

Table S1. Plant species removed from lists due to erroneous inclusion in databases as alien species to South Africa.

Plant species	Database
<i>Afrocarpus falcatus</i>	iNaturalist
<i>Aloe arborescens</i>	iNaturalist
<i>Campylopus introflexus</i>	iNaturalist
<i>Commelina benghalensis</i>	SAPIA
<i>Gomphocarpus physocarpus</i>	iNaturalist
<i>Ipomoea cairica</i>	SAPIA
<i>Leucadendron salicifolium</i>	iNaturalist
<i>Ludwigia palustris</i>	SAPIA
<i>Melinis repens</i>	iNaturalist
<i>Mentha longifolia</i>	SAPIA
<i>Nidorella ivifolia</i>	iNaturalist
<i>Podocarpus elongatus</i>	iNaturalist
<i>Protea aurea</i>	iNaturalist
<i>Protea burchellii</i>	iNaturalist
<i>Protea eximia</i>	iNaturalist
<i>Protea laticolor</i>	iNaturalist
<i>Protea laurifolia</i>	iNaturalist
<i>Protea neriifolia</i>	iNaturalist
<i>Rubus immixtus</i>	SAPIA
<i>Samolus porosus</i>	SAPIA
<i>Senecio pterophorus</i>	iNaturalist
<i>Solanum retroflexum</i>	SAPIA
<i>Tecomaria capensis</i>	iNaturalist
<i>Thunbergia alata</i>	iNaturalist

