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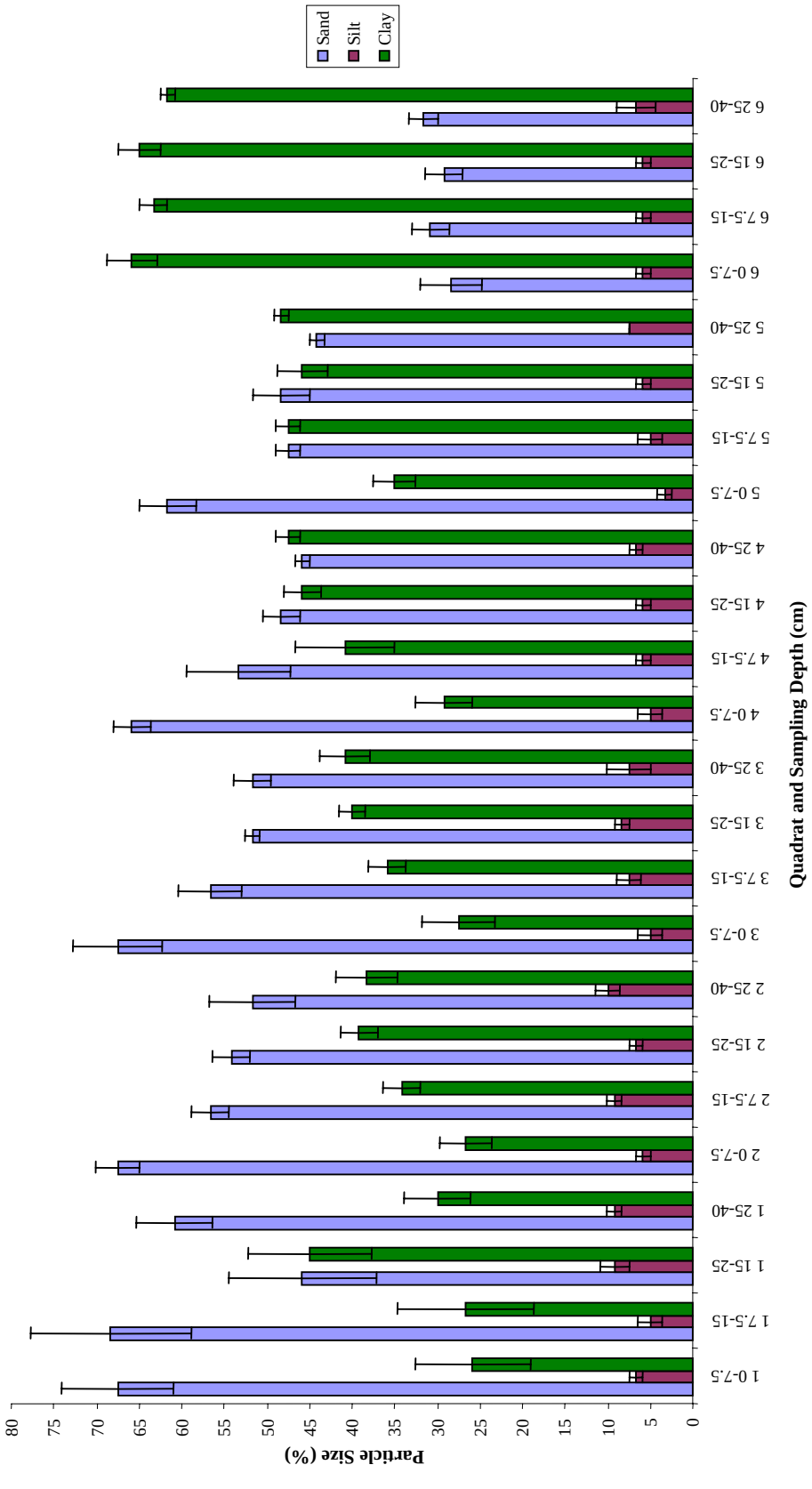
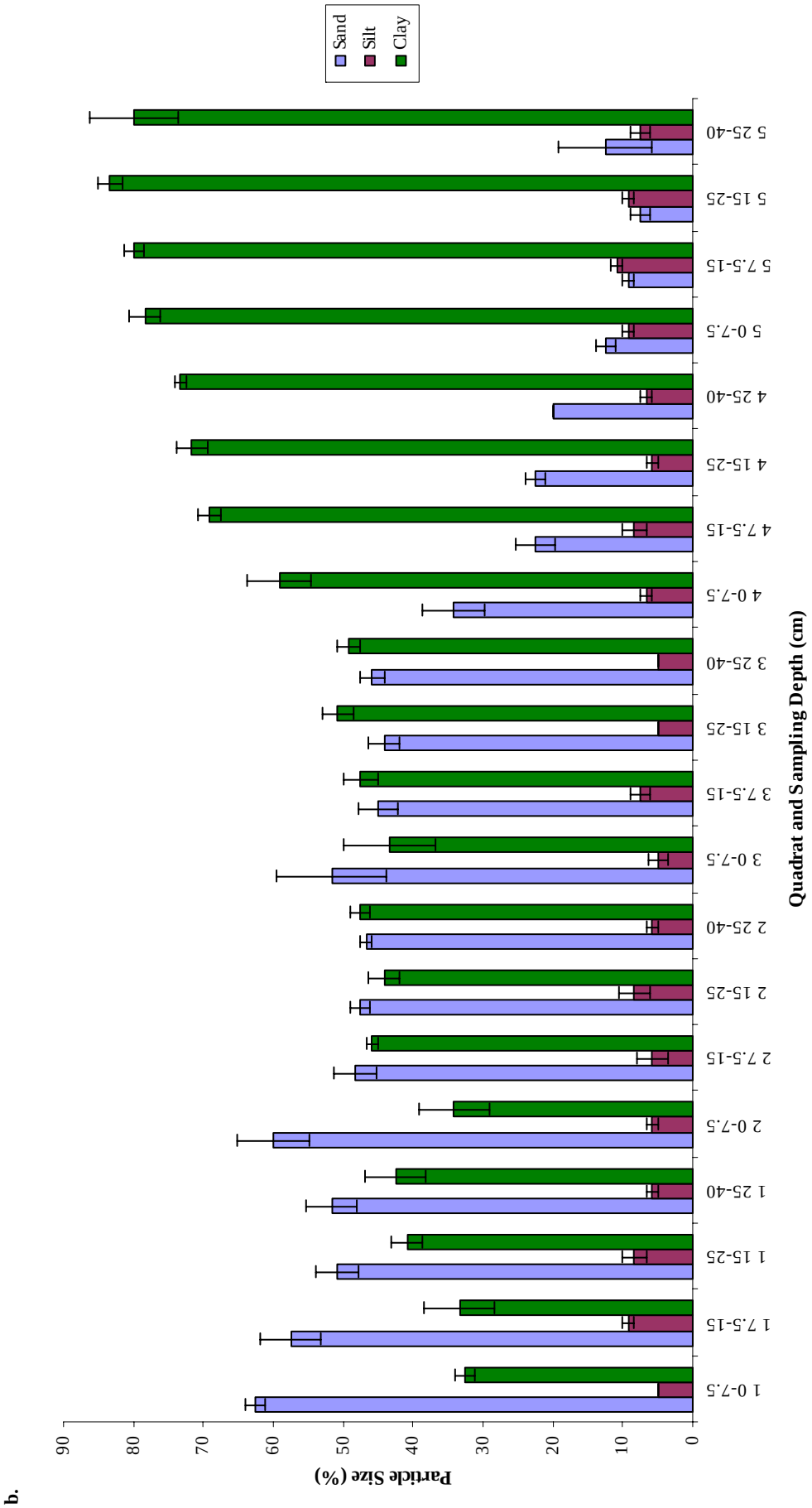
Appendices



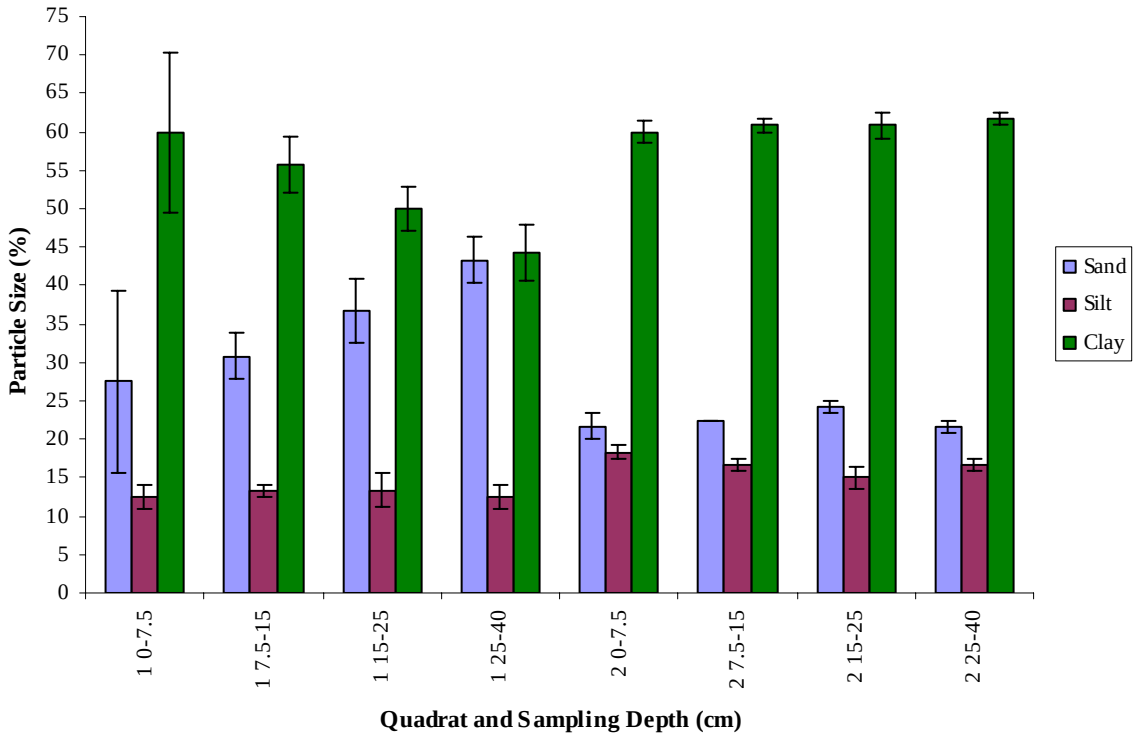
Appendix 1: Soil texture for each quadrat and sampling depth for a. Lake Malta, b. Lake Balaka, c. Lake Wetherell, d. Lake Menindee and e. Lake Cawndilla (Chapter 5).

