Table 1: Species-specific allometric models selected from best fit predictor variables (x.var) used to estimate biomass

Species	Location	x.var[§]	n	r^2	a[†]	b[†]	$\sigma^{\dagger}$	LC[†]	UC[†]	MSE	Duan[‡]	MB[⋆]
Aloe speciosa	Kirkwood	CA.SL	22	0.85	-13.31	1.10	0.52	0.73	1.54	0.47	1.22	1.08
Aloe striata	Darlington	Hgt	15	0.74	-6.53	1.79	0.63	0.69	1.64	0.55	1.26	1.12
Asparagus capensis	Darlington	CD	16	0.85	-12.07	2.33	0.30	0.82	1.35	0.26	1.12	1.07
Azima tetracantha	Kirkwood	CA.H	11	0.95	-15.63	1.15	0.13	0.90	1.20	0.10	1.05	1.02
Blepharis capensis$^{\triangledown}$	Kirkwood	CA.H	5	1.00	-11.36	0.78	0.03	0.95	1.09	0.02	1.01	1.01
Boscia oleoides	Kirkwood	CA.H	14	0.81	-18.89	1.33	0.15	0.88	1.22	0.13	1.07	1.01
Brachylaena ilicifolia	Kirkwood	CD.H	13	0.96	-17.13	1.79	0.08	0.92	1.15	0.06	1.04	1.01
Capparis sepiaria	Kirkwood	CD	11	0.89	-10.48	2.40	0.16	0.88	1.23	0.13	1.07	1.02
Carissa haematocarpa	Kirkwood	Hgt	8	0.93	-15.86	3.75	0.11	0.91	1.18	0.08	1.04	1.01
Cotyledon velutina	Kirkwood	CD	8	0.83	-7.88	2.17	0.14	0.89	1.21	0.10	1.05	1.01
Crassula mesembryanthemoides	Darlington	CD	14	0.75	-7.62	1.62	0.18	0.87	1.25	0.15	1.08	1.05
Crassula muscosa	Darlington	CA.H	17	0.97	-9.71	0.77	0.07	0.93	1.13	0.06	1.03	1.03
Crassula ovata$^{\triangledown}$	Cambria	CD.H	21	0.87	-14.92	1.62	0.81	0.63	1.80	0.74	1.30	1.16
Crassula perforata	Darlington	CD.H	14	0.98	-10.65	1.27	0.06	0.93	1.13	0.05	1.03	1.03
Drosanthemum lique	Calitzdorp	CD	5	0.93	-13.59	3.05	0.27	0.83	1.32	0.16	1.09	1.02
Ehretia rigida	Kirkwood	CD.H	8	0.99	-13.18	1.43	0.02	0.97	1.06	0.01	1.01	1.01
Euclea undulata	Kirkwood	CD	22	0.95	-11.28	2.60	0.18	0.87	1.25	0.16	1.10	1.06
Euphorbia coerulescens	Jansenville	CA.H	15	0.97	-8.95	0.88	0.16	0.88	1.23	0.14	1.07	1.06
Euphorbia mauritanica	Calitzdorp	CD.H	10	0.60	-10.06	1.17	0.42	0.77	1.45	0.33	1.19	1.01
Euphorbia triangularis	Kirkwood	Hgt	22	0.98	-15.19	3.18	0.12	0.90	1.19	0.11	1.05	1.04
Galenia filiformis	Calitzdorp	CD	6	0.74	-12.27	2.52	0.33	0.80	1.38	0.22	1.11	1.01
Grewia robusta	Kirkwood	CD	16	0.91	-11.87	2.66	0.12	0.90	1.19	0.11	1.06	1.02
Gymnosporia polyacantha	Kirkwood	CA.H	15	0.99	-15.41	1.14	0.09	0.92	1.16	0.08	1.04	1.03
Jathropa capensis	Kirkwood	CA.H	4	0.72	-13.23	0.97	0.23	0.85	1.29	0.12	1.06	1.00
Lycium cinereum	Calitzdorp	CD.H	8	0.95	-9.18	1.04	0.09	0.92	1.16	0.07	1.03	1.02
Lycium ferocissimum$^{\triangledown}$	Oudtshoorn	CD.H	24	0.66	-7.48	0.85	0.59	0.70	1.60	0.54	1.26	1.10
Malephora lutea	Calitzdorp	CA.H	9	0.93	-7.47	0.67	0.09	0.91	1.17	0.07	1.04	1.03
Mesembryanthemum guerichianum	Pearston	Hgt	3	0.98	-7.46	1.73	0.01	0.98	1.04	0.00	1.00	1.00
Panicum maximum$^{\triangledown}$	Kirkwood	CD	8	0.85	-12.34	2.42	0.30	0.82	1.35	0.22	1.11	1.03
Pappea capensis	Kirkwood	CD	20	0.98	-12.07	2.79	0.07	0.93	1.14	0.07	1.03	1.03
Plumbago auriculata$^{\triangledown}$	Cambria	CD.H	21	0.80	-14.03	1.47	0.41	0.77	1.44	0.37	1.26	1.05
Portulacaria afra	Kirkwood	CA.H	42	0.94	-11.15	0.94	0.34	0.80	1.39	0.33	1.15	1.13
Psilocaulon junceum	Calitzdorp	CD	8	0.96	-10.21	2.28	0.13	0.89	1.20	0.10	1.05	1.04
Ptaeroxylon obliquum	Kirkwood	CD.H	20	0.98	-18.06	1.87	0.23	0.85	1.29	0.21	1.12	1.07
Pteronia incana	Calitzdorp	CA.H	6	0.95	-11.68	0.94	0.19	0.86	1.26	0.13	1.07	1.03

