

**Table S4** Model Selection for the best binomial generalized linear model explaining the odds of cutaneous leishmaniasis seropositivity by ELISA in dogs at the household level. In the table SFA= Sand Fly abundance and Total = domiciliary + peridomiciliary. The best model is **bolded**.

Model Selection Round	Model Structure	AIC	ΔAIC
0	Total SFA (C)	50.52	4.51
0	Domiciliary SFA (DC) + peridomiciliary SFA (PDC)	51.91	5.90
0	Total <i>Lutzomyia panamensis</i> abundance (pana) + Total <i>Lutzomyia trapidoi</i> abundance (trapi)	52.05	6.04
1	Trapi	50.45	4.44
0	domiciliary pana (dpana) + peridomiciliary pana (ppana) + domiciliary trapi (dtrapi) + peridomiciliary trapi (ptrapi)	49.58	3.57
1	dpana + dtrapi + ptrapi	47.59	1.58
1	dtrapi + ptrapi	46.28	0.27
<b>1</b>	<b>Dtrapi</b>	<b>46.01</b>	---
	dtrapi + Peridomicile index (pi) + Vegetation index (vi) + housing destituness index (hdi) + number of humans with open Leishmaniasis lessons (actL) + number of humans with past Leishmaniasis Lessons (pasL)+ number of humans (H) + richness of domestic animals (da) + richness of wildlife animals (wa) + index of domestic animal abundance (ida) + index of wildlife animal presence (iwa)	61.91	15.90
3	dtrapi+ida+da	47.88	1.87
4	dtrapi+ida	47.25	1.24