

Appendices A

List of plots with number of individual trees, number of tree species in each plot, calculated Shannon wiener and Simpson's indices and carbon sequestration rate in tones of CO₂e per hectare per year for each study site.

Kakamega forest

Plot number	No of trees (N)	No of species	Shannon Wiener index (H')	Simpsons diversity index (D)	Sequestration rate tCO ₂ e/ha/yr
Kakamega 001	20	6	1.469	0.763	2.16
Kakamega 002	27	4	1.177	0.689	2.12
Kakamega 003	21	5	1.228	0.648	2.22
Kakamega 004	10	6	1.696	0.889	0.51
Kakamega 005	26	5	1.270	0.702	4.16
Kakamega 006	19	5	1.044	0.532	2.12
Kakamega 007	22	7	1.516	0.753	2.40
Kakamega 008	16	5	1.401	0.758	0.09
Kakamega 009	27	8	1.860	0.855	0.50
Kakamega 010	35	8	1.836	0.820	1.30
Kakamega 011	16	5	1.392	0.767	0.31
Kakamega 012	15	5	1.338	0.733	0.45
Kakamega 013	9	6	1.735	0.917	0.14
Kakamega 014	19	6	1.589	0.807	0.84
Kakamega 015	38	9	2.001	0.868	1.13
Mean	21	6	1.50	0.77	1.36

Kaberua forest

Plot number	No of trees (N)	No of species	Shannon Wiener index (H')	Simpsons diversity index (D)	Sequestration rate tCO ₂ e/ha/yr
Kaberua 001	5	3	0.95	0.70	1.42
Kaberua 002	4	3	1.04	0.83	0.33
Kaberua 003	6	5	1.56	0.93	0.11
Kaberua 004	14	4	1.20	0.70	0.40
Kaberua 005	17	6	1.70	0.85	2.42
Kaberua 006	12	3	0.72	0.44	0.56
Kaberua 007	17	4	1.23	0.73	0.08
Kaberua 008	5	3	0.95	0.70	0.05
Kaberua 009	15	5	1.46	0.79	0.17
Kaberua 010	23	4	1.28	0.74	1.69
Kaberua 011	13	7	1.78	0.87	0.82
Kaberua 012	14	3	1.06	0.69	0.24

Kaberua 013	7	1	-	-	0.02
Kaberua 014	13	4	0.94	0.53	0.43
Mean	12	4	1.22	0.73	0.62

Kabaru-Naromoru forest

Plot number	No of trees (N)	No of species	Shannon Wiener index (H')	Simpsons diversity index (D)	Sequestration rate tCO ₂ e/ha/yr
Kabaru 001	49	3	1.00	0.62	1.98
Kabaru 002	26	3	0.77	0.50	1.15
Kabaru 003	25	2	0.59	0.42	0.70
Kabaru 004	14	4	1.20	0.70	0.63
Kabaru 005	45	5	1.22	0.64	2.34
Kabaru 006	20	2	0.61	0.44	3.82
Kabaru 007	9	1	-	-	0.07
Kabaru 008	29	3	0.65	0.36	4.85
Kabaru 009	26	4	1.23	0.69	1.77
Narumoru 001	20	2	0.61	0.44	0.22
Narumoru 002	42	2	0.26	0.14	2.44
Narumoru 003	32	2	0.23	0.12	1.27
Narumoru 004	18	2	0.33	0.52	1.19
Narumoru 005	41	3	0.79	0.54	1.31
Mean	28	3	0.73	0.47	1.70