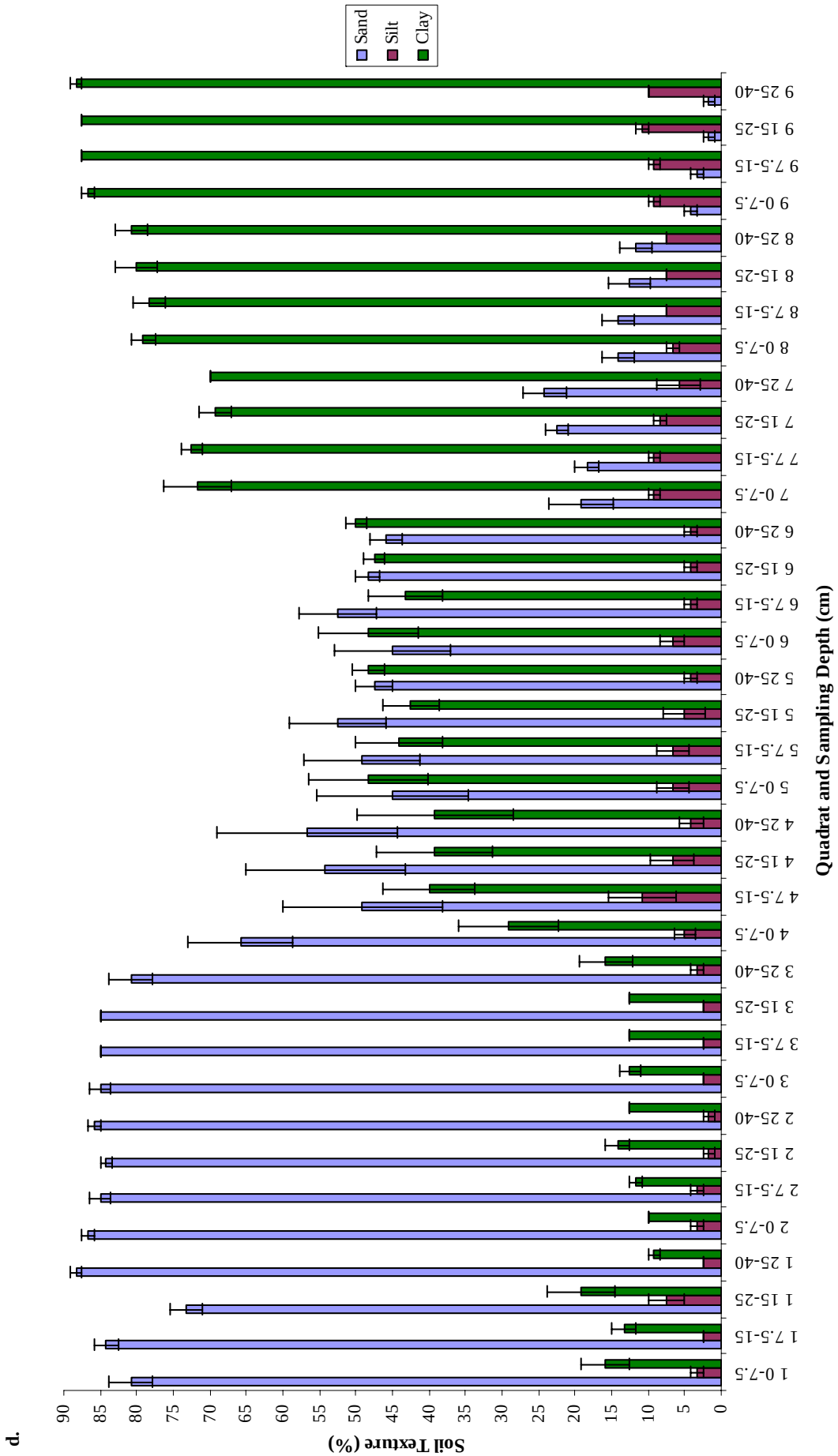
a.


Sand
Silt
Clay
Particle Size (%)
0
10
20
30
40
50
60
70
80
90
Quadrat and Sampling Depth (cm)
1 0-7.5
1 7.5-15
1 15-25
1 25-40
2 0-7.5
2 7.5-15
2 15-25
2 25-40
3 0-7.5
3 7.5-15
3 15-25
3 25-40
4 0-7.5
4 7.5-15
4 15-25
4 25-40
5 0-7.5
5 7.5-15
5 15-25
5 25-40

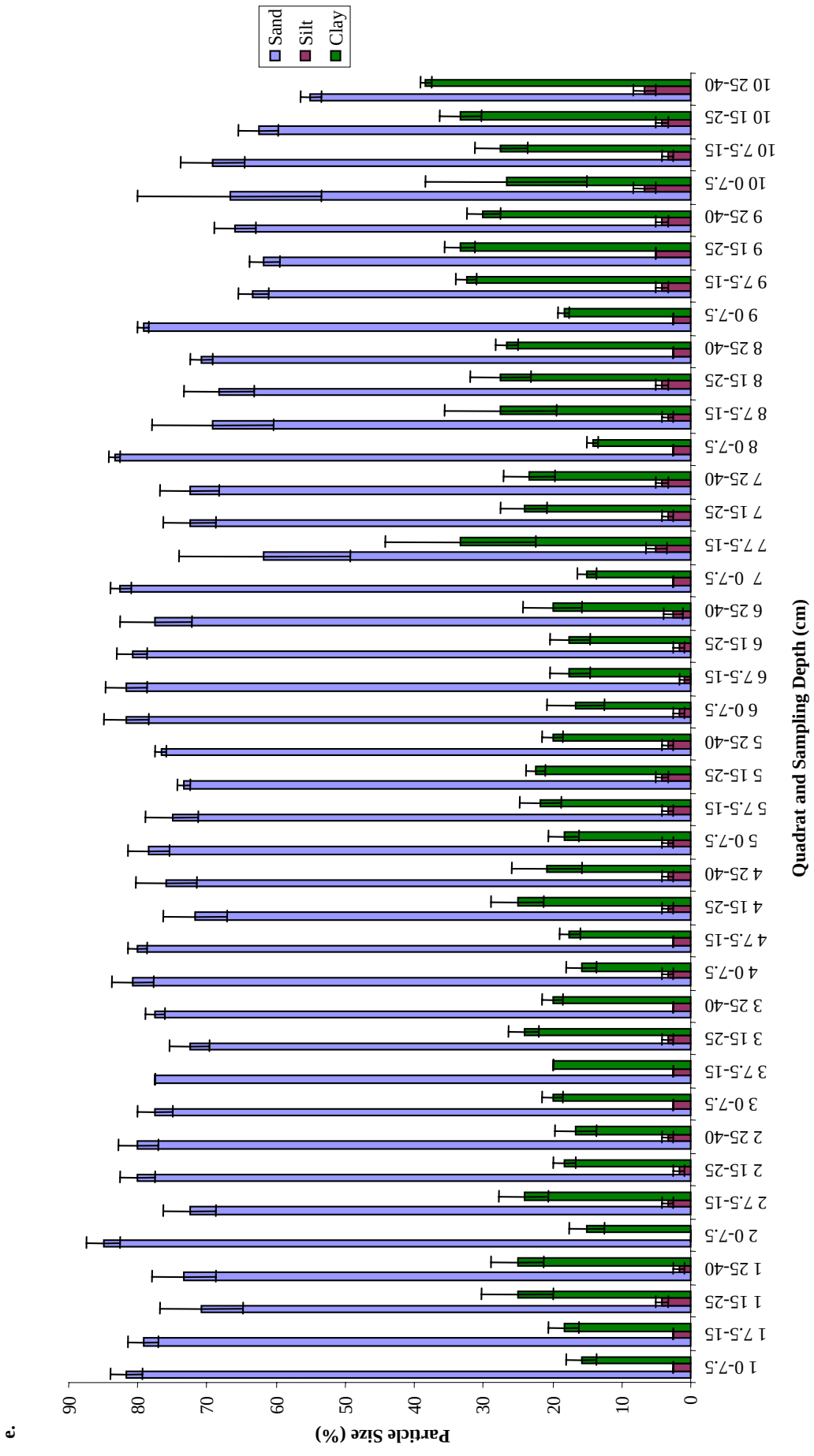
b.

c.


Particle Size (%)
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
1 0-7.5
1 7.5-15
1 15-25
1 25-40
2 0-7.5
2 7.5-15
2 15-25
2 25-40
Quadrat and Sampling Depth (cm)
Sand
Silt
Clay


Sand
Silt
Clay
Soil Texture (%)
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
Quadrat and Sampling Depth (cm)
1 0-7.5
1 7.5-15
1 15-25
1 25-40
2 0-7.5
2 7.5-15
2 15-25
2 25-40
3 0-7.5
3 7.5-15
3 15-25
3 25-40
4 0-7.5
4 7.5-15
4 15-25
4 25-40
5 0-7.5
5 7.5-15
5 15-25
5 25-40
6 0-7.5
6 7.5-15
6 15-25
6 25-40
7 0-7.5
7 7.5-15
7 15-25
7 25-40
8 0-7.5
8 7.5-15
8 15-25
8 25-40
9 0-7.5
9 7.5-15
9 15-25
9 25-40

d.


e.
Particle Size (%)
0
10
20
30
40
50
60
70
80
90
Sand
Silt
Clay
Quadrat and Sampling Depth (cm)
1 0-7.5
1 7.5-15
1 15-25
1 25-40
2 0-7.5
2 7.5-15
2 15-25
2 25-40
3 0-7.5
3 7.5-15
3 15-25
3 25-40
4 0-7.5
4 7.5-15
4 15-25
4 25-40
5 0-7.5
5 7.5-15
5 15-25
5 25-40
6 0-7.5
6 7.5-15
6 15-25
6 25-40
7 0-7.5
7 7.5-15
7 15-25
7 25-40
8 0-7.5
8 7.5-15
8 15-25
8 25-40
9 0-7.5
9 7.5-15
9 15-25
9 25-40
10 0-7.5
10 7.5-15
10 15-25
10 25-40

Appendix 2: Indicator species analysis summary tables for the strandline study (Chapter 3) a. Lake Cawndilla, b. Lake Menindee, c. Lake Tandure and d. Lake Malta (Type A, B or C denotes why the species was not a significant indicator (Chapter 2)).

a.

Species	Location	*P*
Eragrostis dielsii	Below Strandline	1.00 (Type A)
Medicago sp.	Below Strandline	1.00 (Type A)
Morgania floribunda	Below Strandline	0.515 (Type B)
Polygonum aviculare	Below Strandline	1.00 (Type A)
Gnaphalium luteo-album	High Elevation	0.54 (Type A)
Limosella australis	Low Elevation	1.00 (Type A)
Wahlenbergia communis	Low Elevation	1.00 (Type A)
Alisma sp.	Strandline	0.175 (Type A)
Alternanthera denticulata	Strandline	0.021
Argemone ochroleuca	Strandline	1.00 (Type A)
Centipeda minima	Strandline	1.00 (Type A)
Chenopodium pumilio	Strandline	0.044
Crassula sieberana	Strandline	1.00 (Type A)
Cyperus gymnocaulos	Strandline	0.019
Epaltes australis	Strandline	1.00 (Type A)
Eucalyptus largiflorens	Strandline	0.175 (Type A)
Euphorbia drummondii	Strandline	1.00 (Type A)
Glinus lotoides	Strandline	1.00 (Type A)
Heliotropium curassivicum	Strandline	0.009
Iseotopsis graminifolia	Strandline	1.00 (Type A)
Lemna sp.	Strandline	1.00 (Type A)
Ludwigia peploides	Strandline	0.021
Myriocephalus stuartii	Strandline	0.021
Nicotiana velutino	Strandline	1.00 (Type A)
Pachychornia tennuis	Strandline	1.00 (Type A)
Polygonum plebium	Strandline	0.21 (Type B)
Rumex bidens	Strandline	0.021
Senecio sp.	Strandline	0.021
Solanum karsensis	Strandline	1.00 (Type A)
Solanum oligacanthum	Strandline	0.21 (Type A)
Sporobolus mitchelli	Strandline	0.182 (Type A)
Tetragonia tetragonoides	Strandline	0.184 (Type A)
Unknown dicot 1	Strandline	0.175 (Type A)
Xanthium occidentale	Strandline	0.289 (Type A)

b.