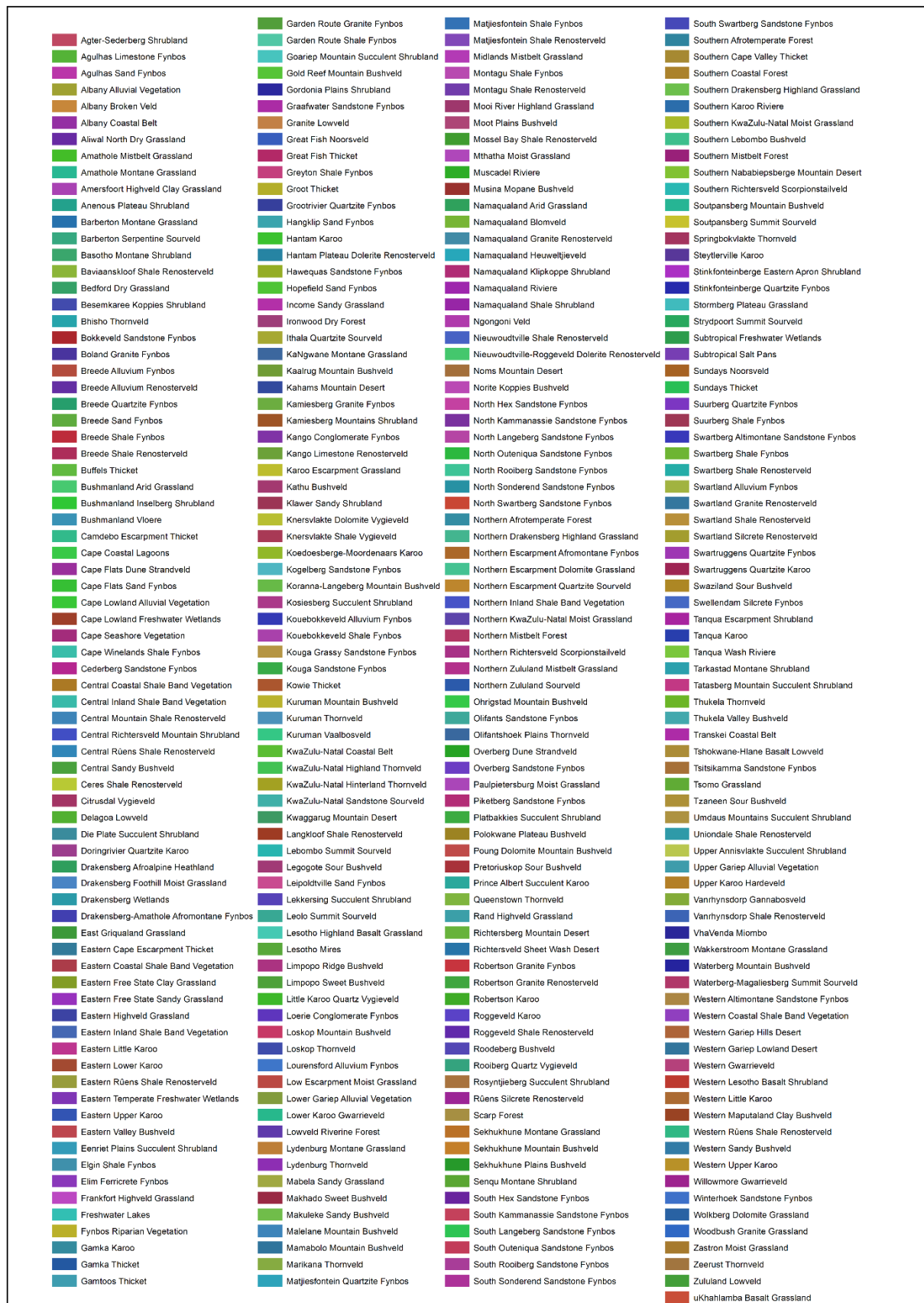


Table S3. Mountain surveys that have been conducted across the six mountain ranges in South Africa.

Mountain range	Survey	Focused alien plant survey	Number of alien plants recorded
Entire mountain ranges	SAPIA [55]	Yes	588
	iNaturalist [43]	No	239
Across two ranges (SGE and EGE)	Great Escarpment Biodiversity Research Programme data mobilisation [40]	No	160
Tropical Cuestas			
Soutpansberg	Ruwanza and Mhlongo [56]	Yes	6
Eastern Great Escarpment			
Sneeuberg Centre	Clark et al. [57]	No	107
	Clark et al. [58]	No	37
	Clark et al. [59]	No	105
Mountain Zebra National Park	Brown and Bezuidenhout [60]	No	7
	Bezuidenhout and Brown [61]	No	4
	Brown and Bezuidenhout [62]	No	2
Drakensberg Mountain Centre	Carbutt and Edwards [27]	No	166
	Carbutt et al. [28]	Yes	50
	Kalwijn et al. [29]	No	106
	Steyn et al. [63]	Yes	152
	Turner [15]	Yes	63
	Popp and Kalwijn [64]	Yes	52
Mpumalanga/Limpopo Escarpment	Clark et al. (2018), unpublished	No	224
Platberg	Brand et al. [65]	Yes	2
	Brand et al. [66]	Yes	22
Ngeli mountains	Grieve and Downs [67]	No	65
Stormberg	Clark and Vidal (2015), unpublished	No	39
Great Winterberg	Clark et al. [68]	No	127
Amatola Mountains (Hogsback)	Omar et al. [69]	No	3

Southern Great Escarpment			
Hantam mountain	Hoffman and Merwe [70]	No	2
Hantam–Roggeveld	Clark et al. [71]	No	23
Nuweveldberge	Clark et al. [72]	No	36
Cape Fold Mountains			
Cape Peninsula Mountains	Moll and Trinder-Smith [73]	Yes	14
Agter-Groenberg conservancy	Walton [74]	No	3
Tsitsikamma	Kraaij and Baard [75]	Yes	109 (across all surveyed area and not just mountain areas)

Table S6. The most abundant alien plants found across all six mountain ranges in South Africa (see Figure 1).

