

Appendix

Table 1 : List of tree species growing around a thermal power plant.**Pollution tolerant plants****Trees**

Acacia arabica Willd.
Aegle marmelos Correa.
Ailanthus excelsa Roxb.
Albizia lebbek Benth.
Alstonia macrophylla Wall.
A. scholaris Br.
Artocarpus heterophylla Lamk.
Azadirachta indica A. Juss.
Butea frondosa Roxb.
Casuarina equisetifolia L.
Citrus medica L.
Dalbergia sissoo Roxb.
Diospyros melanoxylon Blume.
Eucalyptus citriodora Hook.
Ficus benghalensis L.
F. infectoria Roxb.

F. religiosa Forsk.
Holoptelea integrifolia Planch.
Lagerstroemia sp.
Leucaena macrophylla Benth.
Madhuca indica J. F. Gmel.
Mimusops elengi Sieber ex A. DC.
Moringa oleifera Lam.
Phoenix sylvestris Roxb.
Phyllanthus distichus Hook. & Arn.
P. emblica L.
Pithecellobium dulce Benth.
Polyalthia longifolia Benth. & Hook.
Prosopis juliflora DC.
Psidium guajava L.
Spondias mangifera Willd.
Tamarindus indica L.
Zizyphus mauritiana Lam.

Shrubs

Bougainvillea sp.
Calotropis procera Br.
C. gigantea Ait.
Cassia sophera Wall.
Clerodendron infortunatum Caertn.
Ipomoea fistulosa Mart. ex Choisy.

Lantana camara L.
Murraya exotica L.
Nerium odoratum Ait.
Ricinus communis L.
Tabernaemontana coronaria Willd.
Thevetia nerifolia Juss.

Herbs

Achyranthes aspera Jacq.
Amaranthus graecizans Auct.
Argemone mexicana L.

Croton sparsiflorus Morong.
Solanum xanthocarpum Schrad. & Wendl.

Pollution Sensitive Plants

Anthocephalus cadamba Miq.
Aster amellus L.
Avena sativa L.
Beta vulgaris Schrad.
Brassica campestris L.
Calendula officinalis L.
Dahlia rosea Cav.

Delonix regia Raffin.
Dianthus Sp.
Gossypium indicum Linn.
Impatiens balsamea L.
Medicago sativa L.
Morus alba Linn.
Triticum aestivum L.

(after Ahmad *et al.* 1991)

Table 2 : List of study tree species

	Tree species	Vernacular Name	Family	Nature
1	<i>Acacia nilotica</i> (L.) Del Sub sp. <i>indica</i> (Benth.) Brenan	Desi Baval	Mimuseae	Deciduous
2	<i>Anogeissus latifolia</i> Wall.	Dhavdo	Combretaceae	Deciduous
3	<i>Azadirachta indica</i> A. Juss.	Limdo	Meliaceae	Semi-evergreen
4	<i>Bauhinia racemosa</i> Linn.	Aasitro	Caesalpinaceae	Deciduous
5	<i>Cordia dichotoma</i> Forst.	Gundo	Ulmaceae	Deciduous
6	<i>Holoptelea integrifolia</i> Planch.	Kanjo	Ulmaceae	Deciduous
7	<i>Mangifera indica</i> Linn.	Aambo	Anacardiaceae	Evergreen
8	<i>Mimusops hexandra</i> Roxb.	Rayan	Sapotaceae	Evergreen
9	<i>Moringa pterygosperma</i> Goert.	Saragvo	Moringaceae	Deciduous
10	<i>Pithecellobium dulce</i> Benth.	Gorasamli	Mimuseae	Evergreen
11	<i>Streblus asper</i> Lour.	Harero	Ulmaceae	Evergreen
12	<i>Tamarindus indica</i> Linn.	Aamli	Caesalpinaceae	Evergreen