Species	Location	*P*
Chenopodium pumilio	Below Strandline	0.524 (Type B)
Hypochoeris radicata	High Elevation	1.00 (Type A)
Wahlenbergia communis	High Elevation	1.00 (Type A)
Polygonum aviculare	Low Elevation	1.00 (Type A)
Alisma sp.	Strandline	1.00 (Type A)
Alternanthera denticulata	Strandline	0.021
Argemone ochroleuca	Strandline	0.184 (Type A)
Cyperus gymnocaulos	Strandline	0.021
Epaltes australis	Strandline	0.224 (Type B)
Eragrostis dielsii	Strandline	1.00 (Type A)
Euphorbia drummondii	Strandline	1.00 (Type A)
Galenia secunda	Strandline	1.00 (Type A)
Gnaphalium luteo-album	Strandline	1.00 (Type A)
Heliotropium curassivicum	Strandline	0.021
Ludwigia peploides	Strandline	0.021
Morgania floribunda	Strandline	0.012
Myriocephalus stuartii	Strandline	1.00 (Type A)
Persicaria lapathifolium	Strandline	1.00 (Type A)
Ricinis communis	Strandline	0.184 (Type A)
Rumex bidens	Strandline	0.184 (Type A)
Rumex crispus	Strandline	1.00 (Type A)
Senecio sp.	Strandline	1.00 (Type A)
Solanum oligacanthum	Strandline	0.184 (Type A)
Sporobolus mitchelli	Strandline	1.00 (Type A)
Xanthium occidentale	Strandline	0.021

c.

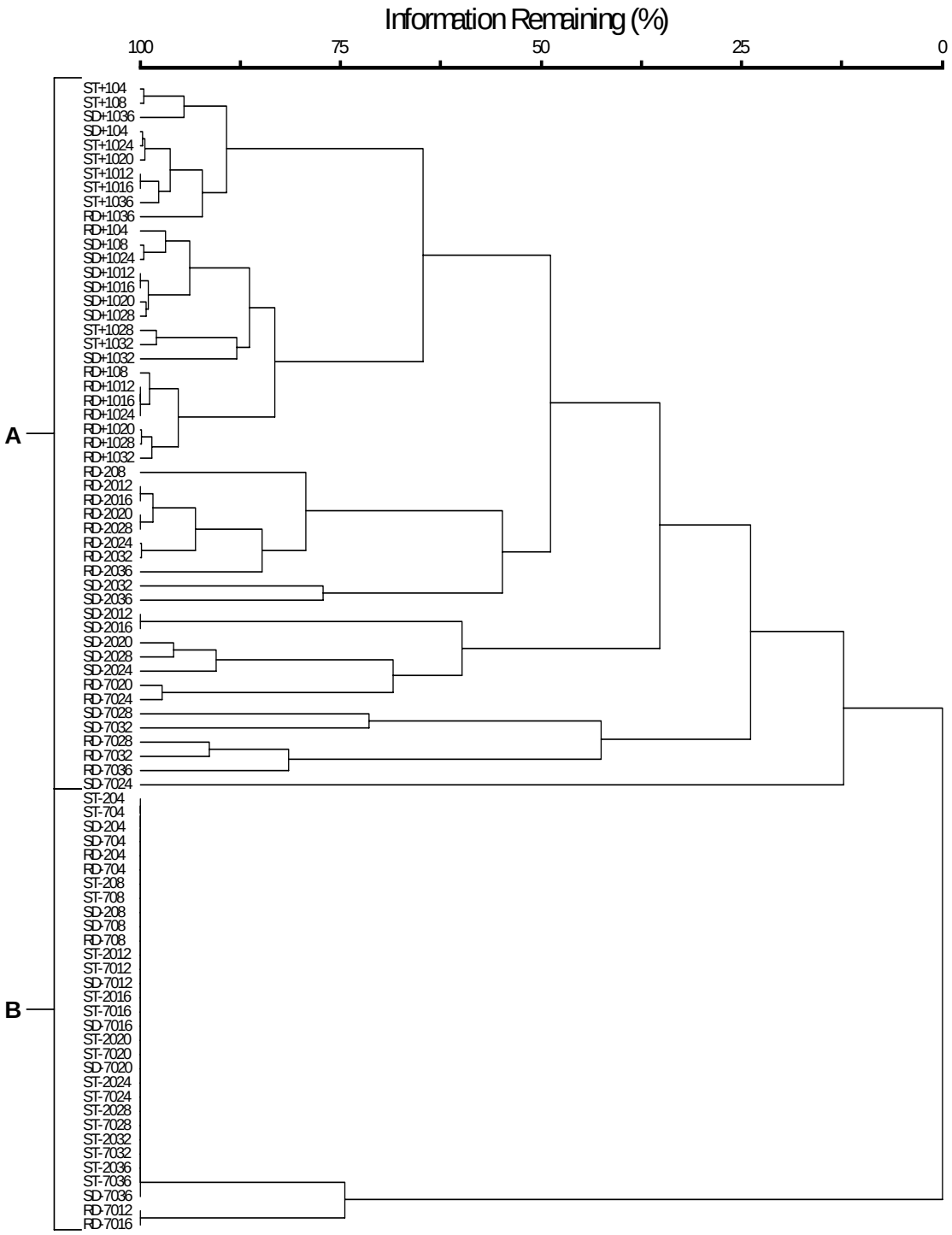
Species	Location	*P*
Chenopodium pumilio	Below Strandline	0.662 (Type B)
Gnaphalium luteo-album	Below Strandline	0.133 (Type C)
Azolla sp.	High Elevation	1.00 (Type A)
Crassula sieberana	High Elevation	0.187 (Type C)
Cyperus gymnocaulos	High Elevation	0.77 (Type A)
Eucalyptus largiflorens	High Elevation	1.00 (Type A)
Morgania floribunda	High Elevation	1.00 (Type A)
Nicotiana glauca	High Elevation	1.00 (Type A)
Nicotiana velutino	High Elevation	0.194 (Type A)
Sporobolus mitchelli	High Elevation	1.00 (Type A)
Limosella australis	Low Elevation	1.00 (Type A)
Alternanthera denticulata	Strandline	0.014
Centipeda minima	Strandline	0.054 (Type B)
Chloris truncata	Strandline	1.00 (Type A)
Epaltes australis	Strandline	1.00 (Type A)
Eragrostis dielsii	Strandline	0.729 (Type A)
Eragrostis parvifolia	Strandline	1.00 (Type A)
Haloragis aspera	Strandline	0.504 (Type A)
Heliotropium amplexicaule	Strandline	1.00 (Type A)
Heliotropium curassivicum	Strandline	1.00 (Type A)
Juncus aridicola	Strandline	0.17 (Type A)
Ludwigia peploides	Strandline	0.021
Medicago spp.	Strandline	1.00 (Type A)
Myriocephalus stuartii	Strandline	0.513 (Type A)
Persicaria lapathifolium	Strandline	0.021
Polygonum plebium	Strandline	1.00 (Type A)
Ptilotus obovatus	Strandline	1.00 (Type A)
Rumex bidens	Strandline	1.00 (Type A)
Rumex crispus	Strandline	1.00 (Type A)
Schlerolaena sp.	Strandline	1.00 (Type A)
Tetragonia tetragonoides	Strandline	0.129 (Type A)
Xanthium occidentale	Strandline	1.00 (Type A)

d.

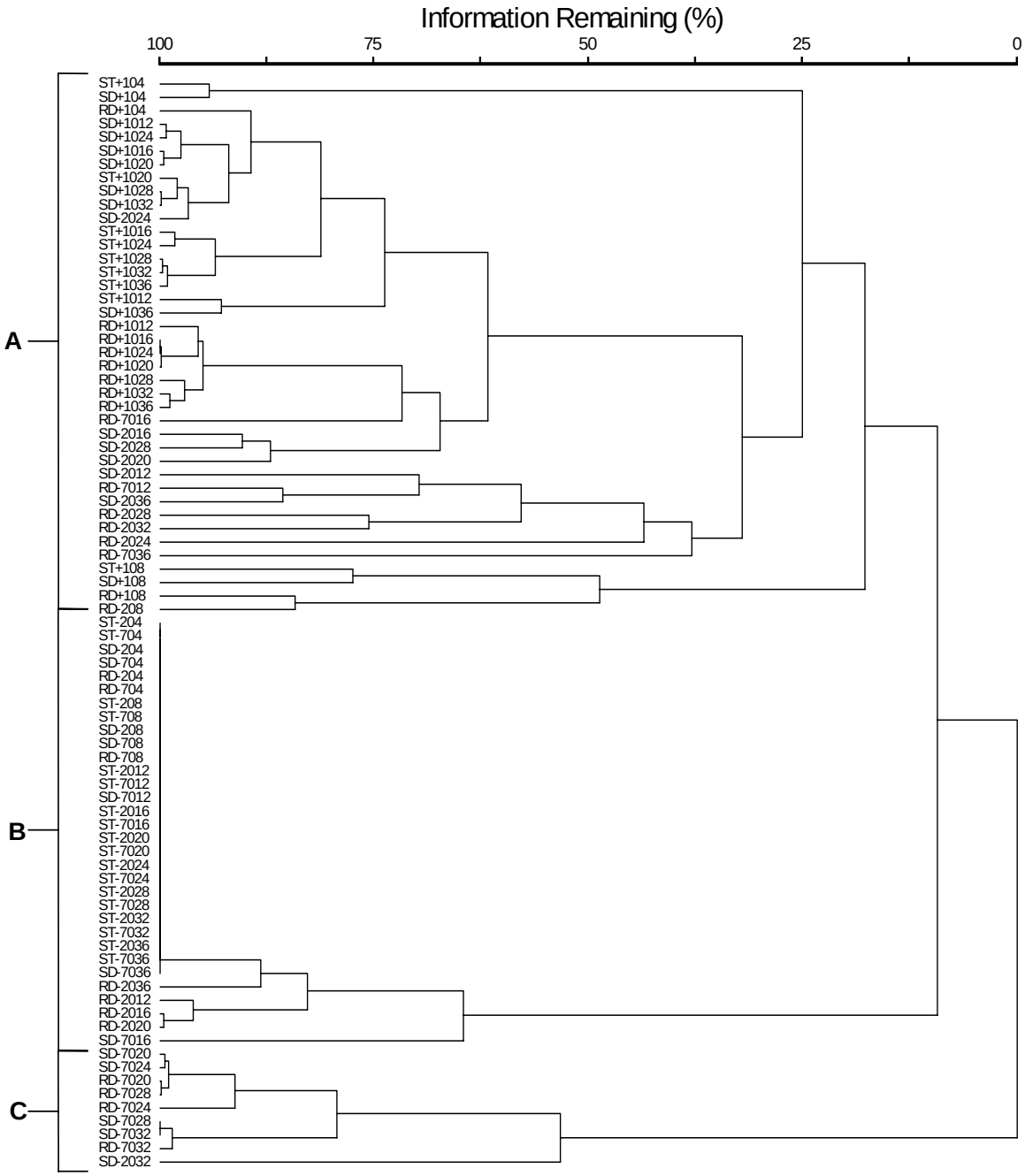
Species	Location	*P*
Chenopodium pumilio	Below Strandline	0.386 (Type B)
Eragrostis parvifolia	Below Strandline	0.191 (Type A)
Myriophyllum verrucosum	Below Strandline	1.00 (Type A)
Polygonum plebium	Below Strandline	0.329 (Type B)
Solanum oligacanthum	Below Strandline	0.511 (Type A)
Alisma sp.	High Elevation	1.00 (Type A)
Convolvulus arvensis	High Elevation	0.528 (Type A)
Crassula sieberana	High Elevation	0.048
Eragrostis dielsii	High Elevation	1.00(Type A)
Euphorbia drummondii	High Elevation	0.159 (Type A)
Galenia secunda	High Elevation	1.00(Type A)
Heliotropium europaeum	High Elevation	0.062 (Type C)
Isolepis australiensis	High Elevation	0.194 (Type A)
Mollogo cerviana	High Elevation	0.703 (Type B)
Nicotiana glauca	High Elevation	1.00 (Type A)
Rumex bidens	High Elevation	1.00 (Type A)
Cyperus gymnocaulos	Low Elevation	0.23 (Type C)
Iseotopsis graminifolia	Low Elevation	0.063 (Type C)
Alternanthera denticulata	Strandline	0.021
Ammania multiflora	Strandline	0.037
Centipeda minima	Strandline	0.021
Daucus glochidiatus	Strandline	1.00 (Type A)
Epaltes australis	Strandline	0.42 (Type B)
Glinus lotoides	Strandline	0.668 (Type C)
Gnaphalium luteo-album	Strandline	0.021
Haloragis aspera	Strandline	0.266 (Type C)
Heliotropium amplexicaule	Strandline	0.266 (Type A)
Limosella australis	Strandline	0.292 (Type B)
Medicago spp.	Strandline	0.021
Morgania floribunda	Strandline	0.16 (Type B)
Myosurus minima	Strandline	0.021
Myriocephalus stuartii	Strandline	1.00 (Type A)
Polygonum aviculare	Strandline	1.00 (Type A)
Rumex crispus	Strandline	0.184 (Type C)
Scleroblitum atriplicinum	Strandline	0.021
Sporobolus mitchelli	Strandline	0.511 (Type B)
Tetragonia tetragonoides	Strandline	1.00 (Type A)
Unknown dicot 1	Strandline	1.00 (Type A)
Wahlenbergia communis	Strandline	0.216 (Type B)

Appendix 3: Group average clustering dendrogram of each hydrology, elevation and sampling time for the a. Lake Cawndilla, b. Lake Menindee, c. Lake Wetherell, d. Lake Balaka and e. Lake Malta seed bank (ST = static, SD = slow drawdown, RD = rapid drawdown, +10, -20 or -70 = elevation and 4, 8, 12, 16, 20, 24, 28, 32 or 36 = sampling time in weeks) (Chapter 4).