Alien plant species	Growth form	Seed dispersal	Maximum Height (metres)	Mountain Range	Native range	Climatic zones	Frost tolerance	References
<i>Acacia cyclops</i>	shrub or small tree	birds, mammals	4	WGE	Australia	Semi-arid subtropical	Slight	[76]
<i>Acacia dealbata</i>	evergreen tree or shrub	birds, insects, water	30	EGE	Australia	Cool to warm subhumid and occasionally humid	Yes (20 - 80 days)	[76]
<i>Acacia mearnsii</i>	shrub or tree	birds, mammals, water	10	EGE, CFM	Australia	Temperate and subtropical lowlands to tropical highlands	High altitude genotypes can tolerate frost	[76]
<i>Acacia melanoxylon</i>	tree	birds, water	20	CFM,	Australia	Cool and warm humid and warm sub-humid	Yes (1 – 40 days)	[76]
<i>Acacia saligna</i>	tree	birds, water	8	CFM	Australia	Warm, sub-humid, humid and higher rainfall parts of semi-arid	Introduced areas exhibits frost sensitivity (1 – 6 days)	[76]
<i>Atriplex lindleyi</i> <i>subsp inflata</i>	woody shrub	water	0.3	SGE	Australia	Arid	Yes	[77, 78]
<i>Atriplex nummularia</i>	woody shrub	seed production limited, livestock	3	WGE, SGE	Australia	Temperate and sub-tropical	Yes	[79]
<i>Caesalpinia decapetala</i>	evergreen shrub	birds, mammals, water, livestock	4	EGE	India, Sri Lanka	Sub-humid to humid	Yes	[76]
<i>Campuloclinium macrocephalum</i>	erect, perennial herb	wind	3	TC	South America, Central America and Mexico	Wide range of climates	Yes	[80, 81]

<i>Conyza bonariensis</i>	annual herb	wind	0.75	CGM	Temperate South America	Warm temperate, sub-tropical and tropical	Yes	[76]
<i>Conyza sumatrensis</i>	annual herb	wind	2	CGM	Sub-tropical South America	Warm temperate, sub-tropical and tropical	Yes	[76]
<i>Erodium cicutarium</i>	annual herb	birds, mammals, ballistic, water, rodents, ants	0.6	SGE	Europe, North Africa and temperate Asia	Wide range of climates	Yes	[76]
<i>Eucalyptus camaldulensis</i>	tree	wind	20	WGE	Australia	Warm to hot, sub-humid to semi-arid	Yes (Up to 40 days)	[76]
<i>Jacaranda mimosifolia</i>	tree	wind, water	20	TC	Central and eastern South America	Temperate mesothermal and tropical	No	[76]
<i>Lantana camara</i>	erect, perennial shrub	birds, water	2	EGE	Central and South America	Wide range of climates	No	[76]
<i>Melia azedarach</i>	tree	birds	12	TC, CGM	Asia	Wide range of climates	Older trees tolerant	[76]
<i>Nicotiana glauca</i>	small tree or shrub	water	7	WGE, SGE	Argentina, Bolivia	Semi-arid	No	[76]
<i>Opuntia ficus-indica</i>	perennial shrub	birds, mammals	5	TC, CFM, SGE, CGM	Uncertain, likely Mexico	Wide range of climates	Yes	[76]
<i>Pinus pinaster</i>	tree	wind	35	CFM,	Mediterranean	Wide range of climates	Yes	[76]
<i>Prosopis glandulosa</i>	tree	birds, livestock, mammals, water	15	WGE, SGE, CGM	North America to Mexico	Wide range of climates	Yes	[76]

<i>Ricinus communis</i>	small tree or shrub	ballistic, birds, mammals	12	TC	North-Eastern Africa	Warm-temperate and tropical	No	[76]
<i>Rubus fruticosus</i>	deciduous shrub	birds, livestock, mammals, water	3	CFM	Europe	Temperate	Yes	[76]
<i>Salix babylonica</i>	tree	water, wind	25	EGE	China	Temperate	Yes	[82, 83]
<i>Solanum mauritianum</i>	small tree or shrub	birds, mammals	10	EGE	Argentina, Brazil, Uruguay and Paraguay	Wide range of climates	Slight	[76]