Table 3 : Number of individuals tree species sampled at each locality

Trees	Sites							
	Control	2	3	4	5	6	7	8
<i>Acacia</i>	7	5	9	-	4	9	10	-
<i>Anogeissus</i>	5	10	8	5	3	6	6	-
<i>Azadirachta</i>	10	8	10	10	9	9	9	6
<i>Bauhinia</i>	3	5	3	-	3	3	-	-
<i>Cordia</i>	4	3	5	-	3	5	3	3
<i>Holoptelea</i>	7	5	10	10	7	10	9	-
<i>Mangifera</i>	7	8	7	-	7	8	6	8
<i>Mimusops</i>	5	7	-	5	7	-	-	-
<i>Moringa</i>	10	9	7	10	7	8	7	6
<i>Pithecellobium</i>	6	10	10	7	7	6	7	3
<i>Streblus</i>	8	10	8	6	8	8	10	4
<i>Tamarindus</i>	5	7	3	5	7	5	-	-

Table 4 : Greater than 5% of wind direction observed in each month of 2 yr.

Months	Direction of wind							Calm	Speed
	SW	S	SE	W	NW	N	NE		
Apr	27.0	19.5							3.1
May	62.5	12.0						6.5	6.8
Jun	28.0	55.0							7.2
Jul	36.5	50.5	7.0						6.3
Aug	65.8	13.9							4.7
Sep	25.0	33.0		10.0					1.8
Oct	9.0				11.0	8.0		55.5	1.2
Nov					20.5	25.0		46.0	1.3
Dec					27.5	24.6	8.0	37.1	1.6
Jan				6.7	43.0	19.4	9.0	19.7	1.7
Feb		6.5		13.5	46.0	6.5		13.0	1.9
Mar			12.5	8.0	10.0	12.5	12.5	12.0	2.0

Table 5 : Site locations from the sources and their common pollutants

Sites	Nearest Source(s)	Direction of site from source & Distance (km)	Common pollutants
2	Oil refinery, Fertilizer complex	East 0.55 West 1.25	Hydrocarbons SO ₂ , NO _x , NH ₃ , SPM
3	GIPCL, IPCL	East 0.10 North-West 1.00	Thermal SO ₂ , CO ₂ , NO _x , Hydrocarbons
4	Fertilizer complex	North-East 0.45	SO ₂ , NO _x , NH ₃ , SPM
5	GIPCL Oil refinery	South-West 0.60 West 1.00	Thermal Hydrocarbons
6	GIDC(HPCL)	West 0.25	NO _x , Cl ₂ , H ₂ S
7	GIDC (Nitrite plant)	East 0.30	NO _x
8	Alkalies & Chemicals industry	East 0.25	Cl ₂ , Hg

Table 6 :Mean and range of pollutants in $\mu\text{g m}^{-3}$ for sulphur dioxide (SO_2), nitrogen oxides (NO_x) and suspended particulate matter (SPM) from Apr 1994 - Mar 1996

Periods	Pollutants	Control	Spot 1 (Site 4)	Spot 2 (Site 2,3,5)	Spot 3 (Site 6,7,8)
Apr-Jun	SO_2	8.6 (3.8-15.2)	42.1 (22.6-88.4)	35.3 (18.6-47.0)	35.1 (9.7-88.4)
	NO_x	19.7 (9.2-20.8)	29.4 (19.6-42.7)	28.0 (19.3-45.1)	26.9 (13.1-46.2)
	SPM	304.6 (203.8-447)	382.7 (312.5-524.8)	400.8 (275-517.8)	368.1 (202-602)
Jul-Sep	SO_2	7.6 (3.9-29.1)	31.1 (16.1-74.8)	28.8 (18.5-40.5)	42.5 (12.8-197.4)
	NO_x	22.6 (13.8-30.6)	29.3 (20.1-41.6)	27.0 (19.0-29.8)	27.6 (9.1-36.6)
	SPM	162.6 (42.0-225.0)	345.7 (228-424.6)	290.1 (228-372.8)	275.1 (112-452)
Oct-Dec	SO_2	11.6 (3.3-36.3)	30.0 (19.5-43.8)	34.5 (24.3-52.5)	48.8 (18.1-96.5)
	NO_x	21.0 (6.7-28.6)	28.9 (14.1-41.3)	32.9 (20.9-44.4)	29.1 (16.2-46.9)
	SPM	403.0 (146-504)	302.9 (175-372.8)	323.6 (215-380)	343.6 (159-720)
Jan-Mar	SO_2	11.0 (3.4-29.5)	43.7 (26.8-67.5)	34.8 (22.1-53.3)	44.1 (23.7-41.2)
	NO_x	15.2 (4.1-20.1)	31.9 (22-44.2)	31.0 (20.3-48.8)	30.0 (6.5-58.5)
	SPM	313.6 (154-406)	321.8 (208-512.8)	285.2 (214-318)	333.4 (95-505)

Monitoring was done thrice in a day for 8 hr and for 3d per mo.

