

**Table S3.** Model performance estimated with the area under the curve (AUC) and true skill statistic (TSS) for all the species that had at least five spatially unique points. Bold values represent species with low model performance and were not included to estimate species richness (SR) and weighted endemism (WE) using species distribution models (SDM).

Species	Training samples	Test samples	Test AUC	TSS
<i>Allium eurotophilum</i>	4	1	0.919	0.73887827
<i>Allium glandulosum</i>	70	17	0.8688	0.63015503
<i>Allium haematochiton</i>	7	1	0.9358	0.86929573
<b><i>Alophia drummondii</i></b>	<b>6</b>	<b>1</b>	<b>0.8501</b>	<b>0.48553219</b>
<i>Arisaema macrospathum</i>	10	2	0.8778	0.7235341
<b><i>Beloglottis costaricensis</i></b>	<b>6</b>	<b>1</b>	<b>0.7717</b>	<b>0.49104525</b>
<i>Bessera elegans</i>	12	3	0.9508	0.65844487
<i>Bletia adenocarpa</i>	17	4	0.9561	0.69394519
<i>Bletia campanulata</i>	44	11	0.9114	0.68861753
<i>Bletia coccinea</i>	17	4	0.9202	0.65763225
<i>Bletia ensifolia</i>	14	3	0.8918	0.6027884
<i>Bletia gracilis</i>	24	5	0.9286	0.63003824
<i>Bletia lilacina</i>	7	1	0.9296	0.79901211
<i>Bletia macristhmochila</i>	24	5	0.9074	0.5960325
<i>Bletia neglecta</i>	21	5	0.9552	0.68882728
<i>Bletia parkinsonii</i>	18	4	0.9671	0.83107075
<i>Bletia punctata</i>	16	4	0.9522	0.79819949
<b><i>Bletia purpurata</i></b>	<b>28</b>	<b>6</b>	<b>0.8744</b>	<b>0.47684831</b>
<i>Bletia purpurea</i>	87	21	0.8979	0.60337567
<i>Bletia roezlii</i>	31	7	0.9361	0.6859146
<i>Bletia tenuifolia</i>	5	1	0.9881	0.68376354
<i>Brachystele polyantha</i>	7	1	0.8808	0.72031549
<b><i>Calochortus barbatus</i></b>	<b>15</b>	<b>3</b>	<b>0.7895</b>	<b>0.46042065</b>
<b><i>Calochortus exilis</i></b>	<b>4</b>	<b>1</b>	<b>0.8393</b>	<b>0.44609624</b>
<b><i>Calochortus fuscus</i></b>	<b>6</b>	<b>1</b>	<b>0.8197</b>	<b>0.41402167</b>
<i>Calochortus purpureus</i>	6	1	0.9398	0.69297323
<b><i>Calochortus spatulatus</i></b>	<b>7</b>	<b>1</b>	<b>0.7386</b>	<b>0.12543021</b>
<i>Calochortus venustus</i>	5	1	0.9161	0.66097833
<i>Cardiostigma longispatha</i>	7	1	0.9577	0.68044933
<i>Cipura campanulata</i>	6	1	0.8116	0.54080625
<i>Cipura paludosa</i>	12	3	0.8422	0.55688337
<b><i>Corallorhiza bulbosa</i></b>	<b>4</b>	<b>1</b>	<b>0.813</b>	<b>0.25310707</b>
<i>Crinum americanum</i>	6	1	0.8354	0.64181007
<i>Cypripedium irapeanum</i>	9	2	0.859	0.54855003
<i>Cypripedium molle</i>	8	1	0.9687	0.86731995
<i>Deiregyne densiflora</i>	7	1	0.8883	0.58741236
<b><i>Dichromanthus cinnabarinus</i></b>	<b>12</b>	<b>3</b>	<b>0.7711</b>	<b>0.34643085</b>

