex ratio of steriles	1 female: 1 male
Steriles per ha per release in Bt cotton fields	0, 25, **75***, 150 (=0, 50, 150, 300 per week per ha)
Steriles per ha per release in non-Bt cotton fields	0, 100, **500*,** 1000 (=0, 200, 1000, 2000 per week per ha)

Pheromone ropes only in non-Bt cotton fields

All non-Bt fields treated once early in season	May 17-June 20 (6-leaf stage)
Daily % reduction in fecundity caused by pheromone ropes	20, **40***, 60 for 30 days

Insecticide & pheromone sprays only in non-Bt cotton fields

Spray threshold (check sterile male:native male ratio weekly)	≥60 no spray 30-59 spray pheromone 0-29 spray pheromone + insecticide
Daily reduction in fecundity caused by pheromone sprays	20, **40***, 60 for 14 days
Mean % of adults killed daily by insecticide	37 per day for 5 days
Mean % of eggs killed daily by insecticide	95 per day for 5 days
Larvae are not killed by sprays	