Table 7 : Soil Quality Data

Sites	N% in Organic Carbon	P ₂ O ₅ KgAc ⁻¹	K ₂ O KgAc ⁻¹	pH	EC Ωm ⁻²	Sulphur Content mgg ⁻¹
Control	0.39	5.00	138.00	8.90	0.19	1.47
2	0.76	3.00	275.00	9.10	0.38	1.56
3	0.48	3.00	120.00	9.10	0.35	2.02
4	0.34	3.00	140.00	9.25	0.44	5.83
5	0.70	4.00	257.00	9.10	0.76	4.77
6	0.82	5.00	275.00	8.60	0.60	4.68
7	0.45	6.00	71.20	8.90	0.35	2.89
8	0.68	4.00	188.70	8.70	0.89	4.91

Table 8 : Observations of growth parameters (1994-96) for *Acacia nilotica*

Months	IL	G	LL	LA	LD	LF	LWT	BWT	TWT	LAR	SLA	LWR	LW/BWR	IN/BR	FL/IN	FR/BR
Control																
Ht : 8.35(0.3)	1.98(0.1)	0.13*	224.4(43.2)	11.6(1.4)	0.0	0.0	0.61(0.1)	0.18*	0.80	145.6	188.2	0.77	3.41	-	-	-
D : 6.55(0.5)	1.99(0.1)	0.13*	368.6(51.5)	23.2(1.8)	0.0	0.0	1.02(0.1)	0.47*	1.51	153.9	225.6	0.68	2.14	-	-	-
CBH : 112.4(15.2)	2.46(0.1)	0.14*	278.1(29.4)	14.8(0.7)	0.0	0.0	1.10(0.1)	0.34*	1.45	134.0	134.0	0.76	3.21	32.7 (6.9)	26.0 (5.2)	-
Cr : 3.63 (0.4)	1.96(0.1)	0.15*	259.4(21.1)	15.6(0.9)	0.0	0.0	0.84*	0.28*	1.14	183.7	183.7	0.74	2.96	-	-	2.5 (0.1)
Site 2																
Ht : 7.65(0.3)	2.04(0.1)	0.12*	199.8(31.7)	9.0(1.4)	0.0	0.9(0.5)	0.62(0.1)	0.27*	0.91	99.3	143.0	0.68	2.27	-	-	-
D : 5.75(0.5)	1.87(0.1)	0.17*	152.3(31.8)	8.4(1.4)	0.0	0.0	0.55*	0.20*	0.76	109.9	150.1	0.72	2.70	8.7 (2.5)	32.5 (7.7)	-
CBH : 80.6(13.9)	1.98(0.1)	0.18*	193.0(16.2)	10.7(0.7)	0.0	1.0(0.5)	0.72*	0.33*	1.08	100.7	147.3	0.67	2.10	2.4 (0.9)	15.4 (2.5)	-
Cr : 3.65(0.5)	1.78(0.1)	0.14*	233.8(28.9)	14.8(1.3)	0.0	0.0	0.66(0.1)	0.27*	1.13	130.4	171.6	0.76	3.10	-	-	2.0 (0.3)
Site 3																
Ht : 8.22(0.8)	2.00(0.1)	0.16*	385.1(44.7)	16.5(2.1)	0.0	0.0	0.53(0.1)	0.20*	1.04	158.5	198.4	0.79	3.97	-	-	-
D : 5.33(0.3)	1.83(0.1)	0.16*	261.1(27.2)	14.0(1.3)	0.0	1.3(0.3)	0.47*	0.23*	0.71	193.3	297.1	0.67	1.97	2.5 (0.5)	16.6 (2.2)	-
