

Supplementary material

Appendix 1

Plant strategies of alien species in the study area according to the C-S-R classification scheme (Grime 1977). Botanical nomenclature according to IPNI (<www.ipni.org/>), with authors' names excluded for simplicity.

Species	C-S-R class.	Species	C-S-R class.	Species	C-S-R class.
<i>Acacia dealbata</i>	SR	<i>Cyperus eragrostis</i>	CR	<i>Oxalis articulata</i>	SR
<i>Acacia longifolia</i>	SC	<i>Datura stramonium</i>	R	<i>Oxalis latifolia</i>	R
<i>Acacia mearnsii</i>	SC	<i>Erigeron karvinskianus</i>	CSR	<i>Oxalis pes-caprae</i>	R
<i>Acacia melanoxylon</i>	SC	<i>Eupatorium adenophorum</i>	CSR	<i>Papaver somniferum</i>	R
<i>Ailanthus altissima</i>	SC	<i>Euphorbia lathyris</i>	SR	<i>Paspalum dilatatum</i>	SC
<i>Alcea rosa</i>	CR	<i>Galinsoga ciliata</i>	R	<i>Paspalum paspalodes</i>	SC
<i>Allium triquetrum</i>	SR	<i>Galinsoga parviflora</i>	R	<i>Phytolacca americana</i>	CR
<i>Amaranthus deflexus</i>	R	<i>Gamochaeta calviceps</i>	SR	<i>Polygonum capitatum</i>	CSR
<i>Amaranthus hybridus</i>	R	<i>Gamochaeta pensylvanica</i>	SR	<i>Reynoutria japonica</i>	SR
<i>Amaranthus retroflexus</i>	R	<i>Gamochaeta simplicicaulis</i>	SR	<i>Robinia pseudoacacia</i>	C
<i>Arctotheca calendula</i>	R	<i>Gamochaeta spicata</i>	SR	<i>Rosa</i> sp.	SR
<i>Artemisia verlotiorum</i>	C	<i>Gamochaeta subfalcata</i>	SR	<i>Senecio inaequidens</i>	CSR
<i>Aster squamatus</i>	CSR	<i>Hakea sericea</i>	SC	<i>Senecio mikanioides</i>	SC
<i>Aster x salignus</i>	CSR	<i>Helichrysum foetidum</i>	CR	<i>Sida rhombifolia</i>	SC
<i>Bidens frondosa</i>	CR	<i>Ipomaea acuminata</i>	CSR	<i>Solanum pseudocapsicum</i>	CSR
<i>Bidens pilosa</i>	CR	<i>Juncus tenuis</i>	SR	<i>Solanum sublobatum</i>	CR
<i>Boussigaultia cordifolia</i>	CR	<i>Lepidium virginicum</i>	SR	<i>Solerolia solerolii</i>	SR
<i>Bromus catharticus</i>	CR	<i>Lobularia maritima</i>	SR	<i>Soliva pterosperma</i>	SR
<i>Buddleja davidii</i>	SC	<i>Lonicera japonica</i>	SC	<i>Sporobolus indicus</i>	SC
<i>Calystegia silvatica</i>	SR	<i>Lunaria annua</i>	CR	<i>Stenotaphrum secundatum</i>	SC
<i>Chenopodium ambrosioides</i>	CR	<i>Lychnis coronaria</i>	CSR	<i>Tradescantia fluminensis</i>	CR
<i>Conyza bilbaoana</i>	CR	<i>Matricaria discoidea</i>	R	<i>Trifolium incarnatum</i>	CSR
<i>Conyza bonariensis</i>	CR	<i>Mirabilis jalapa</i>	CR	<i>Tritonia x crocosmiflora</i>	SC
<i>Conyza canadensis</i>	CR	<i>Myriophyllum aquaticum</i>	CR	<i>Verbena bonariensis</i>	CSR
<i>Conyza sumatrensis</i>	CR	<i>Nothoscordum gracile</i>	SR	<i>Veronica peregrina</i>	R
<i>Coronopus didymus</i>	R	<i>Oenothera biennis</i>	CSR	<i>Veronica persica</i>	R
<i>Cortaderia selloana</i>	SC	<i>Oenothera glazioviana</i>	CSR	<i>Vinca major</i>	C
<i>Cotula australis</i>	SR	<i>Oenothera speciosa</i>	CSR	<i>Zantedeschia aethiopica</i>	SR
<i>Cymbalaria muralis</i>	CSR	<i>Oenothera stricta</i>	CSR		