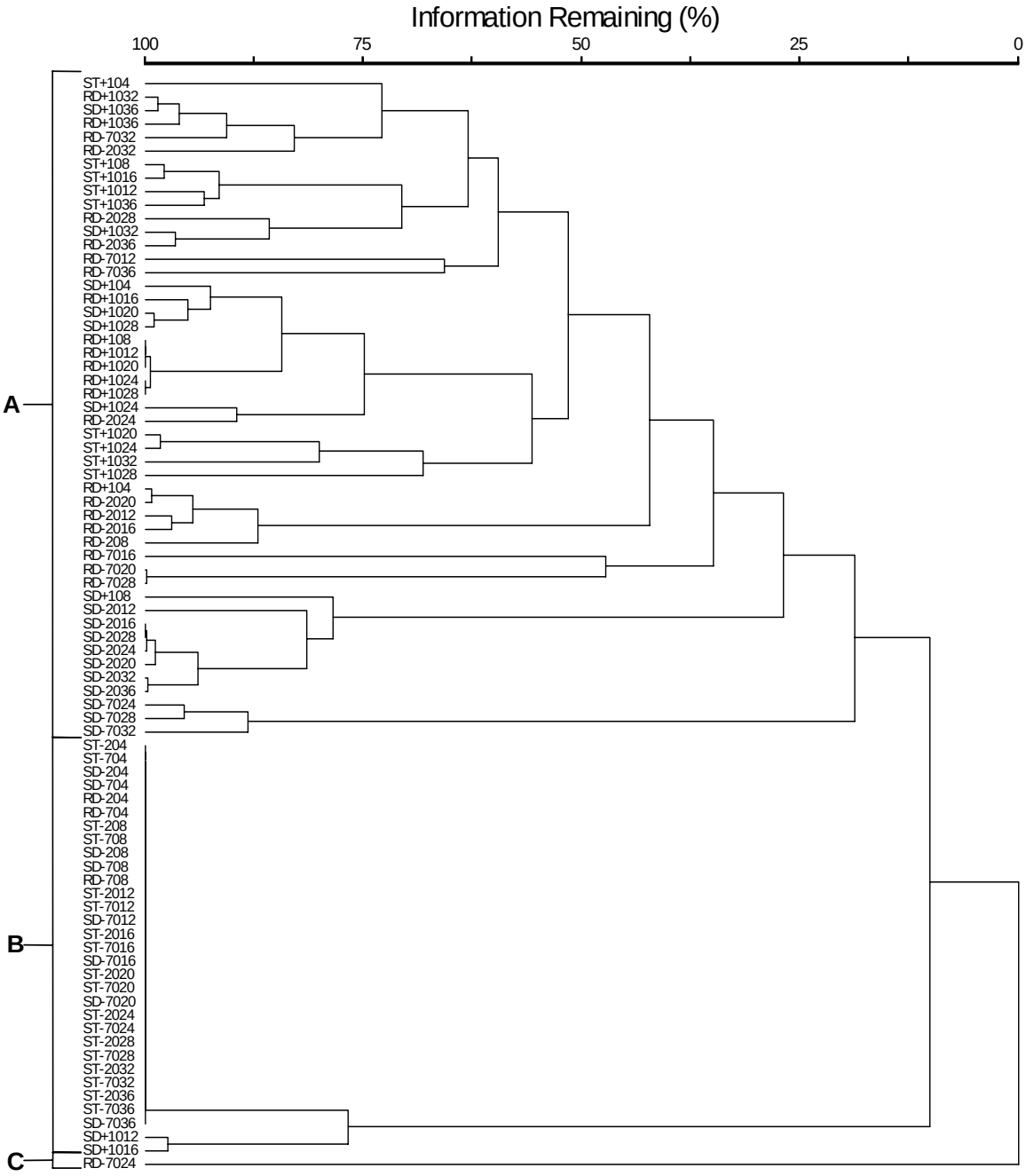
a.



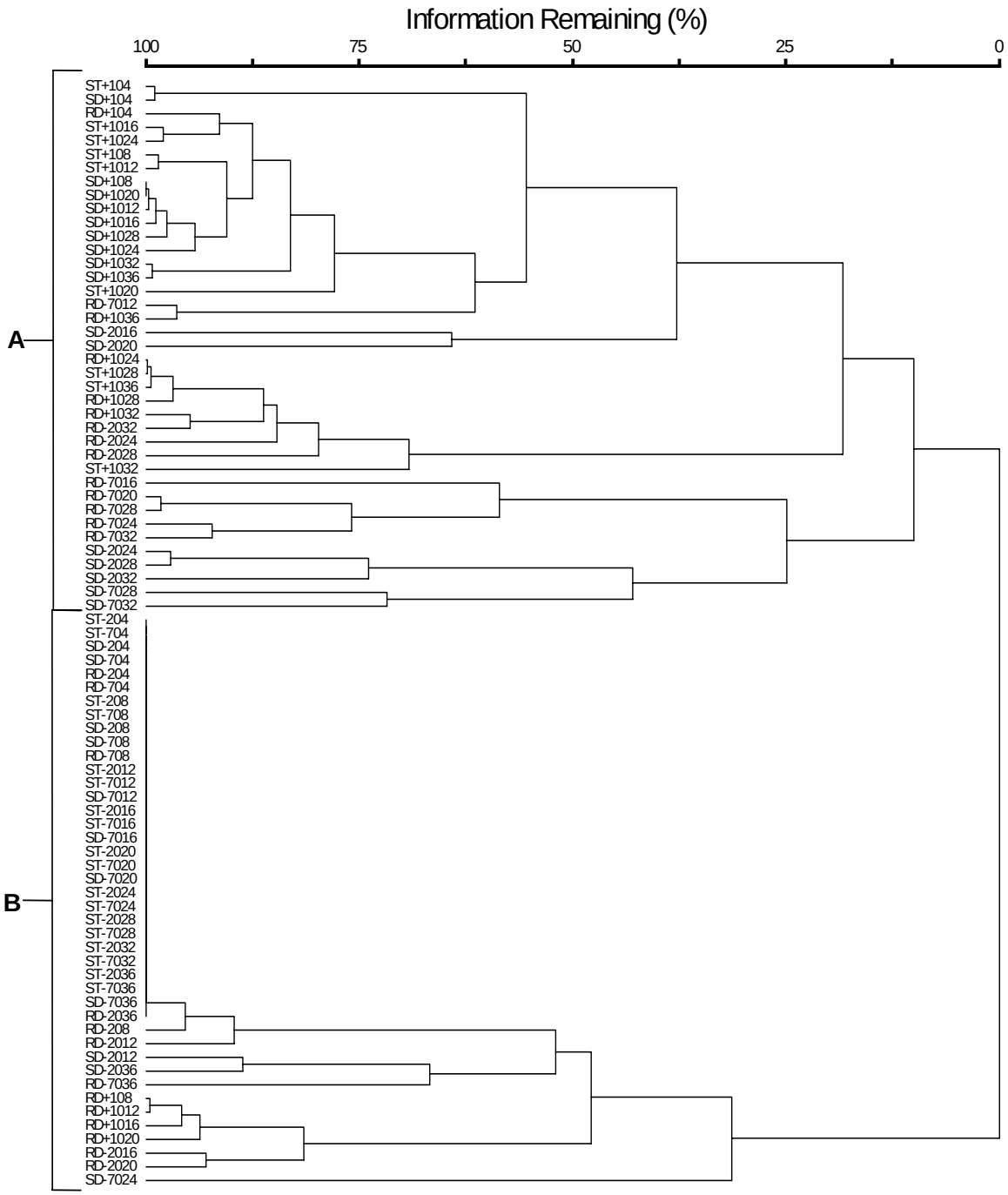
b.


Information Remaining (%)
100
75
50
25
0
A
B
C
ST+104
SD+104
RD+104
SD+1012
SD+1024
SD+1016
SD+1020
ST+1020
SD+1028
SD+1032
SD-2024
ST+1016
ST+1024
ST+1028
ST+1032
ST+1036
ST+1012
SD+1036
RD+1012
RD+1016
RD+1024
RD+1020
RD+1028
RD+1032
RD+1036
RD-7016
SD-2016
SD-2028
SD-2020
SD-2012
RD-7012
SD-2036
RD-2028
RD-2032
RD-2024
RD-7036
ST+108
SD+108
RD+108
RD-208
ST-204
ST-704
SD-204
SD-704
RD-204
RD-704
ST-208
ST-708
SD-208
SD-708
RD-708
ST-2012
ST-7012
SD-7012
ST-2016
ST-7016
ST-2020
ST-7020
ST-2024
ST-7024
ST-2028
ST-7028
ST-2032
ST-7032
ST-2036
ST-7036
SD-7036
RD-2036
RD-2012
RD-2016
RD-2020
SD-7016
SD-7020
SD-7024
RD-7020
RD-7028
RD-7024
SD-7028
SD-7032
RD-7032
SD-2032