CBH : 98.4(8.3)	1.69(0.1)	0.16*	181.3(20.2)	10.2(0.7)	0.0	1.4(0.4)	0.43*	0.15*	0.59	172.9	233.0	0.74	2.87	4.2 (1.6)	2.8 (1.0)	-
Cr : 3.61(0.2)	1.55(0.1)	0.14*	224.5(27.0)	13.3(1.4)	0.0	0.0	0.58(0.1)	0.22*	0.81	164.9	227.1	0.72	2.65	-	-	1.4 (0.5)
Site 5																
Ht : 7.91(1.1)	1.64(0.1)	0.21*	201.5(18.6)	12.2(1.3)	0.0	0.0	0.52(0.1)	0.23*	0.76	161.0	234.6	0.72	2.18	-	-	-
D : 5.76(0.1)	1.92(0.1)	0.20*	169.1(12.0)	6.3(0.4)	0.0	0.0	0.45*	0.16*	0.62	101.8	140.0	0.73	2.85	-	-	-
CBH : 83.6(26.7)	1.85(0.2)	0.14*	218.4(33.3)	8.6(0.9)	0.0	1.2(0.6)	0.39*	0.09*	0.49	175.1	219.1	0.79	3.98	14.2 (1.1)	3.6 (0.3)	3.5 (0.5)
Cr : 2.70(0.5)	1.46(0.1)	0.12*	216.0(28.4)	10.0(1.1)	0.0	0.8(0.3)	0.35*	0.07*	0.46	218.9	284.0	0.77	3.27	28.3 (1.6)	3.6 (0.3)	1.0 (0.0)
Site 6																
Ht : 7.90(0.4)	1.66(0.1)	0.19*	236.1(18.3)	13.2(1.2)	0.0	0.0	0.51*	0.21*	0.73	180.4	254.2	0.69	2.44	19.0 (4.0)	4.7 (1.3)	-
D : 5.82(0.2)	1.39(0.1)	0.15*	230.7(25.1)	12.4(1.3)	0.0	0.0	0.49*	0.21*	0.71	174.3	249.6	0.69	2.31	4.3 (1.0)	18.1 (2.7)	-
CBH : 80.1(7.9)	1.99(0.1)	0.15*	227.7(26.1)	13.0(1.5)	0.0	0.0	0.50*	0.24*	0.75	173.0	265.1	0.66	2.08	3.1 (0.7)	10.3 (0.8)	-
Cr : 2.69(0.2)	1.69(0.1)	0.14*	141.5(16.7)	7.2(0.7)	0.6(0.2)	0.6(0.3)	0.26*	0.16*	0.44	164.2	266.9	0.60	1.59	-	-	1.1 (0.1)
Site 7																
Ht : 7.82(0.2)	1.93(0.1)	0.21*	304.6(15.7)	17.3(1.1)	0.3(0.2)	0.6(0.4)	0.66(0.1)	0.49*	1.16	148.8	258.3	0.56	1.36	-	-	-
D : 5.85(0.2)	1.82(0.1)	0.15*	106.5(20.9)	5.3(0.9)	0.0	1.8(0.4)	0.16*	0.25*	0.44	121.1	293.6	0.41	0.70	-	-	-
CBH : 86.3(6.3)	1.85(0.1)	0.15*	216.5(13.3)	13.4(0.7)	0.0	0.0	0.51*	0.24*	0.76	176.2	257.8	0.67	2.16	2.2 (0.6)	4.2 (0.8)	-
Cr : 3.61(6.3)	1.88(0.1)	0.16*	250.2(18.5)	13.2(1.0)	0.5(0.1)	0.7(0.3)	0.66*	0.27*	0.94	140.8	199.4	0.70	2.40	-	-	0.3 (0.05)