Putterlickia pyracantha	Kirkwood	CA.H	15	0.78	-7.90	0.66	0.62	0.69	1.63	0.54	1.40	1.10
Rhigozum obovatum	Oudtshoorn	CA.H	8	0.90	-12.39	0.94	0.28	0.82	1.34	0.21	1.14	1.03
Ruschia multiflora	Calitzdorp	CA.H	6	0.90	-7.43	0.58	0.09	0.92	1.16	0.06	1.03	1.01
Schotia afra	Kirkwood	CA.H	19	0.93	-14.34	1.08	0.37	0.79	1.41	0.34	1.14	1.08
Vachellia karoo$^{\triangledown}$	Cambria	CA.H	15	0.97	-20.91	1.35	0.11	0.91	1.18	0.09	1.05	1.02

§ Predictor variable where Hgt = plant height (cm), CD = mean crown diameter (cm), CD.H = mean crown diameter × Hgt (cm^3), CA.H = crown area × Hgt (cm^3), SL = stem length up to base of rosette for *Aloe speciosa*.

† To get an individual estimate use the power function $y_n = ax^b$ and substitute a and b. This estimate termed naive y (y_n) is biased and can be corrected following Nickless et al. (2011) by calculating the variance of the predicted value with $\sigma_p^2 = exp(2y_n + 2\sigma^2) - exp(2y_n + \sigma^2)$ and using it to derive corrected y_c with $y_c = exp(ln(y_n) + \sigma_p^2/2)$. The Lower (LC) and Upper confidence limits (UC) can be obtained by multiplying Y_c with the tabled LC and UC values.

‡ Duan (1983)'s Smearing Estimate is a correction factor that may be used by simply multiplying y_n with the corresponding variable to get Y_c .

* MB is a correction factor to minimise bias (Clifford et al. 2013; Shen et al. 2008) and similarly applied as the Smearing Estimate.

$^{\triangledown}$ Models are based on dry weight instead of freshly felled weight and thus no need for applying a dry-wet ratio

Table 2: Parameters of all allometric models developed for common species within spekboom thicket and adjacent vegetation.