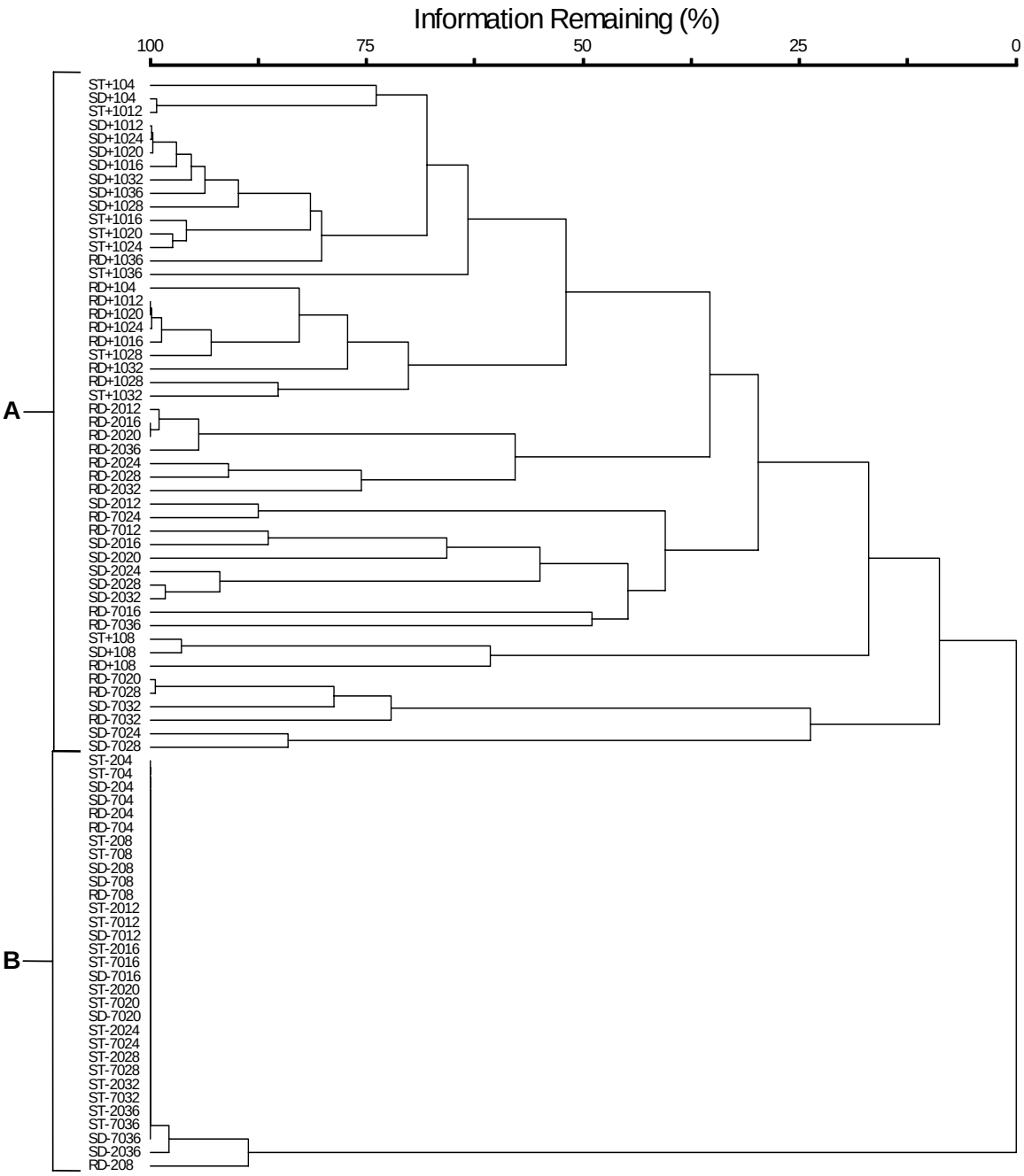
c.


Information Remaining (%)
100
75
50
25
0
ST+104
RD+1032
SD+1036
RD+1036
RD-7032
RD-2032
ST+108
ST+1016
ST+1012
ST+1036
RD-2028
SD+1032
RD-2036
RD-7012
RD-7036
SD+104
RD+1016
SD+1020
SD+1028
RD+108
RD+1012
RD+1020
RD+1024
RD+1028
SD+1024
RD-2024
ST+1020
ST+1024
ST+1032
ST+1028
RD+104
RD-2020
RD-2012
RD-2016
RD-208
RD-7016
RD-7020
RD-7028
SD+108
SD-2012
SD-2016
SD-2028
SD-2024
SD-2020
SD-2032
SD-2036
SD-7024
SD-7028
SD-7032
ST-204
ST-704
SD-204
SD-704
RD-204
RD-704
ST-208
ST-708
SD-208
SD-708
RD-708
ST-2012
ST-7012
SD-7012
ST-2016
ST-7016
SD-7016
ST-2020
ST-7020
SD-7020
ST-2024
ST-7024
ST-2028
ST-7028
ST-2032
ST-7032
ST-2036
ST-7036
SD-7036
SD+1012
SD+1016
RD-7024
A
B
C

d.


Information Remaining (%)
100
75
50
25
0
A
B
ST+104
SD+104
RD+104
ST+1016
ST+1024
ST+108
ST+1012
SD+108
SD+1020
SD+1012
SD+1016
SD+1028
SD+1024
SD+1032
SD+1036
ST+1020
RD-7012
RD+1036
SD-2016
SD-2020
RD+1024
ST+1028
ST+1036
RD+1028
RD+1032
RD-2032
RD-2024
RD-2028
ST+1032
RD-7016
RD-7020
RD-7028
RD-7024
RD-7032
SD-2024
SD-2028
SD-2032
SD-7028
SD-7032
ST-204
ST-704
SD-204
SD-704
RD-204
RD-704
ST-208
ST-708
SD-208
SD-708
RD-708
ST-2012
ST-7012
SD-7012
ST-2016
ST-7016
SD-7016
ST-2020
ST-7020
SD-7020
ST-2024
ST-7024
ST-2028
ST-7028
ST-2032
ST-7032
ST-2036
ST-7036
SD-7036
RD-2036
RD-208
RD-2012
SD-2012
SD-2036
RD-7036
RD+108
RD+1012
RD+1016
RD+1020
RD-2016
RD-2020
SD-7024

e.


Information Remaining (%)
100
75
50
25
0
A
B
ST+104
SD+104
ST+1012
SD+1012
SD+1024
SD+1020
SD+1016
SD+1032
SD+1036
SD+1028
ST+1016
ST+1020
ST+1024
RD+1036
ST+1036
RD+104
RD+1012
RD+1020
RD+1024
RD+1016
ST+1028
RD+1032
RD+1028
ST+1032
RD-2012
RD-2016
RD-2020
RD-2036
RD-2024
RD-2028
RD-2032
SD-2012
RD-7024
RD-7012
SD-2016
SD-2020
SD-2024
SD-2028
SD-2032
RD-7016
RD-7036
ST+108
SD+108
RD+108
RD-7020
RD-7028
SD-7032
RD-7032
SD-7024
SD-7028
ST-204
ST-704
SD-204
SD-704
RD-204
RD-704
ST-208
ST-708
SD-208
SD-708
RD-708
ST-2012
ST-7012
SD-7012
ST-2016
ST-7016
SD-7016
ST-2020
ST-7020
SD-7020
ST-2024
ST-7024
ST-2028
ST-7028
ST-2032
ST-7032
ST-2036
ST-7036
SD-7036
SD-2036
RD-208

Appendix 4: Indicator species analysis of the a. Lake Cawndilla, b. Lake Menindee, c. Lake Wetherell, d. Lake Balaka and e. Lake Malta seed bank (Type A, B or C denotes why the species was not a significant indicator (Chapter 2)) (Chapter 4).

a.

Species	Group	*P*
Alisma sp.	A	0.547 (Type A)
Alternanthera denticulata	A	0.001
Argemone ochroleuca	A	0.001
Centipeda minima	A	0.001
Cyperus gymnocaulos	A	0.001
Epaltes australis	A	0.001
Euphorbia drummondii	A	1.00 (Type A)
Gnaphalium luteo-album	A	0.38 (Type A)
Heliotropium curassivicum	A	0.001
Juncus aridicola	A	0.522 (Type A)
Limosella australis	A	0.061 (Type q)
Ludwigia peploides	A	1.00 (Type A)
Medicago spp.	A	0.021
Mollogo cerviana	A	0.148 (Type A)
Morgania floribunda	A	0.001
Polygonum plebium	A	1.00 (Type A)
Rumex bidens	A	1.00 (Type A)
Sporobolus mitchelli	A	1.00 (Type A)
Xanthium occidentale	A	0.001
Bare Soil	B	0.001

b.

Species	Group	*P*
Alternanthera denticulata	A	0.001
Ammania multiflora	C	0.003
Argemone ochroleuca	C	0.516 (Type A)
Centipeda minima	C	0.001
Chenopodium pumilio	A	1.00 (Type A)
Cyperus gymnocaulos	A	0.625 (Type A)
Eragrostis australasica	A	0.138 (Type A)
Epaltes australis	A	0.001
Gnaphalium luteo-album	C	0.001
Heliotropium curassivicum	A	0.005
Juncus aridicola	A	0.595 (Type A)
Limosella australis	C	0.001
Ludwigia peploides	A	1.00 (Type A)
Medicago spp.	A	0.03
Mollogo cerviana	C	0.346 (Type A)
Morgania floribunda	A	0.001
Nicotiana glauca	A	0.055 (Type A)
Polygonum plebium	C	0.484 (Type A)
Sporobolus mitchelli	C	0.017
Bare Soil	B	0.001

c.

Species	Group	*P*
Alisma sp.	A	1.00 (Type A)
Alternanthera denticulata	A	0.001
Ammania multiflora	A	0.154 (Type A)
Centipeda minima	A	0.001
Cyperus gymnocaulos	A	0.149 (Type A)
Eragrostis parvifolia	A	0.546 (Type A)
Epaltes australis	A	0.031
Galenia secunda	A	0.023
Gnaphalium luteo-album	A	0.052 (Type A)
Iseotopsis graminifolia	A	1.00 (Type A)
Juncus aridicola	C	0.005
Limosella australis	A	0.10 (Type A)
Ludwigia peploides	A	0.001
Marsilea sp.	A	0.055 (Type A)
Medicago spp.	A	0.004
Mollogo cerviana	A	0.287 (Type A)
Morgania floribunda	A	0.078 (Type A)
Myosurus minima	A	1.00 (Type A)
Myriophyllum verrucosum	A	1.00 (Type A)
Persicaria lapathifolium	A	0.147 (Type A)
Polygonum plebium	A	0.152 (Type A)
Sporobolus mitchelli	A	1.00 (Type A)
Tetragonia tetragonoides	A	1.00 (Type A)
Typha domingensis	A	0.003
Bare Soil	B	0.001

d.

Species	Group	*P*
Alternanthera denticulata	A	0.162 (Type A)
Ammania multiflora	A	0.052 (Type A)
Centipeda minima	A	0.001
Cyperus gymnocaulos	A	0.24 (Type A)
Epaltes australis	A	0.001
Euphorbia drummondii	A	0.485 (Type A)
Galenia secunda	A	0.47 (Type A)
Gnaphalium luteo-album	A	0.004
Hypochoeris radicata	A	0.481 (Type A)
Iseotopsis graminifolia	A	0.038
Juncus aridicola	B	0.484 (Type B)
Limosella australis	A	0.003
Medicago spp.	A	0.001
Mollogo cerviana	A	0.22 (Type A)
Morgania floribunda	A	0.001
Myriophyllum verrucosum	A	0.488 (Type B)
Polygonum plebium	A	0.001
Xanthium occidentale	A	0.504 (Type A)
Bare Soil	B	0.001

e.

Species	Group	*P*
Ammania multiflora	A	0.007
Centipeda minima	A	0.001
Chenopodium pumilio	A	0.048
Cyperus gymnocaulos	A	0.078 (Type A)
Eragrostis australasica	A	0.126 (Type A)
Eragrostis dielsii	A	0.542 (Type A)
Eragrostis parvifolia	A	0.036
Epaltes australis	A	0.001
Gnaphalium luteo-album	A	0.001
Haloragis aspera	A	1.00 (Type A)
Heliotropium curassivicum	A	1.00 (Type A)
Iseotopsis graminifolia	A	0.275 (Type A)
Juncus aridicola	A	1 (Type A)
Limosella australis	A	0.006
Ludwigia peploides	A	1.00 (Type A)
Medicago spp.	A	0.001
Mollogo cerviana	A	0.036
Morgania floribunda	A	0.001
Polygonum plebium	A	0.081 (Type A)
Sporobolus mitchelli	A	0.001
Tetragonia tetragonoides	A	1.00 (Type A)
Bare Soil	B	0.001

Appendix 5: Sediment exposure time for each quadrat and survey in a. Lake Malta, b. Lake Balaka, c. Lake Wetherell, d. Lake Menindee and e. Lake Cawndilla (Chapter 5).

a.

