Supplied materials

Table S1. Bioclimatic and edaphic layers used for the MaxEnt modeling of each *Zephyranthes* species.

Specie	Bioclimatic variables
Zephyranthes brevipes	BIO5, BIO8, BIO10, BIO12, BIO13, BIO15, BIO19, SMpH
Zephyranthes carinata	BIO1, BIO3, BIO4, BIO8, BIO9, BIO12, BIO14, BIO17, SMpH
Zephyranthes chichimeca	BIO1, BIO2, BIO3, BIO7, BIO8, BIO10, BIO13, BIO14, BIO16, SMEC
Zephyranthes chlorosolen	BIO3, BIO5, BIO10, BIO12, BIO16, BIO18, SMMg, SMNa
Zephyranthes citrina	BIO1, BIO6, BIO7, BIO10, BIO14, BIO17, BIO18, SMCOrg, SMNa
Zephyranthes concolor	BIO6, BIO8, BIO9, BIO10, BIO13, BIO15, BIO16, SMCOrg, SMK
Zephyranthes drummondii	BIO6, BIO8, BIO10, BIO11, BIO12, BIO15, BIO16, SMK, SMMg
Zephyranthes fosteri	BIO2, BIO5, BIO8, BIO10, BIO13, BIO15, BIO19, SMCa, SMEC, SMMg
Zephyranthes lindleyana	BIO1, BIO3, BIO8, BIO9, BIO10, BIO12, BIO13, BIO16, SMCa
Zephyranthes longifolia	BIO6, BIO7, BIO12, BIO13, BIO16, SMCa, SMK, SMNa
Zephyranthes minuta	BIO1, BIO4, BIO7, BIO8, BIO10, BIO19, SMEC, SMMg
Zephyranthes morrisclintii	BIO1, BIO5, BIO8, BIO10, BIO18, SMSAR, SMCa, SMNa, SMpH
Zephyranthes sessilis	BIO4, BIO5, BIO6, BIO7, BIO15, BIO18, SMSAR, SMNa

Table S2. Area Under the Curve (AUC) value of the ROC analysis of the training and test models of 13 resulting *Zephyranthes* species.

Species	Training	Test
Zephyranthes brevipes	0.959	0.9774
Zephyranthes carinata	0.9301	0.9386
Zephyranthes chichimeca	0.9721	0.9573
Zephyranthes chlorosolen	0.945	0.9757
Zephyranthes citrina	0.992	0.9974
Zephyranthes concolor	0.981	0.9767
Zephyranthes drummondii	0.9562	0.9127
Zephyranthes fosteri	0.9515	0.9388
Zephyranthes lindleyana	0.9317	0.8697
Zephyranthes longifolia	0.9281	0.9118
Zephyranthes minuta	0.966	0.9844
Zephyranthes morrisclintii	0.9557	0.9857
Zephyranthes sessilis	0.9916	0.993

Table S3. Cutoff threshold for each species for the binomial test. MTSPS: Maximum Test Sensitivity Plus Specificity.

Specie	MTSPS	Binomial Test (*p-value*)	Kappa Index
Zephyranthes brevipes	0.555	2.2e-16	0.72
Zephyranthes carinata	0.238	2.2e-16	0.89
Zephyranthes chichimeca	0.426	9.797e-11	0.78
Zephyranthes chlorosolen	0.155	2.2e-16	0.83
Zephyranthes citrina	0.504	2.2e-16	0.61
Zephyranthes concolor	0.205	2.2e-16	0.85
Zephyranthes drummondii	0.304	2.2e-16	0.73
Zephyranthes fosteri	0.173	2.2e-16	0.89
Zephyranthes lindleyana	0.401	2.2e-16	0.67
Zephyranthes longifolia	0.271	2.2e-16	0.81
Zephyranthes minuta	0.282	2.2e-16	0.81
Zephyranthes morrisclintii	0.627	1.544e-12	0.73
Zephyranthes sessilis	0.037	2.2e-16	0.9

Table S4. Prediction of potential species distribution area using MTSPS as cut-off threshold.

Specie	Potential distribution area (Km²)
Zephyranthes brevipes	54,790.10
Zephyranthes carinata	535,691.56
Zephyranthes chichimeca	112,884.20
Zephyranthes chlorosolen	136,997.44
Zephyranthes citrina	105,12.09
Zephyranthes concolor	79,306.70
Zephyranthes drummondii	114,115.56
Zephyranthes fosteri	203,783.26
Zephyranthes lindleyana	184,478.03
Zephyranthes longifolia	348,622.03
Zephyranthes minuta	102,083.03
Zephyranthes morrisclintii	591,75.27
Zephyranthes sessilis	110,975.85