

Supplementary material

Table S1. Three emission scenarios.

Emission	Description
SSP1-2.6	SSP1 (Low forcing scenario) Upgrade to RCP2.6 scenario based on (Radiative forcing reaches 2.6 W/m ² in 2100)
SSP2-4.5	SSP2 (Medium forcing scenario) Upgrade to RCP4.5 scenario based on (Radiative forcing reaches 4.5 W/m ² in 2100)
SSP5-8.5	SSP5 (High Forcing Scenario) Upgrade to RCP8.5 scenario based on (SSP5 is the only SSP scenario that can achieve radiative forcing to 8.5 W/m ² in 2100)

Table S2. Potential suitable areas for *Linepithema humile* under different climate change scenarios (10⁴ km²).

Period	Highly	Moderately	Poorly	Total
Current	0.18	6.37	73.76	80.31
2030s, SSP1-2.6	0.54	9.22	94.84	104.60
2030s, SSP2-4.5	0.59	11.07	90.84	102.50
2030s, SSP5-8.5	0.87	7.22	89.60	97.69
2050s, SSP1-2.6	0.76	13.43	101.91	116.10
2050s, SSP2-4.5	0.49	15.73	78.81	95.03
2050s, SSP5-8.5	1.12	4.26	67.66	73.04

Table S3. Future changes in suitable area (10⁴km²).

Period	Loss	Gain	Unchanged
2030s, SSP1-2.6	9.24	33.21	71.26
2030s, SSP2-4.5	9.45	31.56	70.95
2030s, SSP5-8.5	11.78	28.91	68.72
2050s, SSP1-2.6	7.59	43.10	72.91
2050s, SSP2-4.5	16.56	31.23	63.85
2050s, SSP5-8.5	26.11	18.92	54.22

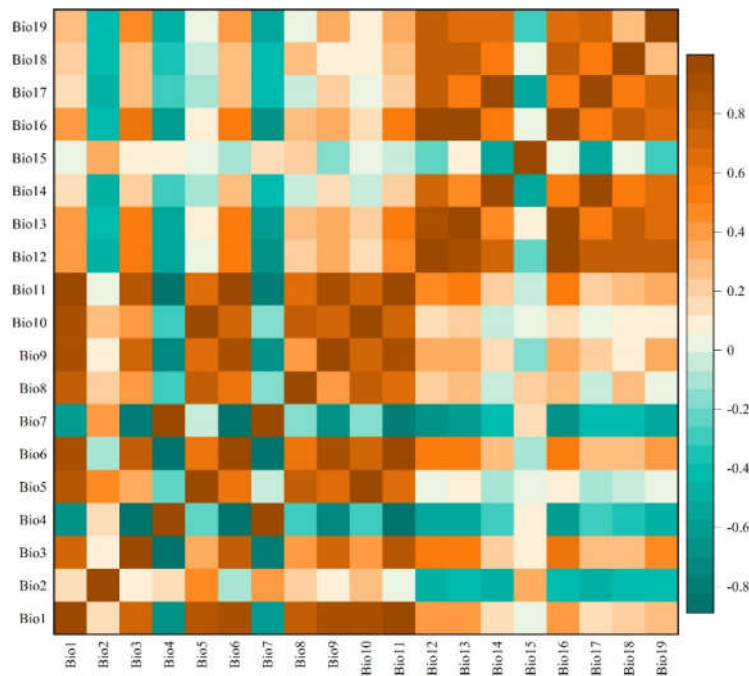


Figure S1. Correlation coefficient between Bioclimatic variables.

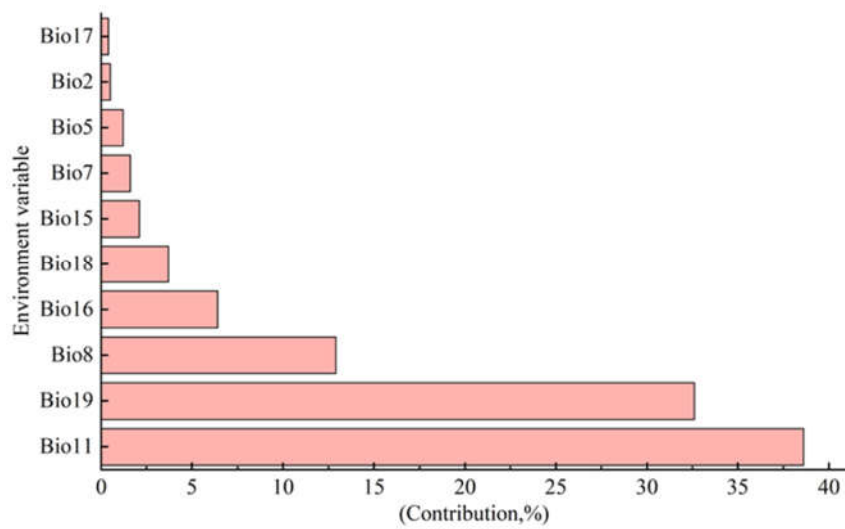


Figure S2. Contribution of different bioclimatic variables to MaxEnt model for *Linepithema humile*.