		Quadrat and No. Days Exposed					
Survey Date	**Code**	**1**	**2**	**3**	**4**	**5**	**6**
November 2001	1101	19	0	0	0	0	0
December 2001	1201	49	20	0	0	0	0
January 2002	0102	80	51	17	0	0	0
February 2002	0202	111	82	48	29	0	0
March 2002	0302	139	110	76	57	34	0
April 2002	0402	170	141	107	88	65	10
May 2002	0502	210	181	147	128	105	50
August 2002	0802	290	261	227	208	185	130
November 2002	1102	380	351	317	298	275	220
February 2003	0203	470	441	407	388	365	310

b.

		Quadrat and No. Days Exposed				
Survey Date	**Code**	**1**	**2**	**3**	**4**	**5**
November 2001	1101	19	0	0	0	0
December 2001	1201	56	35	0	0	0
January 2002	0102	87	66	20	0	0
February 2002	0202	118	97	51	20	0
March 2002	0302	146	125	79	48	20
April 2002	0402	177	156	110	79	51
May 2002	0502	222	201	155	124	96
August 2002	0802	302	281	235	204	176
November 2002	1102	392	371	325	294	266
February 2003	0203	482	461	415	384	356

c.

		Quadrat and No. Days Exposed	
Survey Date	**Code**	**1**	**2**
November 2001	1101	33	0
December 2001	1201	73	Not sampled
January 2002	0102	104	Not sampled
February 2002	0202	135	Not sampled
March 2002	0302	163	Not sampled
April 2002	0402	203	Not sampled
November 2002	1102	416	372
February 2003	0203	506	462

d.

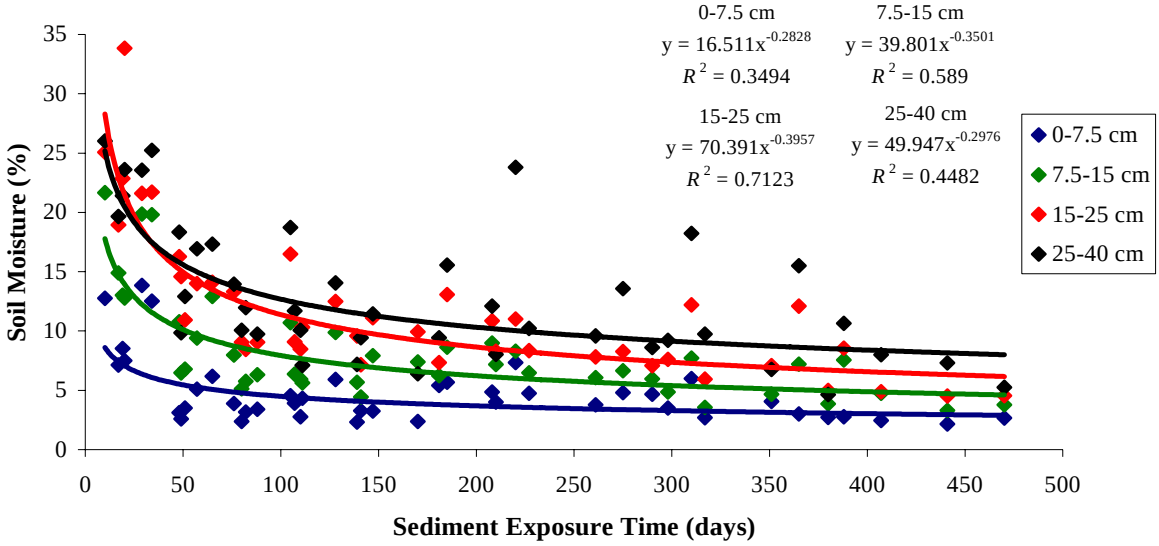
		Quadrat and No. Days Exposed								
Survey Date	**Code**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
November 2001	1101	33	0	0	0	0	0	0	0	0
December 2001	1201	73	9	0	0	0	0	0	0	0
January 2002	0102	104	40	7	0	0	0	0	0	0
February 2002	0202	135	71	38	5	0	0	0	0	0
March 2002	0302	163	99	66	33	21	0	0	0	0
April 2002	0402	194	130	97	64	52	23	0	0	0
May 2002	0502	234	170	137	104	92	63	42	0	0
August 2002	0802	314	250	217	184	172	143	122	26	0
November 2002	1102	404	340	307	274	262	233	212	116	70
February 2003	0203	494	430	397	364	352	323	302	206	160

e.

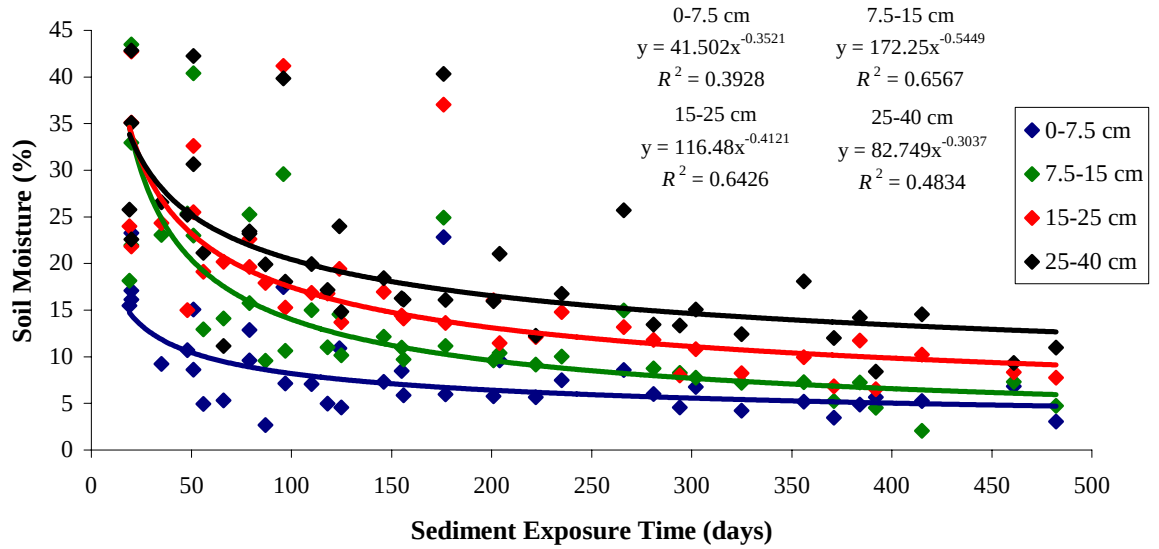
		Quadrat and No. Days Exposed									
Survey Date	**Code**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
November 2001	1101	33	0	0	0	0	0	0	0	0	0
December 2001	1201	73	35	0	0	0	0	0	0	0	0
January 2002	0102	104	66	5	0	0	0	0	0	0	0
February 2002	0202	135	97	36	30	0	0	0	0	0	0
March 2002	0302	163	125	64	58	21	0	0	0	0	0
April 2002	0402	194	156	95	89	52	24	0	0	0	0
May 2002	0502	234	196	135	129	92	64	38	0	0	0
August 2002	0802	309	271	210	204	167	139	113	10	0	0
November 2002	1102	399	361	300	294	257	229	203	100	21	0
February 2003	0203	479	441	380	374	337	309	283	180	101	20

Appendix 6: Relationship between sediment exposure time and soil moisture content for each sampling depth for a. Lake Malta, b. Lake Balaka, c. Lake Wetherell, D. Lake Menindee and e. Lake Cawndilla.

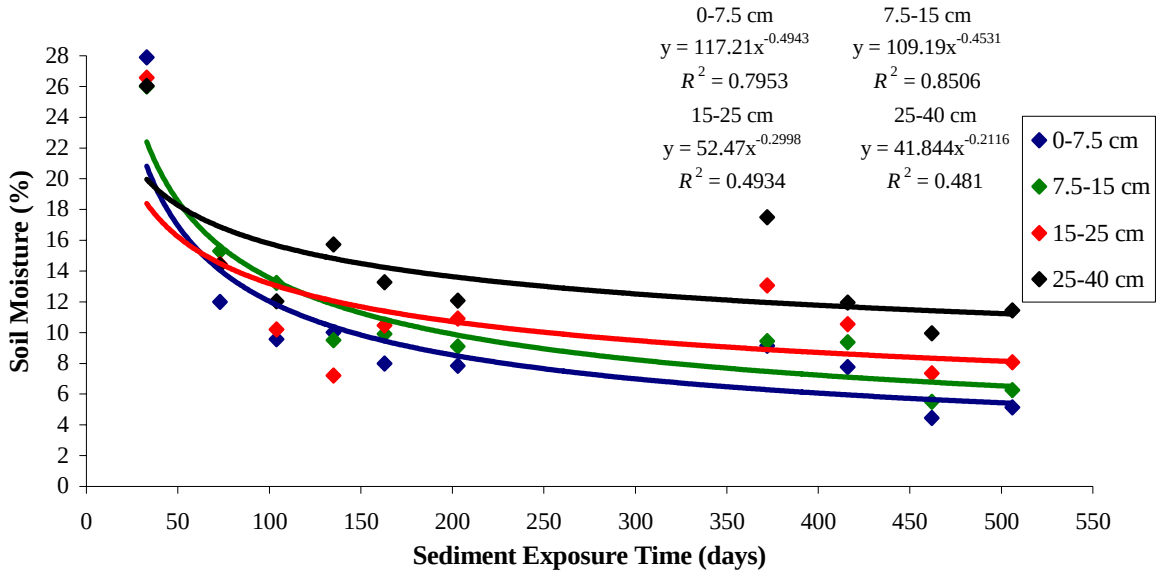
a.



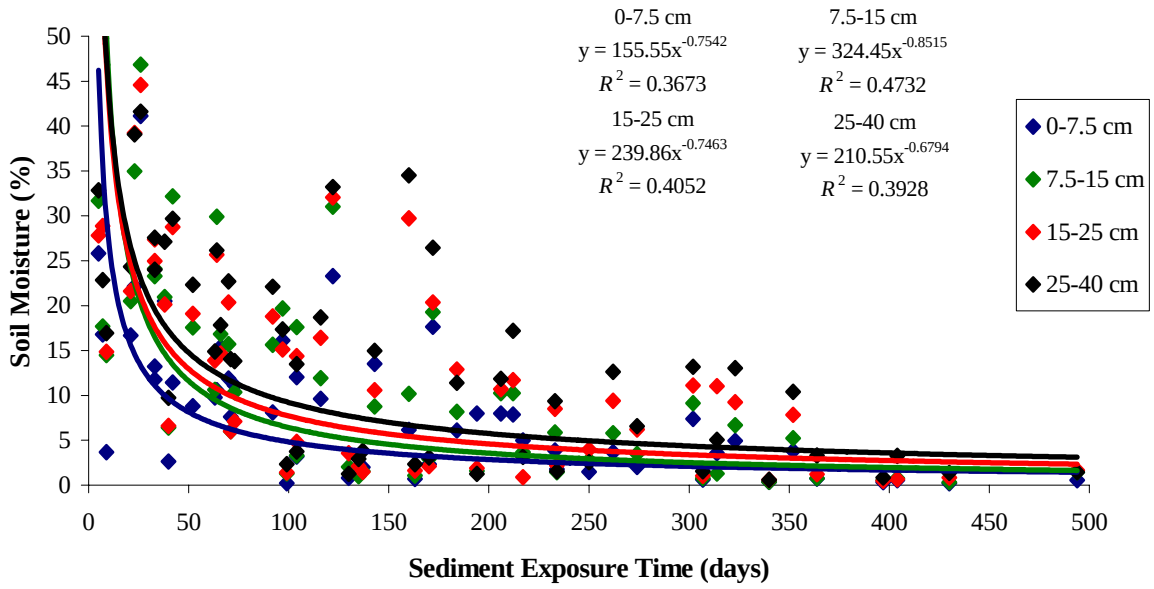
b.