* = SE < 0.1

-- = Reproductive Stage not recorded

Table 9 : Observations of growth parameters (1994-96) for *Anogeissus latifolia*

Months		IL	G	LA	LD	LF	LWT	BWT	TWT	LAR	SLA	LWR	LW/BWT	IN/BR	FL/IN	FR/BR
Control																
Ht :	10.25 (2.1)	1.80(0.1)	0.17*	6.6(0.2)	0.0	0.0	0.56*	0.09*	0.66	100.8	117.1	0.86	6.19	-	-	-
D :	8.45(0.8)	1.71(0.2)	0.13*	5.8(0.6)	0.0	0.0	0.51*	0.07*	0.58	85.4	105.5	0.87	6.78	-	-	-
CBH :	95.0 (1.0)	1.11(0.1)	0.09*	7.8(0.4)	0.0	0.0	0.43*	0.06*	0.48	162.9	182.6	0.89	8.24	-	-	-
Cr :	4.96 (0.1)	1.50(0.1)	0.10*	8.8(0.6)	0.0	0.0	0.48*	0.10*	0.61	146.5	177.4	0.81	4.73	6.1(0.7)	38.1(1.8)	6.2(1.1)
Site 2																
Ht :	8.12 (0.3)	1.23(0.1)	0.19*	6.3(0.4)	0.0	0.0	0.41*	0.10*	0.52	122.8	154.7	0.80	3.85	-	-	-
D :	6.92(0.7)	1.17*	0.08*	3.9(0.7)	0.0	0.4	0.28*	0.08*	0.35	169.7	205.3	0.82	4.77	-	-	-
CBH :	93.3(13.4)	1.10*	0.08*	4.2(0.2)	0.42(0.1)	0.0	0.38*	0.05*	0.43	98.5	111.1	0.88	7.63	-	-	-
Cr :	4.43(0.1)	0.98*	0.08*	3.2(0.2)	0.0	0.9(0.2)	0.38*	0.04*	0.43	75.6	85.3	0.88	7.78	11.1(1.0)	20.8(1.8)	-
Site 3																
Ht :	9.22(0.7)	2.09(0.1)	0.18*	5.1(0.4)	0.0	0.0	0.37*	0.12*	0.50	102.6	135.5	0.74	3.01	-	-	-
D :	7.12(0.6)	1.03(0.1)	0.08*	5.2(0.4)	0.0	0.4(0.1)	0.30*	0.05*	0.31	171.3	174.5	0.98	5.31	-	-	-
CBH :	85.5(4.14)	0.73*	0.07*	3.8(0.3)	0.0	1.1(0.2)	0.29*	0.03*	0.33	115.2	129.8	0.87	7.91	-	-	-
Cr :	2.78(0.1)	0.91(0.1)	0.08*	4.6(0.3)	0.86(0.1)	2.6(0.4)	0.24*	0.03*	0.28	164.7	180.3	0.85	6.42	8.0(0.8)	19.1(1.8)	-
Site 4																
Ht :	9.26(0.8)	1.63(0.1)	0.07*	6.4(0.4)	0.0	0.0	0.48*	0.12*	0.61	106.7	133.0	0.80	4.05	-	-	5(1.1)
D :	8.22(0.8)	0.75(0.1)	0.11*	5.1(0.4)	0.0	1.0(0.3)	0.32*	0.05*	0.39	133.2	156.2	0.84	5.78	-	-	-
CBH :	95.0 (14.2)	1.00(0.1)	0.13*	6.2(0.3)	0.0	0.7(0.3)	0.37*	0.07*	0.45	138.9	166.9	0.82	4.95	-	-	-
Cr :	3.92(0.3)	0.74*	0.07*	5.1(0.4)	0.0	0.8(0.2)	0.34(0.4)	0.04*	0.39	129.1	147.2	0.87	7.14	7.6(0.7)	27.1(1.2)	-
Site 5																
Ht :	7.45(2.4)	2.08(0.2)	0.21(0.1)	5.6(0.7)	0.0	0.0	0.42*	0.14*	0.58	97.7	131.6	0.73	2.89	-	-	-
D :	8.25(0.8)	1.18(0.1)	0.10*	7.2(1.4)	0.0	0.3(0.1)	0.35*	0.10*	0.46	158.1	205.7	0.77	3.32	-	-	-
CBH :	94.5(9.7)	0.89(0.6)	0.07*	4.2(0.5)	0.0	2.3(0.5)	0.28*	0.05*	0.34	126.1	150.4	0.84	5.21	-	-	-
Cr :	3.35(0.2)	0.88(0.1)	0.10*	4.5(0.5)	0.0	0.9(0.3)	0.30*	0.05*	0.36	126.4	148.9	0.85	5.83	4.0(0.2)	21.1(0.9)	-
Site 6																
Ht :	8.22(0.3)	1.13(0.1)	0.22*	2.1(0.5)	0.0	0.0	0.42*	0.13*	0.56	38.2	49.9	0.75	3.27	-	13.6(1.2)	6.1 (0.8)
D :	6.84(0.8)	0.94(0.1)	0.08*	7.4(0.7)	0.88*	0.4(0.1)	0.34*	0.08*	0.41	180.1	211.6	0.82	5.73	-	-	-
CBH :	84.6(3.8)	0.98*	0.09*	5.1(0.3)	0.0	0.4*	0.33*	0.04*	0.38	133.9	152.0	0.86	7.41	-	-	-
Cr :	2.81(0.1)	0.78*	0.08*	3.5(0.3)	0.81(0.2)	0.6(0.2)	0.29*	0.02*	0.24	150.1	170.0	0.88	7.28	7.0 (1.0)	22.4(1.3)	-
Site 7																
Ht :	7.41(0.74)	1.42(0.1)	0.11*	2.6(0.3)	0.18*	0.0	0.34*	0.17*	0.52	50.2	75.3	0.65	1.99	-	-	-
D :	6.33(0.6)	0.83*	0.07*	3.4(0.2)	0.0	0.5(0.4)	0.18*	0.03*	0.24	143.8	189.9	0.82	5.53	-	-	-
CBH :	79.3(3.6)	0.87(0.1)	0.08*	3.9(0.3)	0.14(0.1)	0.6(0.1)	0.24*	0.04(0.1)	0.29	133.5	160.9	0.82	4.86	-	-	-
Cr :	2.11(0.7)	0.81(0.1)	0.12*	2.8(0.2)	0.24(0.1)	2.8(0.6)	0.19*	0.03*	0.24	125.0	148.1	0.82	5.40	12.4(1.6)	24.8(1.8)	10.7(1.5)