Species	Location	x.var[§]	n	r^2	a[†]	b[†]	$\sigma^{\dagger}$	LC[†]	UC[†]	MSE	Duan[‡]	MB[⋆]
Aloe speciosa	Kirkwood	CD	22	0.81	-16.02	3.93	0.65	0.68	1.65	0.59	1.34	1.06
Aloe speciosa	Kirkwood	SL	22	0.74	-8.28	2.08	0.89	0.60	1.88	0.81	1.39	1.15
Aloe speciosa	Kirkwood	BSD	22	0.79	-6.05	1.93	0.74	0.65	1.73	0.67	1.40	1.20
Aloe speciosa	Kirkwood	CD.SL	22	0.83	-12.05	1.47	0.58	0.71	1.59	0.53	1.24	1.09
Aloe speciosa	Kirkwood	CA.SL	22	0.85	-13.31	1.10	0.52	0.73	1.54	0.47	1.22	1.08
Aloe speciosa	Kirkwood	CA	22	0.81	-15.55	1.97	0.65	0.68	1.65	0.59	1.34	1.07
Aloe speciosa	Kirkwood	BSDa	22	0.79	-5.82	0.97	0.74	0.65	1.73	0.67	1.40	1.20
Aloe speciosa	Kirkwood	BSDa.SL	22	0.79	-6.77	0.67	0.73	0.65	1.73	0.67	1.36	1.18
Aloe striata	Darlington	Hgt	15	0.74	-6.53	1.79	0.63	0.69	1.64	0.55	1.26	1.12
Aloe striata	Darlington	CD	15	0.60	-6.40	1.98	0.95	0.59	1.94	0.82	1.42	1.12
Aloe striata	Darlington	CD.H	15	0.71	-6.83	0.99	0.70	0.66	1.70	0.61	1.31	1.12
Aloe striata	Darlington	CA.H	15	0.68	-6.63	0.67	0.76	0.64	1.76	0.66	1.34	1.12
Asparagus capensis	Darlington	Hgt	16	0.12	-6.50	1.07	1.80	0.38	3.01	1.57	2.84	1.09
Asparagus capensis	Darlington	CD	16	0.85	-12.07	2.33	0.30	0.82	1.35	0.26	1.12	1.07
Asparagus capensis	Darlington	CD.H	16	0.64	-12.92	1.33	0.74	0.65	1.73	0.65	1.82	1.06
Asparagus capensis	Darlington	CA.H	16	0.77	-13.15	0.91	0.47	0.75	1.49	0.41	1.33	1.06
Azima tetracantha	Kirkwood	Hgt	11	0.54	-12.39	2.98	1.11	0.54	2.11	0.91	1.60	1.02
Azima tetracantha	Kirkwood	CD	11	0.92	-13.02	2.84	0.20	0.86	1.26	0.16	1.09	1.02
Azima tetracantha	Kirkwood	CD.H	11	0.91	-16.71	1.82	0.21	0.86	1.27	0.17	1.08	1.02
Azima tetracantha	Kirkwood	CA.H	11	0.95	-15.63	1.15	0.13	0.90	1.20	0.10	1.05	1.02
Blepharis capensis[▽]	Kirkwood	Hgt	5	0.92	-17.34	4.49	0.70	0.67	1.70	0.42	1.19	1.03
Blepharis capensis[▽]	Kirkwood	CD	5	1.00	-8.91	1.85	0.03	0.95	1.09	0.02	1.01	1.01
Blepharis capensis[▽]	Kirkwood	CD.H	5	0.99	-11.57	1.34	0.06	0.94	1.12	0.03	1.02	1.02
Blepharis capensis[▽]	Kirkwood	CA.H	5	1.00	-11.36	0.78	0.03	0.95	1.09	0.02	1.01	1.01
Boscia oleoides	Kirkwood	Hgt	14	0.41	-15.22	3.34	0.47	0.75	1.49	0.40	1.22	1.00
Boscia oleoides	Kirkwood	CD	14	0.76	-14.16	3.13	0.20	0.86	1.26	0.17	1.09	1.01
Boscia oleoides	Kirkwood	CD.H	14	0.79	-21.08	2.16	0.17	0.88	1.24	0.14	1.07	1.00
Boscia oleoides	Kirkwood	CA.H	14	0.81	-18.89	1.33	0.15	0.88	1.22	0.13	1.07	1.01
Brachylaena ilicifolia	Kirkwood	Hgt	13	0.95	-22.09	4.48	0.09	0.92	1.16	0.07	1.04	1.01
Brachylaena ilicifolia	Kirkwood	CD	13	0.90	-12.71	2.80	0.19	0.87	1.25	0.16	1.09	1.02
Brachylaena ilicifolia	Kirkwood	CD.H	13	0.96	-17.13	1.79	0.08	0.92	1.15	0.06	1.04	1.01
Brachylaena ilicifolia	Kirkwood	CA.H	13	0.94	-15.25	1.10	0.11	0.91	1.18	0.09	1.05	1.02
Capparis sepiaria	Kirkwood	Hgt	11	0.52	-10.61	2.53	0.68	0.67	1.68	0.55	1.27	1.01
Capparis sepiaria	Kirkwood	CD	11	0.89	-10.48	2.40	0.16	0.88	1.23	0.13	1.07	1.02
Capparis sepiaria	Kirkwood	CD.H	11	0.83	-12.73	1.44	0.24	0.84	1.30	0.20	1.10	1.02

Table 2: Parameters of all allometric models developed for common species within spekboom thicket and adjacent vegetation.