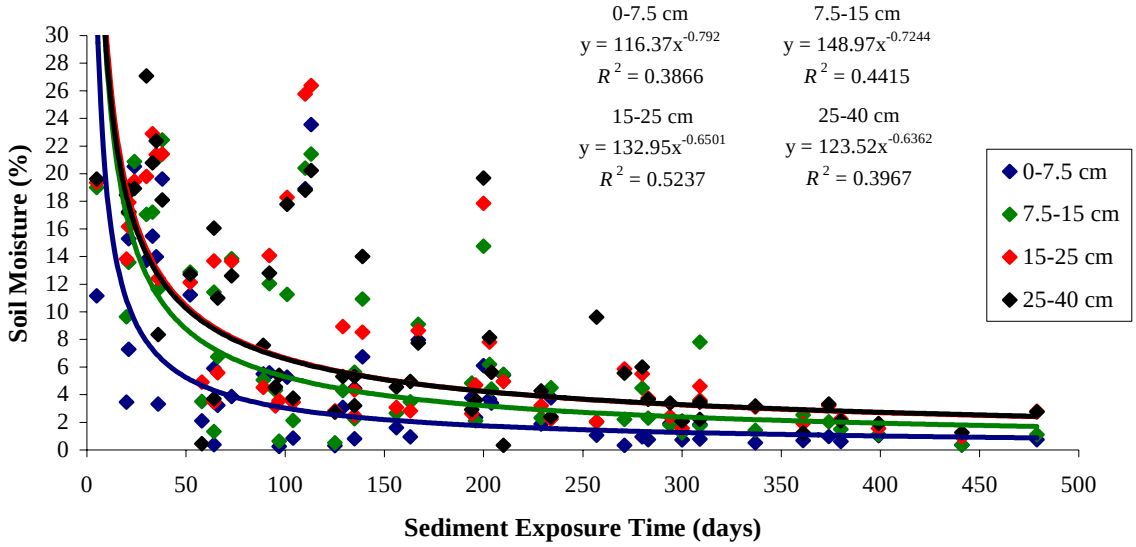
c.


0-7.5 cm
y = 117.21x-0.4943
R2 = 0.7953
7.5-15 cm
y = 109.19x-0.4531
R2 = 0.8506
15-25 cm
y = 52.47x-0.2998
R2 = 0.4934
25-40 cm
y = 41.844x-0.2116
R2 = 0.481
0-7.5 cm
7.5-15 cm
15-25 cm
25-40 cm
Soil Moisture (%)
Sediment Exposure Time (days)

d.

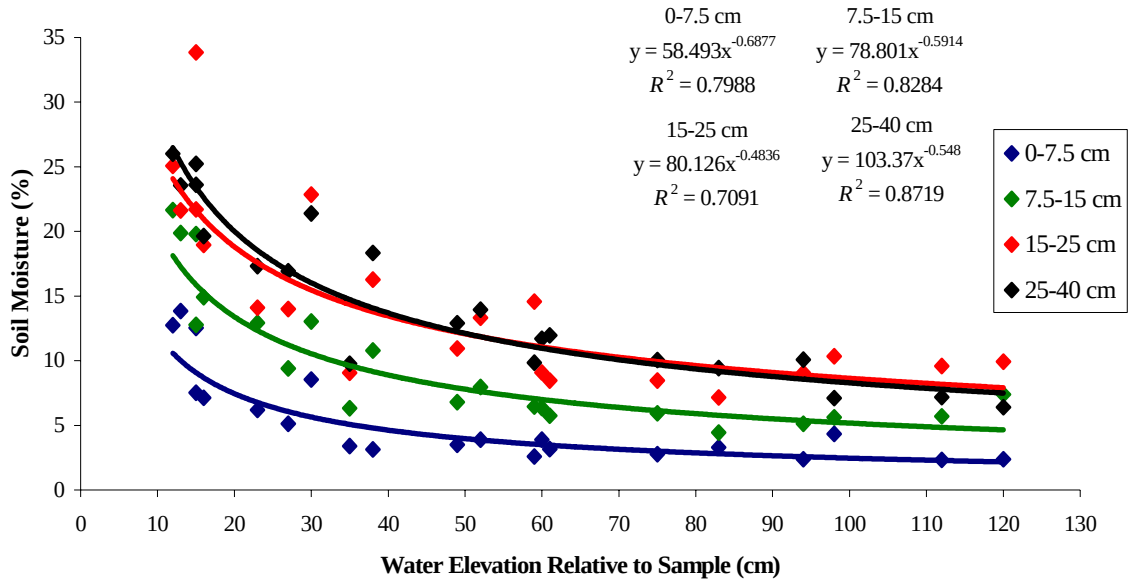

0-7.5 cm
y = 155.55x-0.7542
R2 = 0.3673
7.5-15 cm
y = 324.45x-0.8515
R2 = 0.4732
15-25 cm
y = 239.86x-0.7463
R2 = 0.4052
25-40 cm
y = 210.55x-0.6794
R2 = 0.3928
0-7.5 cm
7.5-15 cm
15-25 cm
25-40 cm
Soil Moisture (%)
Sediment Exposure Time (days)

e.

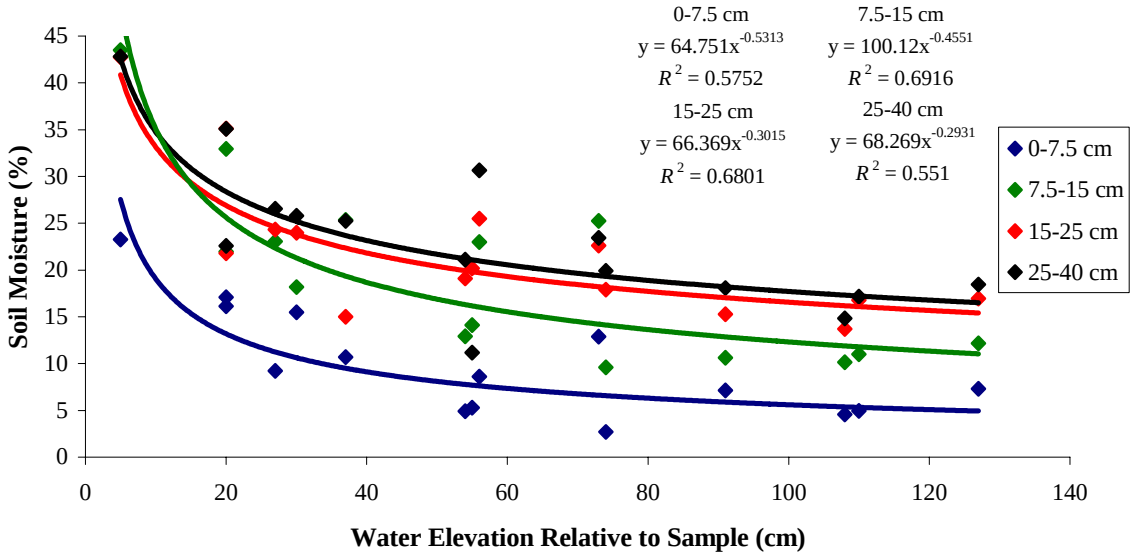

0-7.5 cm
y = 116.37x-0.792
R 2 = 0.3866
7.5-15 cm
y = 148.97x-0.7244
R 2 = 0.4415
15-25 cm
y = 132.95x-0.6501
R 2 = 0.5237
25-40 cm
y = 123.52x-0.6362
R 2 = 0.3967
0-7.5 cm
7.5-15 cm
15-25 cm
25-40 cm
Soil Moisture (%)
Sediment Exposure Time (days)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
0
50
100
150
200
250
300
350
400
450
500

Appendix 7: Relationship between the elevation of the quadrat relative to the water level and soil moisture content for each soil sampling depth a. Lake Malta, b. Lake Balaka, c. Lake Wetherell, D. Lake Menindee and e. Lake Cawndilla.

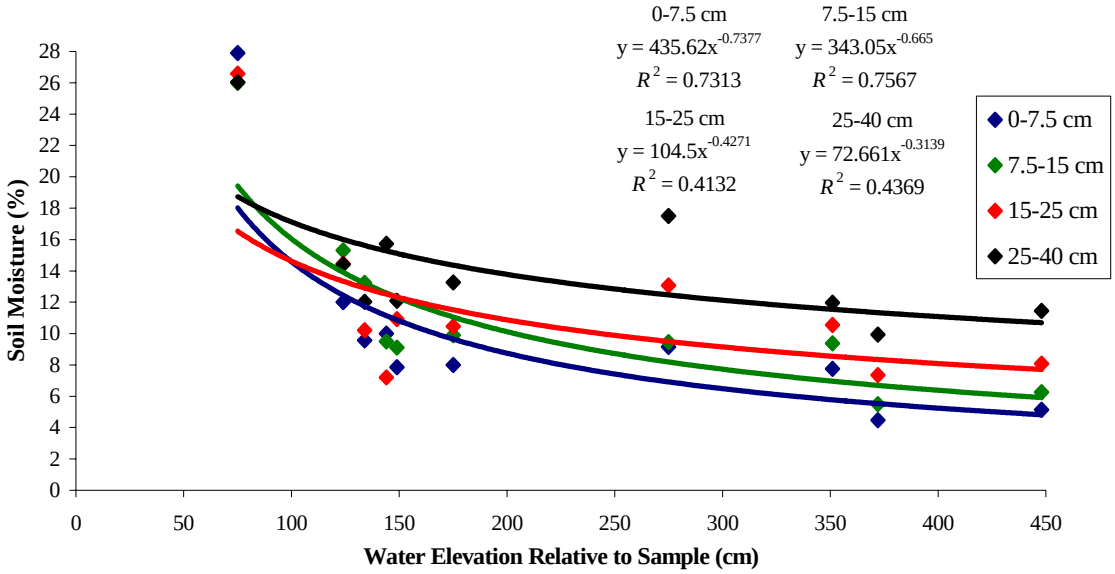
a.



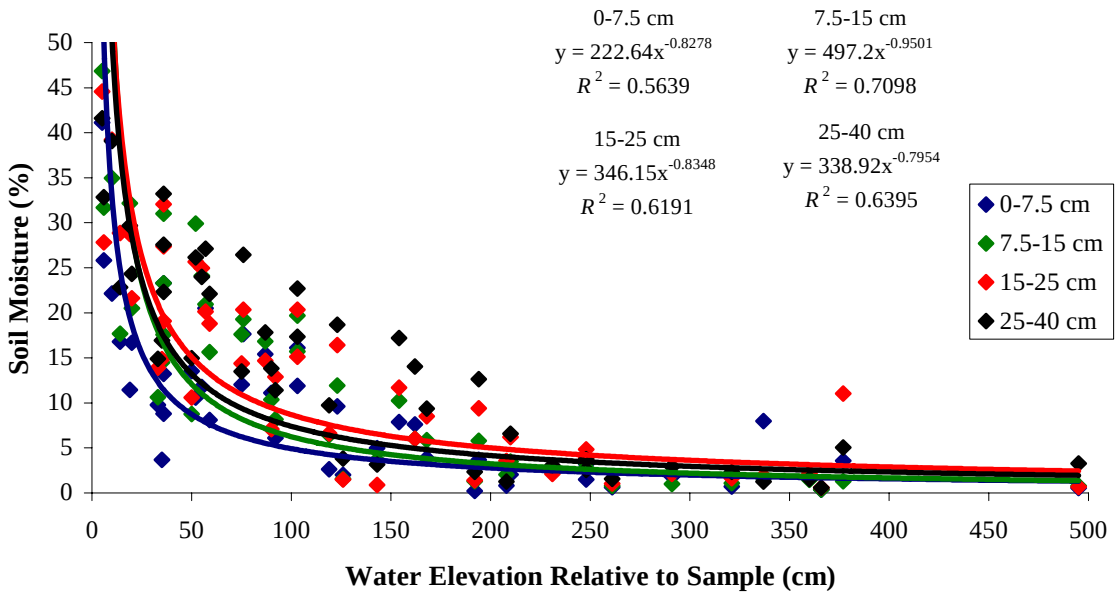
b.



