**(A) RISK OF INSECTICIDE RESISTANCE DEVELOPMENT**

Parameter FirstOrderEffect TotalEffect

coverage\_maxValue 0.284 0.552

slope 0.255 0.540

resistanceGain 0.078 0.404

proportion\_bounds\_logP 0.058 0.192

R 0.053 0.188

fitnessPenalty 0.060 0.176

maxMortality 0.006 0.148

q\_bounds\_logP 0.078 0.140

K\_maxValue 0.047 0.124

*SUM 0.917 2.465*

**(B) RISK OF INSECT PEST OUTBREAK**

Parameter FirstOrderEffect TotalEffect

R 0.343 0.854

K\_maxValue 0.092 0.586

coverage\_maxValue 0.090 0.503

fitnessPenalty 0.098 0.498

resistanceGain 0.084 0.484

slope 0.115 0.463

maxMortality 0.045 0.441

q\_bounds\_logP 0.022 0.417

proportion\_bounds\_logP 0.112 0.416

*SUM 1.000 4.662*