Appendix 2

Results of information-theoretic-based model selection based on the Akaike information criterion

Table A1. Results of information-theoretic-based model selection based on the Akaike information criterion for total invasive species richness within the 'full area', the 'area above the first quartile' (>1st Q) and the 'area above the second quartile' (> 2nd Q), detailing number of model parameters (k), maximised log-likelihood function (logL), adjusted deviance explained (adj.D²), the small-sample bias-corrected form of Akaike's information criterion AICc, Akaike differences (Δ_i) and Akaike weights (w_i). Note that the Akaike weights (w_i) always sum up to 1.

	k	Full area						> 1st Q						> 2nd Q					
		logL	adj.D ²	AICc	Δ_i	w _i	logL	adj.D ²	AICc	Δ_i	w _i	logL	adj.D ²	AICc	Δ_i	w _i			
H ₁	6	68.930	0.770	149.908	0.000	0.855	46.194	0.330	104.441	0.000	0.833	29.027	0.088	70.122	0.000	0.521			
H ₂	10	146.939	0.485	314.007	164.099	0.000	46.973	0.267	114.083	9.643	0.007	29.945	0.061	80.072	9.950	0.004			
H ₃	8	226.192	0.226	468.468	318.560	0.000	70.183	0.054	156.456	52.016	0.000	31.401	0.046	78.921	8.798	0.006			
H ₄	4	286.356	0.066	580.734	430.827	0.000	63.651	0.110	135.327	30.887	0.000	32.951	0.021	73.935	3.813	0.077			
H ₅	8	253.661	0.133	523.407	373.499	0.000	59.215	0.110	134.518	30.078	0.000	28.688	0.044	73.494	3.372	0.096			
H ₆	4	229.719	0.251	467.461	317.553	0.000	63.553	0.111	135.130	30.689	0.000	34.129	0.013	76.291	6.169	0.024			
H ₇	4	264.875	0.136	537.774	387.866	0.000	67.586	0.054	143.197	38.756	0.000	35.231	0.047	78.495	8.372	0.008			
H ₈	8	68.688	0.765	153.461	3.553	0.145	45.825	0.311	107.740	3.299	0.160	28.322	0.057	72.762	2.639	0.139			
H ₉	10	178.890	0.373	377.908	228.000	0.000	55.219	0.138	130.574	26.134	0.000	30.638	0.086	81.458	11.336	0.002			
H ₁₀	6	264.777	0.116	541.603	391.695	0.000	67.122	0.028	146.296	41.856	0.000	34.906	0.096	81.881	11.759	0.001			
H ₁₁	6	235.256	0.214	482.560	332.652	0.000	66.963	0.030	145.977	41.537	0.000	34.793	0.093	81.654	11.532	0.002			
H ₁₂	4	224.287	0.268	456.597	306.689	0.000	61.716	0.137	131.456	27.016	0.000	33.186	0.014	74.404	4.282	0.061			
H ₁₃	4	309.504	0.001	627.030	477.122	0.000	69.451	0.028	146.927	42.486	0.000	33.226	0.013	74.484	4.362	0.059			

Table A2. Results of information-theoretic-based model selection based on the Akaike information criterion for richness of C strategists within the 'full area', the 'area above the first quartile' (> 1st Q) and the 'area above the second quartile' (> 2nd Q), detailing number of model parameters (k), maximised log-likelihood function (logL), adjusted deviance explained (adj.D²), the small-sample bias-corrected form of Akaike's information criterion AICc, Akaike differences (Δi) and Akaike weights (wi). Note that the Akaike weights (wi) always sum up to 1.