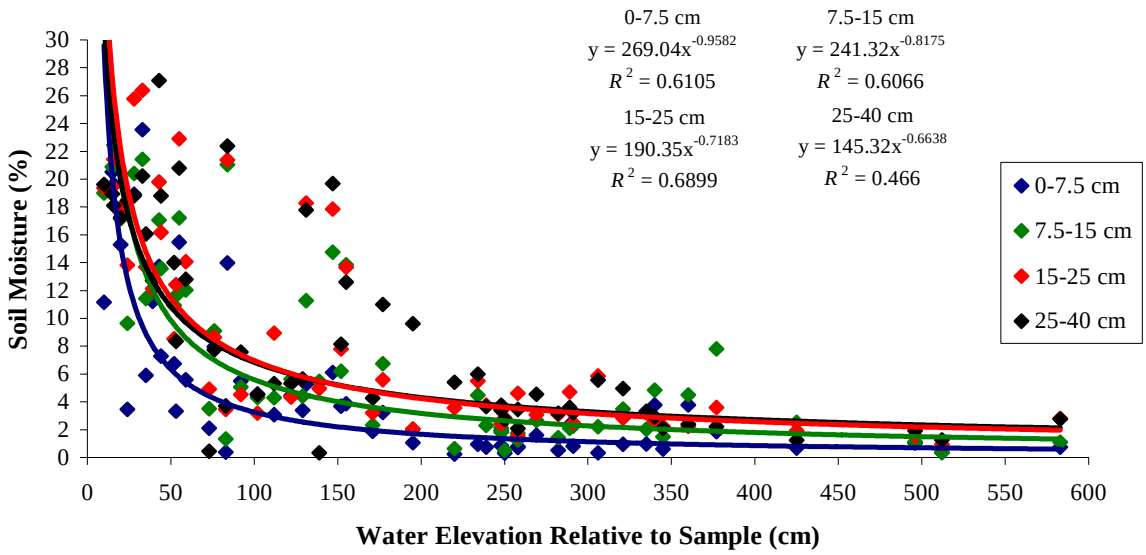
c.


0-7.5 cm
y = 435.62x^-0.7377
R^2 = 0.7313
7.5-15 cm
y = 343.05x^-0.665
R^2 = 0.7567
15-25 cm
y = 104.5x^-0.4271
R^2 = 0.4132
25-40 cm
y = 72.661x^-0.3139
R^2 = 0.4369
0-7.5 cm
7.5-15 cm
15-25 cm
25-40 cm
Soil Moisture (%)
Water Elevation Relative to Sample (cm)

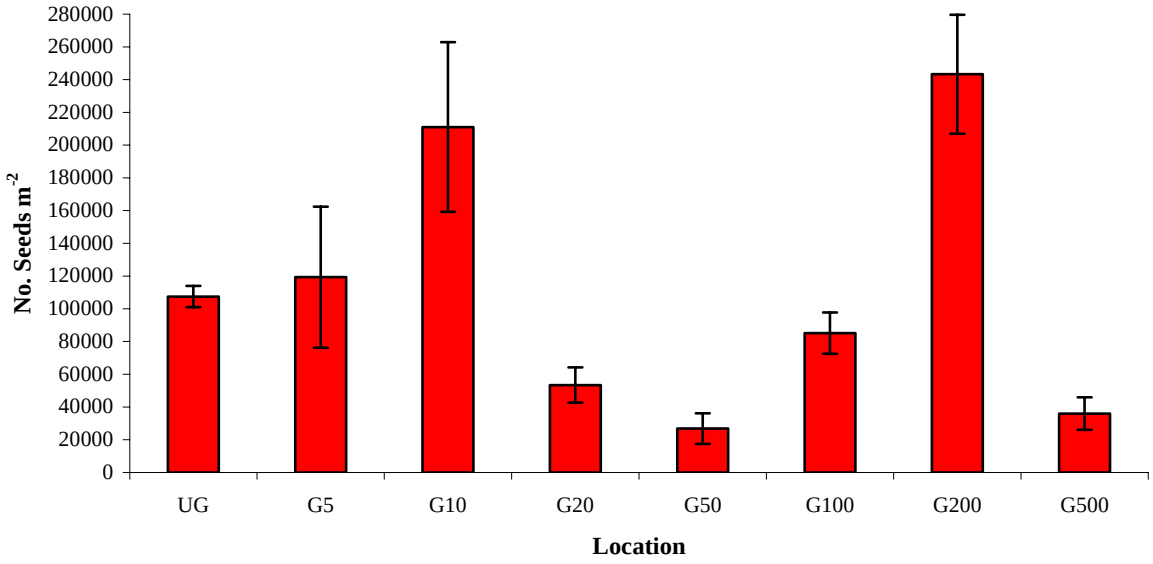
d.


0-7.5 cm
y = 222.64x^-0.8278
R^2 = 0.5639
7.5-15 cm
y = 497.2x^-0.9501
R^2 = 0.7098
15-25 cm
y = 346.15x^-0.8348
R^2 = 0.6191
25-40 cm
y = 338.92x^-0.7954
R^2 = 0.6395
0-7.5 cm
7.5-15 cm
15-25 cm
25-40 cm
Soil Moisture (%)
Water Elevation Relative to Sample (cm)

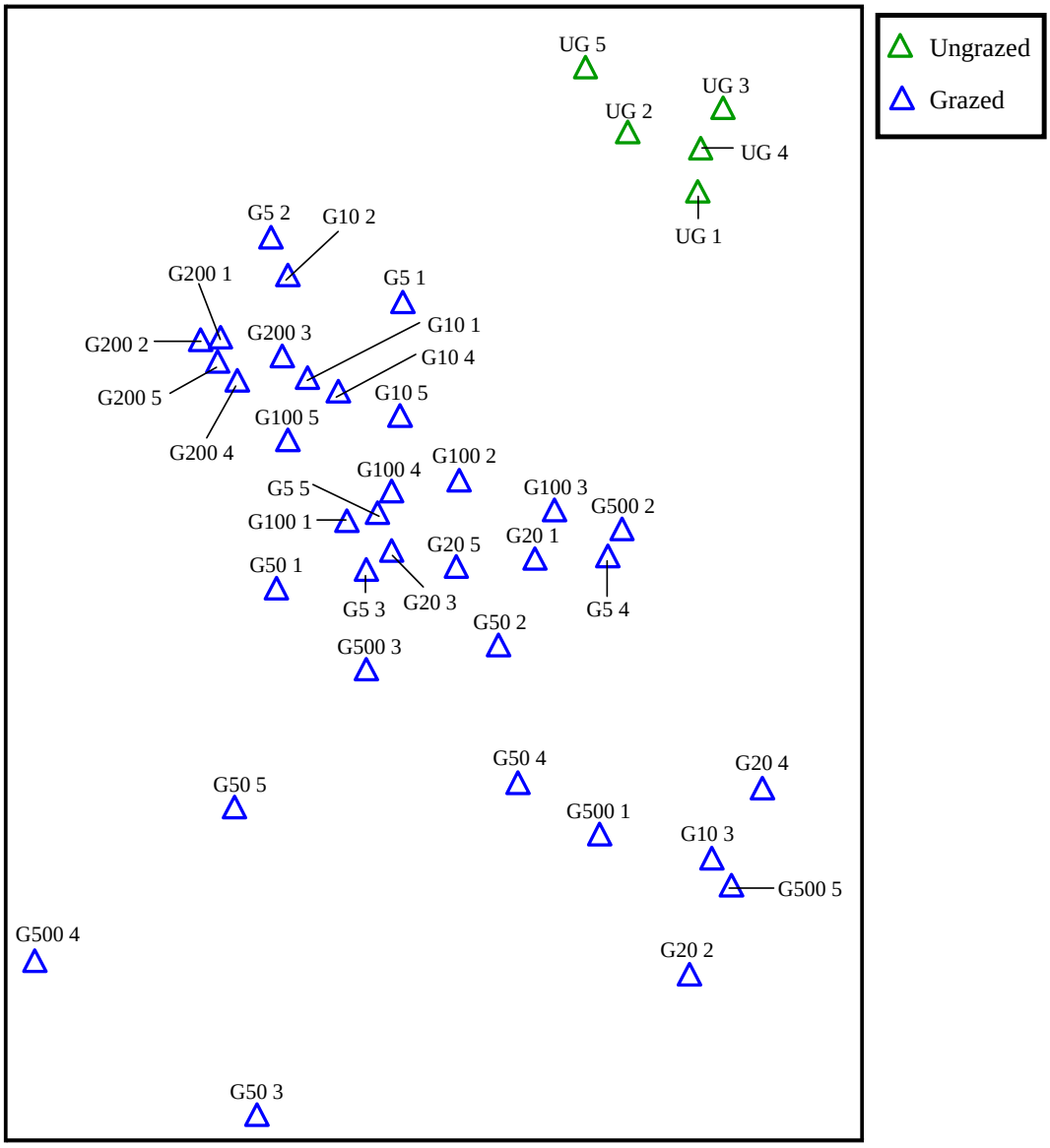
e.


0-7.5 cm
y = 269.04x^-0.9582
R^2 = 0.6105
7.5-15 cm
y = 241.32x^-0.8175
R^2 = 0.6066
15-25 cm
y = 190.35x^-0.7183
R^2 = 0.6899
25-40 cm
y = 145.32x^-0.6638
R^2 = 0.466
0-7.5 cm
7.5-15 cm
15-25 cm
25-40 cm
Soil Moisture (%)
Water Elevation Relative to Sample (cm)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
0
50
100
150
200
250
300
350
400
450
500
550
600

Appendix 8: Total numbers of seeds m^{-2} from ungrazed and grazed areas of the Lake Tandure bed (UG = ungrazed, G = grazed, 5, 10, 20, 50, 100, 200 and 500 = distance in metres from Tandure Creek) (error bars = ± 1 S.E.).



Appendix 9: NMS ordination of the seed bank composition of the grazed and ungrazed sites in Lake Tandure (stress = 13.5%), (UG = ungrazed, G = grazed, 5, 10, 20, 50, 100, 200 and 500 = distance in metres from Tandure Creek, 1, 2, 3, 4 and 5 = replicate number).



Appendix 10: Indicator species analysis for the ungrazed area and each of the distances sampled from the ungrazed area in the grazed area of the Lake Tandure bed (Type A, B or C denotes why the species was not a significant indicator (Chapter 2)) (* denotes exotic species).

Species	Location	*P*
Alisma sp.	Ungrazed	0.124 (Type A)
*Cuscuta campestris**	Ungrazed	0.001
Eragrostis dielsii	Ungrazed	1.00 (Type A)
Persicaria lapathifolium	Ungrazed	0.001
Typha domingensis	Ungrazed	0.001
*Xanthium occidentale**	Ungrazed	0.013
Euphorbia drummondii	Grazed 5	1.00 (Type A)
Gnaphalium luteo-album	Grazed 5	0.103 (Type C)
Medicago sp.*	Grazed 5	1.00 (Type A)
Ludwigia peploides	Grazed 10	1.00 (Type A)
Chloris truncata	Grazed 100	1.00 (Type A)
Alternanthera denticulata	Grazed 200	0.021
Ammania multiflora	Grazed 200	0.011
Centipeda minima	Grazed 200	0.001
Crassula sieberana	Grazed 200	1.00 (Type A)
Epaltes australis	Grazed 200	0.121 (Type A)
*Heliotropium europaeum**	Grazed 200	1.00 (Type A)
Iseotopsis graminifolia	Grazed 200	0.001
Morgania floribunda	Grazed 200	0.536 (Type B)
Polygonum plebium	Grazed 200	0.278 (Type B)
Scirpus sp.	Grazed 200	0.560 (Type B)
Chenopodium pumilio	Grazed 500	1.00 (Type A)
Glinus lotoides	Grazed 500	1.00 (Type A)