Species	Location	x.var[§]	n	r^2	a[†]	b[†]	$\sigma^{\dagger}$	LC[†]	UC[†]	MSE	Duan[‡]	MB[⋆]
Capparis sepiaria	Kirkwood	CA.H	11	0.87	-12.00	0.92	0.18	0.87	1.25	0.15	1.07	1.02
Carissa haematocarpa	Kirkwood	Hgt	8	0.93	-15.86	3.75	0.11	0.91	1.18	0.08	1.04	1.01
Carissa haematocarpa	Kirkwood	CD	8	0.86	-8.98	2.26	0.21	0.86	1.27	0.16	1.08	1.01
Carissa haematocarpa	Kirkwood	CD.H	8	0.91	-11.98	1.45	0.13	0.89	1.21	0.10	1.06	1.01
Carissa haematocarpa	Kirkwood	CA.H	8	0.89	-10.65	0.89	0.16	0.88	1.23	0.12	1.06	1.01
Cotyledon velutina	Kirkwood	Hgt	8	0.01	-0.28	0.32	0.78	0.64	1.77	0.58	1.30	1.01
Cotyledon velutina	Kirkwood	CD	8	0.83	-7.88	2.17	0.14	0.89	1.21	0.10	1.05	1.01
Cotyledon velutina	Kirkwood	CD.H	8	0.45	-8.76	1.09	0.43	0.76	1.46	0.32	1.17	1.01
Cotyledon velutina	Kirkwood	CA.H	8	0.63	-9.19	0.79	0.29	0.82	1.34	0.22	1.11	1.01
Crassula mesembryanthemoides	Darlington	Hgt	14	0.43	-6.49	1.29	0.41	0.77	1.44	0.35	1.19	1.07
Crassula mesembryanthemoides	Darlington	CD	14	0.75	-7.62	1.62	0.18	0.87	1.25	0.15	1.08	1.05
Crassula mesembryanthemoides	Darlington	CD.H	14	0.68	-7.79	0.85	0.23	0.85	1.29	0.20	1.11	1.05
Crassula mesembryanthemoides	Darlington	CA.H	14	0.72	-7.76	0.57	0.20	0.86	1.26	0.17	1.09	1.05
Crassula muscosa	Darlington	Hgt	17	0.85	-11.84	3.03	0.29	0.82	1.34	0.26	1.13	1.06
Crassula muscosa	Darlington	CD	17	0.96	-8.94	1.96	0.07	0.93	1.14	0.06	1.03	1.03
Crassula muscosa	Darlington	CD.H	17	0.96	-10.42	1.24	0.08	0.92	1.15	0.07	1.03	1.03
Crassula muscosa	Darlington	CA.H	17	0.97	-9.71	0.77	0.07	0.93	1.13	0.06	1.03	1.03
Crassula ovata[▽]	Cambria	Hgt	21	0.84	-13.32	2.84	0.99	0.57	1.98	0.90	1.49	1.19
Crassula ovata[▽]	Cambria	CD	21	0.65	-12.45	2.71	2.21	0.31	3.70	2.00	1.52	1.23
Crassula ovata[▽]	Cambria	CD.H	21	0.87	-14.92	1.62	0.81	0.63	1.80	0.74	1.30	1.16
Crassula ovata[▽]	Cambria	CA.H	21	0.82	-14.30	1.06	1.12	0.54	2.13	1.02	1.34	1.18
Crassula perforata	Darlington	Hgt	14	0.89	-11.78	2.83	0.33	0.80	1.38	0.28	1.16	1.07
Crassula perforata	Darlington	CD	14	0.94	-8.87	2.05	0.17	0.88	1.23	0.14	1.07	1.06
Crassula perforata	Darlington	CD.H	14	0.98	-10.65	1.27	0.06	0.93	1.13	0.05	1.03	1.03
Crassula perforata	Darlington	CA.H	14	0.98	-9.86	0.79	0.07	0.93	1.14	0.06	1.03	1.03
Drosanthemum lique	Calitzdorp	Hgt	5	0.00	-2.05	-0.06	3.78	0.14	8.21	2.27	2.97	1.02
Drosanthemum lique	Calitzdorp	CD	5	0.93	-13.59	3.05	0.27	0.83	1.32	0.16	1.09	1.02
Drosanthemum lique	Calitzdorp	CD.H	5	0.53	-14.55	1.75	1.79	0.38	3.00	1.07	1.49	1.01
Drosanthemum lique	Calitzdorp	CA.H	5	0.75	-15.29	1.24	0.94	0.59	1.93	0.56	1.26	1.01
Ehretia rigida	Kirkwood	Hgt	8	0.91	-13.24	2.95	0.15	0.89	1.22	0.11	1.05	1.01
Ehretia rigida	Kirkwood	CD	8	0.96	-11.47	2.51	0.07	0.93	1.14	0.06	1.03	1.01
Ehretia rigida	Kirkwood	CD.H	8	0.99	-13.18	1.43	0.02	0.97	1.06	0.01	1.01	1.01
Ehretia rigida	Kirkwood	CA.H	8	0.99	-12.50	0.92	0.02	0.96	1.07	0.02	1.01	1.01
Euclea undulata	Kirkwood	Hgt	22	0.67	-17.17	3.65	1.29	0.49	2.32	1.18	1.58	1.06
Euclea undulata	Kirkwood	CD	22	0.95	-11.28	2.60	0.18	0.87	1.25	0.16	1.10	1.06

Table 2: Parameters of all allometric models developed for common species within spekboom thicket and adjacent vegetation.

