

SUPPLEMENTAL TABLE S1

Model selection for factors explaining the infection rate at Trinidad de las Minas, Panamá

Model Structure indicates the variables considered in the generalized Poisson rate models, \* indicates if interaction among variables were considered, + that variables were considered additively. AIC indicates the value of the Akaike Information criterion. In the table the minimum AIC model is **bolded**.

Model Structure	AIC
Ecological index (EI)*Peridomiciliary index (PI) * Domiciliary index (DI) * Domiciliary and Peridomiciliary Sand Fly Abundance (SFA)	86.18
EI*PI*DI*Domiciliary Sand Fly Abundance (DSFA)	89.19
EI*PI*DI*Peridomiciliary Sand Fly Abundance (PSFA)	89.20
PI*DI*SFA	73.77
PI*DI*DSFA	77.16
PI*DI*PSFA	76.68
EI*DI*SFA	74.40
EI*DI*DSFA	75.34
EI*DI*PSFA	75.07
(PI+DI)*SFA	74.21
(PI+DI)*DSFA	73.92
(PI+DI)*PSFA	75.24
(EI+DI)*SFA	73.41
(EI+DI)*DSFA	72.04
(EI+DI)*PSFA	73.77
PI+DI*SFA	74.38
PI+DI*DSFA	72.12
PI+DI*PSFA	74.96
EI+DI*SFA	71.42
EI+DI*DSFA	70.81
EI+DI*PSFA	71.81
DI+PI*SFA	72.25
DI+PI*DSFA	73.34
DI+PI*PSFA	73.26
DI+EI*SFA	72.06
DI+EI*DSFA	72.27
DI+EI*PSFA	72.15
PI+EI+DI+SFA	72.09
PI+EI+DI+DSFA	72.38
PI+EI+DI+PSFA	72.19
PI+DI+SFA	73.35
PI+DI*DSFA	71.89
PI+DI*PSFA	73.65
EI+DI+SFA	70.15
EI+DI*DSFA	70.54
EI+DI*PSFA	70.25
PI*SFA	71.88
PI*DSFA	71.99
PI*PSFA	73.21
EI*SFA	73.04
EI*DSFA	72.55
EI*PSFA	73.18
DI*SFA	72.38
DI*DSFA	70.14
DI*PSFA	72.96
PI+SFA	72.7
PI*DSFA	70.61
PI*PSFA	73.07
EI+SFA	71.05
EI*DSFA	70.61
EI*PSFA	71.40
DI+SFA	71.37
DI*DSFA	69.97
DI*PSFA	71.67
DI	70.48
PI	71.78
EI	71.44
SFA	72.53
<b>DSFA</b>	<b>69.96</b>
PSFA	70.98