	k	Full area					> 1st Q					> 2nd Q				
		logL	adj.D ²	AICc	Δi	wi	logL	adj.D ²	AICc	Δi	wi	logL	adj.D ²	AICc	Δi	wi
H ₁	6	53.092	0.747	118.260	0.000	0.867	37.721	0.334	87.524	0.000	0.817	21.704	0.100	55.514	0.000	0.292
H ₂	10	114.613	0.426	249.426	131.166	0.000	43.358	0.176	106.929	19.406	0.000	23.054	0.079	66.388	10.873	0.001
H ₃	8	160.137	0.217	336.405	218.145	0.000	57.022	0.043	130.184	42.660	0.000	23.343	0.026	62.869	7.354	0.007
H ₄	4	200.021	0.067	408.079	289.819	0.000	52.924	0.098	113.886	26.362	0.000	25.765	0.010	59.580	4.066	0.038
H ₅	8	173.484	0.152	363.100	244.840	0.000	46.685	0.146	109.510	21.987	0.000	20.270	0.109	56.723	1.209	0.160
H ₆	4	160.948	0.249	329.932	211.672	0.000	50.295	0.143	108.629	21.105	0.000	24.588	0.036	57.227	1.713	0.124
H ₇	4	183.188	0.145	374.413	256.152	0.000	54.711	0.068	117.460	29.936	0.000	26.506	0.039	61.062	5.547	0.018
H ₈	8	52.939	0.741	122.010	3.750	0.133	37.189	0.320	90.518	2.995	0.183	20.636	0.093	57.454	1.940	0.111
H ₉	10	126.212	0.368	272.625	154.365	0.000	43.405	0.175	107.025	19.501	0.000	21.296	0.003	62.872	7.358	0.007
H ₁₀	6	183.065	0.126	378.206	259.946	0.000	54.665	0.036	121.411	33.887	0.000	26.407	0.095	64.921	9.407	0.003
H ₁₁	6	167.639	0.200	347.354	229.094	0.000	53.807	0.051	119.695	32.172	0.000	25.203	0.045	62.513	6.998	0.009
H ₁₂	4	170.224	0.206	348.484	230.224	0.000	56.016	0.046	120.071	32.547	0.000	26.677	0.046	61.405	5.891	0.015
H ₁₃	4	215.356	0.005	438.748	320.488	0.000	56.569	0.036	121.176	33.652	0.000	24.048	0.057	56.147	0.632	0.213

Table A3. Results of information-theoretic-based model selection based on the Akaike information criterion for richness of S strategists within the 'full area', the 'area above the first quartile' (>1st Q) and the 'area above the second quartile' (>2nd Q), detailing number of model parameters (k), maximised log-likelihood function (logL), adjusted deviance explained (adj.D²), the small-sample bias-corrected form of Akaike's information criterion AICc, Akaike differences (Δ_i) and Akaike weights (wi). Note that the Akaike weights (w_i) always sum up to 1.

		Full area						> 1st Q						> 2nd Q					
k		logL	adj.D ²	AICc	Δ_i	wi	logL	adj.D ²	AICc	Δ_i	wi	logL	adj.D ²	AICc	Δ_i	wi			
H ₁	6	47.393	0.737	106.875	0.000	0.864	34.286	0.215	80.667	1.856	0.262	21.943	0.025	56.012	1.988	0.124			
H ₂	10	91.373	0.467	202.983	96.108	0.000	29.280	0.278	78.811	0.000	0.663	19.001	0.047	58.338	4.313	0.039			
H ₃	8	137.677	0.216	291.508	184.633	0.000	43.317	0.028	102.797	23.987	0.000	22.585	0.064	61.388	7.364	0.008			
H ₄	4	175.932	0.044	359.907	253.032	0.000	40.940	0.095	89.925	11.114	0.003	24.271	0.020	56.603	2.579	0.092			
H ₅	8	158.857	0.096	333.869	226.994	0.000	41.051	0.025	98.266	19.455	0.000	22.760	0.073	61.740	7.715	0.007			
H ₆	4	145.008	0.213	298.058	191.183	0.000	40.608	0.102	89.261	10.450	0.004	24.300	0.021	56.661	2.637	0.090			
H ₇	4	162.627	0.117	333.296	226.421	0.000	44.146	0.024	96.338	17.527	0.000	25.072	0.054	58.205	4.181	0.041			
H ₈	8	47.212	0.731	110.579	3.704	0.136	33.930	0.194	84.023	5.212	0.049	21.851	0.030	59.922	5.897	0.018			
H ₉	10	117.423	0.315	255.083	148.208	0.000	37.326	0.080	94.901	16.091	0.000	20.814	0.044	61.964	7.939	0.006			
H ₁₀	6	162.434	0.097	336.959	230.083	0.000	43.411	0.006	98.917	20.106	0.000	23.977	0.065	60.082	6.058	0.016			
H ₁₁	6	143.990	0.200	300.070	193.195	0.000	43.135	0.012	98.364	19.554	0.000	23.682	0.052	59.491	5.467	0.022			
H ₁₂	4	138.070	0.250	284.182	177.307	0.000	38.970	0.139	85.985	7.174	0.018	22.982	0.034	54.024	0.000	0.336			
H ₁₃	4	184.819	0.003	377.681	270.806	0.000	43.069	0.048	94.183	15.373	0.000	23.497	0.012	55.055	1.031	0.200			