Species	Location	x.var[§]	n	r^2	a[†]	b[†]	$\sigma^{\dagger}$	LC[†]	UC[†]	MSE	Duan[‡]	MB[⋆]
Euclea undulata	Kirkwood	CD.H	22	0.93	-15.58	1.69	0.27	0.83	1.33	0.25	1.13	1.06
Euclea undulata	Kirkwood	CA.H	22	0.95	-13.87	1.04	0.19	0.87	1.25	0.17	1.09	1.05
Euphorbia coerulescens	Jansenville	Hgt	15	0.82	-7.24	2.18	1.11	0.54	2.11	0.96	1.83	1.24
Euphorbia coerulescens	Jansenville	CD	15	0.95	-9.02	2.62	0.32	0.81	1.37	0.28	1.13	1.11
Euphorbia coerulescens	Jansenville	CD.H	15	0.96	-8.90	1.30	0.26	0.83	1.32	0.23	1.13	1.10
Euphorbia coerulescens	Jansenville	CA.H	15	0.97	-8.95	0.88	0.16	0.88	1.23	0.14	1.07	1.06
Euphorbia mauritanica	Calitzdorp	Hgt	10	0.32	-9.57	2.17	0.70	0.67	1.70	0.56	1.26	1.01
Euphorbia mauritanica	Calitzdorp	CD	10	0.55	-5.86	1.52	0.46	0.75	1.49	0.37	1.25	1.03
Euphorbia mauritanica	Calitzdorp	CD.H	10	0.60	-10.06	1.17	0.42	0.77	1.45	0.33	1.19	1.01
Euphorbia mauritanica	Calitzdorp	CA.H	10	0.60	-8.36	0.68	0.42	0.77	1.45	0.33	1.20	1.02
Euphorbia triangularis	Kirkwood	Hgt	22	0.98	-15.19	3.18	0.12	0.90	1.19	0.11	1.05	1.04
Euphorbia triangularis	Kirkwood	CD	22	0.87	-11.65	3.00	0.66	0.68	1.66	0.60	1.29	1.12
Euphorbia triangularis	Kirkwood	CD.H	22	0.97	-14.18	1.62	0.17	0.87	1.24	0.16	1.08	1.06
Euphorbia triangularis	Kirkwood	CA.H	22	0.94	-13.22	1.06	0.29	0.82	1.34	0.27	1.13	1.08
Galenia filiformis	Calitzdorp	Hgt	6	0.20	-9.93	2.10	1.02	0.57	2.01	0.68	1.46	1.01
Galenia filiformis	Calitzdorp	CD	6	0.74	-12.27	2.52	0.33	0.80	1.38	0.22	1.11	1.01
Galenia filiformis	Calitzdorp	CD.H	6	0.61	-13.98	1.56	0.50	0.74	1.52	0.33	1.18	1.01
Galenia filiformis	Calitzdorp	CA.H	6	0.68	-13.43	0.99	0.41	0.77	1.44	0.27	1.14	1.01
Grewia robusta	Kirkwood	Hgt	16	0.65	-17.81	3.93	0.46	0.75	1.49	0.40	1.18	1.01
Grewia robusta	Kirkwood	CD	16	0.91	-11.87	2.66	0.12	0.90	1.19	0.11	1.06	1.02
Grewia robusta	Kirkwood	CD.H	16	0.89	-16.00	1.75	0.15	0.88	1.22	0.13	1.07	1.02
Grewia robusta	Kirkwood	CA.H	16	0.90	-14.31	1.07	0.13	0.90	1.20	0.11	1.06	1.02
Gymnosporia polyacantha	Kirkwood	Hgt	15	0.87	-18.09	3.88	0.92	0.60	1.91	0.80	1.50	1.08
Gymnosporia polyacantha	Kirkwood	CD	15	0.98	-13.82	3.05	0.15	0.89	1.22	0.13	1.06	1.05
Gymnosporia polyacantha	Kirkwood	CD.H	15	0.98	-16.55	1.79	0.15	0.88	1.22	0.13	1.06	1.05
Gymnosporia polyacantha	Kirkwood	CA.H	15	0.99	-15.41	1.14	0.09	0.92	1.16	0.08	1.04	1.03
Jathropa capensis	Kirkwood	Hgt	4	0.27	-13.31	2.82	0.60	0.70	1.61	0.30	1.16	1.00
Jathropa capensis	Kirkwood	CD	4	0.72	-9.82	2.22	0.23	0.85	1.29	0.12	1.05	1.00
Jathropa capensis	Kirkwood	CD.H	4	0.69	-15.54	1.65	0.26	0.84	1.31	0.13	1.07	1.00
Jathropa capensis	Kirkwood	CA.H	4	0.72	-13.23	0.97	0.23	0.85	1.29	0.12	1.06	1.00
Lycium cinereum	Calitzdorp	Hgt	8	0.90	-7.10	1.73	0.17	0.87	1.24	0.13	1.07	1.03
Lycium cinereum	Calitzdorp	CD	8	0.90	-10.61	2.28	0.17	0.87	1.24	0.13	1.06	1.02
Lycium cinereum	Calitzdorp	CD.H	8	0.95	-9.18	1.04	0.09	0.92	1.16	0.07	1.03	1.02
Lycium cinereum	Calitzdorp	CA.H	8	0.95	-9.63	0.72	0.09	0.91	1.16	0.07	1.03	1.02
Lycium ferocissimum[▽]	Oudtshoorn	Hgt	24	0.64	-9.67	2.11	0.64	0.68	1.65	0.59	1.30	1.07