<i>Dichromanthus michuacanus</i>	12	2	0.8699	0.56454748
<i>Echeandia echeandioides</i>	8	1	0.8564	0.74431166
<b><i>Echeandia flavescens</i></b>	<b>9</b>	<b>2</b>	<b>0.8127</b>	<b>0.41622052</b>
<i>Echeandia flexuosa</i>	8	1	0.9235	0.6444232
<i>Echeandia longipedicellata</i>	4	1	0.9368	0.53669535
<i>Echeandia luteola</i>	5	1	0.9716	0.56596558
<i>Echeandia mexicana</i>	13	3	0.8743	0.55895475
<i>Echeandia nana</i>	6	1	0.9617	0.65559273
<b><i>Echeandia occidentalis</i></b>	<b>8</b>	<b>2</b>	<b>0.813</b>	<b>0.41833971</b>
<i>Echeandia paniculata</i>	8	1	0.9364	0.61116953
<i>Echeandia parviflora</i>	10	2	0.8965	0.64369025
<i>Echeandia ramosissima</i>	8	1	0.9001	0.68956342
<i>Echeandia reflexa</i>	4	1	0.9305	0.53161249
<i>Echeandia scabrella</i>	5	1	0.9223	0.51655513
<i>Echeandia skinneri</i>	15	3	0.9059	0.52560548
<i>Echeandia vestita</i>	14	3	0.9503	0.74859783
<b><i>Eleutherine bulbosa</i></b>	<b>4</b>	<b>1</b>	<b>0.8434</b>	<b>0.45927342</b>
<i>Eleutherine latifolia</i>	6	1	0.8889	0.74512428
<i>Govenia alba</i>	5	1	0.7843	0.54271829
<i>Govenia liliacea</i>	12	2	0.8062	0.54604844
<b><i>Govenia mutica</i></b>	<b>5</b>	<b>1</b>	<b>0.8477</b>	<b>0.40095602</b>
<i>Govenia purpusii</i>	6	1	0.9159	0.61470682
<b><i>Govenia superba</i></b>	<b>10</b>	<b>2</b>	<b>0.8436</b>	<b>0.47327916</b>
<i>Habenaria clypeata</i>	16	4	0.9252	0.57573295
<i>Habenaria novemfida</i>	8	1	0.9333	0.68218611
<b><i>Habenaria strictissima</i></b>	<b>4</b>	<b>1</b>	<b>0.9231</b>	<b>0.40305927</b>
<b><i>Habranthus longifolius</i></b>	<b>4</b>	<b>1</b>	<b>0.7611</b>	<b>0.42866475</b>
<b><i>Hexalectris grandiflora</i></b>	<b>8</b>	<b>2</b>	<b>0.7414</b>	<b>0.38237731</b>
<b><i>Hymenocallis acutifolia</i></b>	<b>4</b>	<b>1</b>	<b>0.8346</b>	<b>0.49840663</b>
<i>Hymenocallis harrisiana</i>	4	1	0.8605	0.55928936
<i>Hymenocallis littoralis</i>	8	2	0.8602	0.52173359
<b><i>Hypoxis colliculata</i></b>	<b>4</b>	<b>1</b>	<b>0.969</b>	<b>0.46741555</b>
<i>Hypoxis potosina</i>	5	1	0.8851	0.63223391
<i>Hypoxys decumbens</i>	21	5	0.921	0.66775653
<i>Hypoxys mexicana</i>	18	4	0.8521	0.56217336
<b><i>Liparis vexillifera</i></b>	<b>11</b>	<b>2</b>	<b>0.8066</b>	<b>0.40489165</b>
<i>Malaxis carnosa</i>	7	1	0.8741	0.63996176
<b><i>Malaxis myurus</i></b>	<b>9</b>	<b>2</b>	<b>0.7915</b>	<b>0.49869344</b>
<i>Maranta gibba</i>	6	1	0.9412	0.72294455
<i>Milla biflora</i>	140	35	0.8967	0.6412014
<i>Nemastylis tenuis</i>	43	10	0.8467	0.54286807
<i>Nothoscordum bivalve</i>	21	5	0.8797	0.53514659
<b><i>Nothoscordum gracile</i></b>	<b>9</b>	<b>2</b>	<b>0.7233</b>	<b>0.34665392</b>

<b><i>Orthrosanthus exsertus</i></b>	<b>6</b>	<b>1</b>	<b>0.8398</b>	<b>0.47761313</b>
<i>Polianthes geminiflora</i>	9	2	0.9001	0.53832059
<i>Polianthes longiflora</i>	8	2	0.9725	0.85521033
<i>Polianthes montana</i>	7	1	0.9394	0.60462078
<i>Polianthes palustris</i>	11	2	0.9273	0.75506692
<i>Polianthes platyphylla</i>	10	2	0.9483	0.79899618
<i>Polianthes pringlei</i>	4	1	0.9342	0.71641173
<b><i>Polianthes sessiliflora</i></b>	<b>6</b>	<b>1</b>	<b>0.94</b>	<b>0.46061185</b>
<i>Polianthes tuberosa</i>	8	1	0.8591	0.77833015
<i>Ponthieva mexicana</i>	7	1	0.9264	0.58659975
<i>Ponthieva schaffneri</i>	12	2	0.9048	0.71139261
<b><i>Sacoila lanceolata</i></b>	<b>14</b>	<b>3</b>	<b>0.7592</b>	<b>0.43840025</b>
<b><i>Sarcoglottis assurgens</i></b>	<b>4</b>	<b>1</b>	<b>0.7543</b>	<b>0.32633843</b>
<i>Sarcoglottis schaffneri</i>	12	2	0.89	0.56661887
<b><i>Schiedeella affinis</i></b>	<b>5</b>	<b>1</b>	<b>0.8043</b>	<b>0.40736138</b>
<i>Schiedeella eriophora</i>	8	2	0.8944	0.55833333
<i>Sotoa confusa</i>	4	1	0.8945	0.63768324
<i>Sprekelia formosissima</i>	21	5	0.9012	0.66059273
<b><i>Tigridia ehrenbergii</i></b>	<b>4</b>	<b>1</b>	<b>0.8495</b>	<b>0.47987572</b>
<i>Tigridia meleagris</i>	4	1	0.9383	0.71121734
<i>Tigridia multiflora</i>	10	2	0.8467	0.5900733
<b><i>Tigridia pavonia</i></b>	<b>15</b>	<b>3</b>	<b>0.8618</b>	<b>0.44687699</b>
<i>Trimezia steyermarkii</i>	4	1	0.9501	0.81537604
<i>Triphora gentianoides</i>	4	1	0.8816	0.53677502
<i>Weldenia candida</i>	6	1	0.9788	0.84788082
<i>Zephyranthes brevipes</i>	5	1	0.903	0.52530274
<i>Zephyranthes carinata</i>	11	2	0.9156	0.6805768
<b><i>Zephyranthes lindleyana</i></b>	<b>6</b>	<b>1</b>	<b>0.6576</b>	<b>0.40025494</b>
<i>Zephyranthes verecunda</i>	5	1	0.9663	0.83217017