Table A4. Results of information-theoretic-based model selection based on the Akaike information criterion for richness of R strategists within the 'full area', the 'area above the first quartile' (>1st Q) and the 'area above the second quartile' (> 2nd Q), detailing number of model parameters (k), maximised log-likelihood function (logL), adjusted deviance explained (adj.D²), the small-sample bias-corrected form of Akaike's information criterion AICc, Akaike differences (Δi) and Akaike weights (w_i). Note that the Akaike weights (w_i) always sum up to 1.

	k	Full area					> 1st Q					> 2nd Q				
		logL	adj.D ²	AICc	Δi	w_i	logL	adj.D ²	AICc	Δi	w_i	logL	adj.D ²	AICc	Δi	w_i
H ₁	6	65.206	0.731	142.474	0.000	0.878	42.962	0.298	97.989	0.000	0.857	28.053	0.100	68.194	0.000	0.430
H ₂	10	123.833	0.464	267.828	125.354	0.000	43.764	0.230	107.702	9.712	0.007	30.099	0.092	80.430	12.236	0.001
H ₃	8	189.804	0.199	395.714	253.240	0.000	62.941	0.066	141.995	44.005	0.000	30.304	0.032	76.759	8.565	0.006
H ₄	4	228.049	0.081	464.127	321.653	0.000	55.317	0.128	118.665	20.676	0.000	30.743	0.066	69.529	1.335	0.220
H ₅	8	208.359	0.120	432.823	290.349	0.000	53.605	0.092	123.323	25.333	0.000	27.942	0.048	72.035	3.841	0.063
H ₆	4	186.709	0.248	381.448	238.973	0.000	53.852	0.151	115.736	17.747	0.000	32.731	0.005	73.504	5.310	0.030
H ₇	4	215.633	0.131	439.295	296.821	0.000	59.353	0.064	126.738	28.749	0.000	34.053	0.035	76.148	7.954	0.008
H ₈	8	65.159	0.725	146.425	3.950	0.122	42.778	0.275	101.670	3.680	0.136	27.407	0.066	70.964	2.770	0.108
H ₉	10	150.436	0.349	321.034	178.560	0.000	49.586	0.128	119.345	21.356	0.000	30.546	0.108	81.324	13.130	0.001
H ₁₀	6	215.579	0.111	443.220	300.746	0.000	59.184	0.033	130.433	32.444	0.000	33.729	0.083	79.546	11.352	0.001
H ₁₁	6	195.272	0.195	402.606	260.131	0.000	60.794	0.007	133.654	35.665	0.000	34.660	0.113	81.408	13.214	0.001
H ₁₂	4	177.100	0.287	362.230	219.755	0.000	52.997	0.164	114.026	16.036	0.000	31.371	0.047	70.783	2.589	0.118
H ₁₃	4	251.186	0.012	510.401	367.927	0.000	63.012	0.006	134.055	36.066	0.000	33.510	0.018	75.061	6.867	0.014