Table 2: Parameters of all allometric models developed for common species within spekboom thicket and adjacent vegetation.

Species	Location	x.var[§]	n	r^2	a[†]	b[†]	$\sigma^{\dagger}$	LC[†]	UC[†]	MSE	Duan[‡]	MB[⋆]
Lycium ferocissimum$^{\triangledown}$	Oudtshoorn	CD	24	0.62	-5.28	1.29	0.68	0.67	1.68	0.62	1.30	1.15
Lycium ferocissimum$^{\triangledown}$	Oudtshoorn	CD.H	24	0.66	-7.48	0.85	0.59	0.70	1.60	0.54	1.26	1.10
Lycium ferocissimum$^{\triangledown}$	Oudtshoorn	CA.H	24	0.65	-6.56	0.52	0.62	0.69	1.62	0.57	1.27	1.12
Malephora lutea	Calitzdorp	Hgt	9	0.39	-5.77	2.06	0.88	0.61	1.87	0.69	1.25	1.06
Malephora lutea	Calitzdorp	CD	9	0.93	-6.88	1.54	0.10	0.91	1.17	0.08	1.04	1.03
Malephora lutea	Calitzdorp	CD.H	9	0.90	-7.93	1.14	0.14	0.89	1.21	0.11	1.06	1.04
Malephora lutea	Calitzdorp	CA.H	9	0.93	-7.47	0.67	0.09	0.91	1.17	0.07	1.04	1.03
Mesembryanthemum guerichianum	Pearston	Hgt	3	0.98	-7.46	1.73	0.01	0.98	1.04	0.00	1.00	1.00
Mesembryanthemum guerichianum	Pearston	CD	3	0.30	-8.48	1.87	0.28	0.82	1.33	0.09	1.05	1.00
Mesembryanthemum guerichianum	Pearston	CD.H	3	0.84	-9.52	1.15	0.07	0.93	1.13	0.02	1.01	1.00
Mesembryanthemum guerichianum	Pearston	CA.H	3	0.71	-9.77	0.80	0.12	0.90	1.19	0.04	1.02	1.00
Panicum maximum$^{\triangledown}$	Kirkwood	Hgt	8	0.63	-14.26	2.60	0.74	0.65	1.74	0.56	1.31	1.02
Panicum maximum$^{\triangledown}$	Kirkwood	CD	8	0.85	-12.34	2.42	0.30	0.82	1.35	0.22	1.11	1.03
Panicum maximum$^{\triangledown}$	Kirkwood	CD.H	8	0.82	-14.37	1.38	0.36	0.79	1.40	0.27	1.14	1.02
Panicum maximum$^{\triangledown}$	Kirkwood	CA.H	8	0.85	-14.85	0.90	0.31	0.81	1.36	0.23	1.12	1.02
Pappea capensis	Kirkwood	Hgt	20	0.93	-19.01	4.07	0.28	0.82	1.34	0.26	1.13	1.04
Pappea capensis	Kirkwood	CD	20	0.98	-12.07	2.79	0.07	0.93	1.14	0.07	1.03	1.03
Pappea capensis	Kirkwood	CD.H	20	0.98	-15.21	1.68	0.09	0.91	1.16	0.08	1.04	1.03
Pappea capensis	Kirkwood	CA.H	20	0.98	-13.82	1.05	0.08	0.92	1.15	0.07	1.03	1.03
Plumbago auriculata$^{\triangledown}$	Cambria	Hgt	21	0.66	-11.49	2.59	0.70	0.67	1.70	0.63	1.40	1.06
Plumbago auriculata$^{\triangledown}$	Cambria	CD	21	0.58	-9.69	2.00	0.84	0.62	1.83	0.76	1.79	1.07
Plumbago auriculata$^{\triangledown}$	Cambria	CD.H	21	0.80	-14.03	1.47	0.41	0.77	1.44	0.37	1.26	1.05
Plumbago auriculata$^{\triangledown}$	Cambria	CA.H	21	0.75	-12.73	0.89	0.51	0.73	1.53	0.46	1.41	1.05
Portulacaria afra	Kirkwood	Hgt	42	0.85	-12.05	3.01	0.87	0.61	1.86	0.83	1.40	1.22
Portulacaria afra	Kirkwood	CD	42	0.94	-10.40	2.62	0.36	0.79	1.40	0.34	1.15	1.14
Portulacaria afra	Kirkwood	CD.H	42	0.93	-11.75	1.46	0.39	0.78	1.43	0.37	1.17	1.14
Portulacaria afra	Kirkwood	CA.H	42	0.94	-11.15	0.94	0.34	0.80	1.39	0.33	1.15	1.13
Psilocaulon junceum	Calitzdorp	Hgt	8	0.84	-16.04	4.54	0.50	0.74	1.52	0.37	1.16	1.02
Psilocaulon junceum	Calitzdorp	CD	8	0.96	-10.21	2.28	0.13	0.89	1.20	0.10	1.05	1.04
Psilocaulon junceum	Calitzdorp	CD.H	8	0.94	-12.50	1.57	0.17	0.88	1.24	0.13	1.06	1.03
Psilocaulon junceum	Calitzdorp	CA.H	8	0.95	-11.38	0.93	0.14	0.89	1.21	0.11	1.05	1.03
Ptaeroxylon obliquum	Kirkwood	Hgt	20	0.90	-23.93	4.61	0.91	0.60	1.90	0.82	1.39	1.09
Ptaeroxylon obliquum	Kirkwood	CD	20	0.94	-12.71	2.87	0.60	0.70	1.61	0.54	1.29	1.17
Ptaeroxylon obliquum	Kirkwood	CD.H	20	0.98	-18.06	1.87	0.23	0.85	1.29	0.21	1.12	1.07
Ptaeroxylon obliquum	Kirkwood	CA.H	20	0.97	-15.82	1.14	0.31	0.81	1.36	0.28	1.15	1.10

