NEOTROPICAL ENTOMOLOGY

Global suitable habitats for *Spodoptera litura* (F.) and the implications for Brazilian agriculture

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Table S1. Evaluation of the models developed for *S. litura* using the Maxent algorithm, based on the Area Under the Receiver Operating Characteristic Curve (AUC), the Continuous Boyce Index (CBI), and the corrected Akaike Information Criterion (AICc). The highlighted row indicates the selected model.

Feature Classes	Regularization multiplier	Train		Test		AICc	ΔAICc
		AUC	CBI	AUC	CBI		
L		0.86	0.91	0.82	0.76	14368.48	542.18
Q		0.85	0.99	0.79	0.68	14362.24	535.94
LQ	0.5	0.89	0.95	0.81	0.70	14054.03	227.73
LQH		0.92	0.98	0.83	0.70	14052.82	226.52
LQHP		0.92	0.98	0.82	0.64	13870.30	44.00
L		0.86	0.91	0.82	0.76	14370.58	544.28
Q		0.85	0.99	0.79	0.67	14368.48	542.18
LQ	1.0	0.88	0.94	0.81	0.66	14080.24	253.94
LQH		0.91	0.96	0.84	0.65	13949.51	123.21
LQHP		**0.92**	**0.95**	**0.83**	**0.60**	**13826.30**	**0.00**
L		0.86	0.91	0.82	0.75	14373.02	546.72
Q		0.85	0.99	0.79	0.68	14376.03	549.73
LQ	1.5	0.88	0.93	0.82	0.66	14106.83	280.53
LQH		0.91	0.94	0.84	0.64	13887.70	61.40
LQHP		0.92	0.96	0.83	0.60	13858.42	32.12
L		0.86	0.91	0.82	0.75	14375.72	549.42
Q	2.0	0.85	0.99	0.78	0.67	14384.57	558.26
LQ		0.88	0.92	0.82	0.68	14128.88	302.58

LQH		0.91	0.94	0.84	0.65	13919.52	93.22
LQHP		0.91	0.96	0.84	0.62	13849.09	22.79
L		0.86	0.91	0.82	0.74	14378.79	552.49
Q		0.85	0.99	0.78	0.67	14393.95	567.65
LQ	2.5	0.88	0.90	0.82	0.72	14148.11	321.81
LQH		0.91	0.95	0.84	0.65	13942.86	116.56
LQHP		0.91	0.97	0.84	0.65	13894.71	68.41
L		0.86	0.92	0.82	0.74	14382.05	555.75
Q		0.85	0.99	0.78	0.67	14401.01	574.71
LQ	3.0	0.88	0.90	0.82	0.73	14163.17	336.87
LQH		0.90	0.95	0.84	0.66	13933.28	106.98
LQHP		0.91	0.98	0.84	0.65	13929.26	102.96
L		0.86	0.92	0.82	0.74	14385.72	559.42
Q		0.85	0.99	0.78	0.66	14410.34	584.04
LQ	3.5	0.88	0.90	0.82	0.73	14179.46	353.16
LQH		0.90	0.96	0.84	0.66	13936.51	110.21
LQHP		0.91	0.98	0.83	0.64	13945.84	119.54
L		0.86	0.92	0.82	0.75	14389.71	563.41
Q		0.85	0.99	0.77	0.64	14419.97	593.67
LQ	4.0	0.88	0.90	0.82	0.74	14195.91	369.61
LQH		0.90	0.96	0.84	0.66	13968.90	142.60
LQHP		0.91	0.98	0.83	0.64	13970.15	143.85
L		0.86	0.92	0.81	0.73	14393.81	567.51
Q		0.85	0.99	0.77	0.62	14429.84	603.54
LQ	4.5	0.87	0.88	0.82	0.74	14211.70	385.40
LQH		0.90	0.96	0.84	0.68	13988.88	162.58
LQHP		0.91	0.98	0.83	0.64	13973.56	147.26
L		0.85	0.92	0.81	0.73	14398.42	572.12
Q		0.84	0.99	0.77	0.61	14439.86	613.55
LQ	5.0	0.87	0.90	0.81	0.73	14229.66	403.36
LQH		0.90	0.97	0.83	0.67	14011.60	185.30
LQHP		0.91	0.98	0.83	0.64	13988.23	161.93

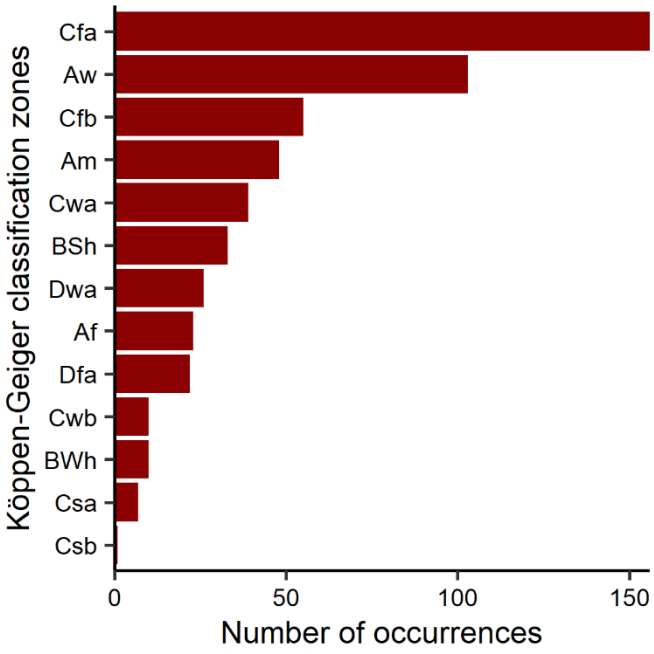

Figure S1 Number of occurrence records of *Spodoptera litura* within each Köppen-Geiger climate zones, considering the native and invasive range.

Occurrence records used in the modelling process:

Marchioro, Cesar Augusto (2026), "Global suitable habitats for Spodoptera litura and the implications for Brazilian agriculture", Mendeley Data, V1, doi: 10.17632/c7wj4c6ffh.1