Table 2: Parameters of all allometric models developed for common species within spekboom thicket and adjacent vegetation.

Species	Location	x.var[§]	n	r^2	a[†]	b[†]	$\sigma^{\dagger}$	LC[†]	UC[†]	MSE	Duan[‡]	MB[⋆]
Pteronia incana	Calitzdorp	Hgt	6	0.75	-15.48	3.97	0.89	0.60	1.88	0.59	1.32	1.02
Pteronia incana	Calitzdorp	CD	6	0.95	-10.21	2.31	0.20	0.86	1.26	0.13	1.06	1.03
Pteronia incana	Calitzdorp	CD.H	6	0.93	-12.91	1.56	0.24	0.84	1.30	0.16	1.09	1.02
Pteronia incana	Calitzdorp	CA.H	6	0.95	-11.68	0.94	0.19	0.86	1.26	0.13	1.07	1.03
Putterlickia pyracantha	Kirkwood	Hgt	15	0.68	-10.06	2.35	0.93	0.59	1.92	0.80	1.42	1.07
Putterlickia pyracantha	Kirkwood	CD	15	0.76	-6.59	1.69	0.69	0.67	1.68	0.59	1.45	1.12
Putterlickia pyracantha	Kirkwood	CD.H	15	0.78	-8.79	1.06	0.63	0.69	1.63	0.54	1.37	1.09
Putterlickia pyracantha	Kirkwood	CA.H	15	0.78	-7.90	0.66	0.62	0.69	1.63	0.54	1.40	1.10
Rhigozum obovatum	Oudtshoorn	Hgt	8	0.80	-11.82	2.73	0.58	0.71	1.59	0.43	1.24	1.03
Rhigozum obovatum	Oudtshoorn	CD	8	0.88	-11.96	2.65	0.34	0.80	1.38	0.25	1.16	1.03
Rhigozum obovatum	Oudtshoorn	CD.H	8	0.89	-12.70	1.43	0.31	0.81	1.36	0.23	1.15	1.02
Rhigozum obovatum	Oudtshoorn	CA.H	8	0.90	-12.39	0.94	0.28	0.82	1.34	0.21	1.14	1.03
Ruschia multiflora	Calitzdorp	Hgt	6	0.67	-6.12	1.49	0.28	0.82	1.34	0.19	1.10	1.02
Ruschia multiflora	Calitzdorp	CD	6	0.87	-7.13	1.58	0.11	0.90	1.18	0.08	1.04	1.02
Ruschia multiflora	Calitzdorp	CD.H	6	0.87	-7.51	0.88	0.11	0.91	1.18	0.07	1.04	1.01
Ruschia multiflora	Calitzdorp	CA.H	6	0.90	-7.43	0.58	0.09	0.92	1.16	0.06	1.03	1.01
Schotia afra	Kirkwood	Hgt	19	0.63	-15.61	3.38	2.06	0.34	3.44	1.84	1.87	1.07
Schotia afra	Kirkwood	CD	19	0.89	-11.06	2.62	0.62	0.69	1.63	0.56	1.26	1.12
Schotia afra	Kirkwood	CD.H	19	0.92	-16.23	1.76	0.42	0.77	1.45	0.38	1.18	1.07
Schotia afra	Kirkwood	CA.H	19	0.93	-14.34	1.08	0.37	0.79	1.41	0.34	1.14	1.08
Vachellia karoo[▽]	Cambria	Hgt	15	0.91	-19.14	3.65	0.32	0.81	1.37	0.28	1.15	1.04
Vachellia karoo[▽]	Cambria	CD	15	0.95	-21.26	4.07	0.18	0.87	1.25	0.16	1.09	1.03
Vachellia karoo[▽]	Cambria	CD.H	15	0.97	-20.94	2.00	0.12	0.90	1.19	0.11	1.05	1.03
Vachellia karoo[▽]	Cambria	CA.H	15	0.97	-20.91	1.35	0.11	0.91	1.18	0.09	1.05	1.02

[§] Predictor variable where Hgt = plant height (cm), CD = mean crown diameter, CD.H = mean crown diameter × Hgt, CA.H = crown area × Hgt, SL = stem length up to base of rosette for *Aloe speciosa*.

[†] To get an individual estimate use the power function $y_n = ax^b$ and substitute a and b. This estimate termed naive y (y_n) is biased and can be corrected following Nickless et al. (2011) by calculating the variance of the predicted value with $\sigma_p^2 = exp(2y_n + 2\sigma^2) - exp(2y_n + \sigma^2)$ and using it to derive corrected y_c with $y_c = exp(ln(y_n) + \sigma_p^2/2)$. The Lower (LC) and Upper confidence limits (UC) can be obtained by multiplying Y_c with the tabled LC and UC values.

[‡] Duan (1983)'s Smearing Estimate is a correction factor that may be used by simply multiplying y_n with the corresponding variable to get Y_c .

[⋆] MB is a correction factor to minimise bias (Clifford et al. 2013; Shen et al. 2008) and similarly applied as the Smearing Estimate.

[▽] Models are based on dry weight instead of freshly felled weight and thus no need for applying a dry-wet ratio

Table 3: Wet-dry ratios for selected species found within Spekboom thicket and adjacent vegetation.

Species	location	n	WDratio	SE
Aloe striata	Darlington dam	6	0.20	0.07
Asparagus capensis	Darlington dam	7	0.52	0.05
Azima tetracantha	Kirkwood	6	0.51	0.04
Boscia oleoides	Darlington dam	7	0.57	0.01
Carissa haematocarpa	Kirkwood	7	0.63	0.02
Crassula mesembryanthoides	Darlington dam	7	0.25	0.05
Crassula muscosa	Darlington dam	10	0.39	0.02
Crassula ovata	Cambria	21	0.11	0.00
Crassula perforata	Darlington dam	6	0.25	0.02
Drosanthemum lique	Calitzdorp	5	0.71	0.07
Ehretia rigida	Cambria	26	0.60	0.01
Euclea undulata	Kirkwood	13	0.63	0.01
Euphorbia coerulescens	Jansenville	10	0.13	0.01
Galenia filiformis	Calitzdorp	5	0.87	0.06
Grewia robusta	Kirkwood	7	0.69	0.02
Gymnosporia capitata	Kirkwood	6	0.56	0.01
Gymnosporia polyacantha	Darlington dam	7	0.64	0.01
Jathropa capensis	Cambria	32	0.22	0.01
Lycium ferocissimum	Cambria	33	0.58	0.01
Malephora lutea	Calitzdorp	6	0.18	0.02
Mesembryanthemum guerichianum	Willowmore	6	0.26	0.05
Mesembryanthemum splendens	Calitzdorp	8	0.36	0.03
Pappea capensis	Cambria	13	0.66	0.01
Plumbago auriculata	Cambria	21	0.52	0.01
Portulacaria afra	Cambria	164	0.27	0.01
Pteronia incana	Calitzdorp	4	0.84	0.07
Ruschia multiflora	Calitzdorp	4	0.54	0.08
Schotia afra	Kirkwood	12	0.62	0.01
Searsia longispina	Cambria	7	0.66	0.01
Vachellia karroo	Cambria	15	0.83	0.01

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