* = SE < 0.1

- = Reproductive Stage not recorded

Table 10 : Observations of Growth parameters (1994-96) for *Azadirachta indica*

	Months	IL	G	LL	LA	LD	LF	LWR	BWT	TWH	LAR	SLA	LWR	LWBWT	INBR	FLIN	FR/BR
Control																	
Ht	9.4(0.9)	1.30(0.1)	0.48(0.1)	115.3(5.6)	133.0(11)	0.0	0.0	7.81(0.8)	1.01(0.1)	8.83	150.5	170.0	0.88	7.71	10.1(2.2)	7.8(0.9)	18.9(2.2)
D	7.04(0.1)	0.74(0.1)	0.49*	121.8(6.4)	114.4(12.2)	0.0	0.0	7.47(0.8)	0.87*	8.15	140.3	153.1	0.91	10.99	-	-	-
CBH	91.5(6.8)	0.97(0.1)	0.48*	102.8(6.8)	84.6(8.2)	0.0	0.0	8.17(0.8)	0.84(0.1)	8.82	123.8	138.8	0.90	9.86	-	-	-
Cr	3.92(0.5)	1.12(0.2)	0.45*	98.6(8.2)	78.3(8.1)	0.0	0.0	5.99(0.7)	0.64(0.1)	7.81	104.2	132.3	0.78	9.21	5.8(0.6)	6.2(0.3)	8.2(0.3)
Site 2																	
Ht	8.21(0.9)	1.00(0.2)	0.45*	118.0(0.5)	97.8(7.3)	0.0	0.0	8.37(0.8)	0.85(0.1)	7.22	135.0	153.1	0.84	7.44	5.4(1.0)	5.7(1.0)	2.8(0.4)
D	8.65(0.3)	0.80(0.1)	0.48*	115.9(6.7)	90.2(10.3)	1.8(1.0)	0.4(0.2)	8.97(0.8)	0.58(0.1)	7.55	119.3	129.3	0.92	11.97	-	-	-
CBH	123.8(6.2)	0.50(0.1)	0.56*	98.4(7.7)	88.3(7.3)	1.0(0.5)	1.2(0.8)	8.59(0.7)	0.85(0.1)	7.24	92.2	103.5	0.91	10.13	-	-	-
Cr	3.31(0.4)	0.58(0.1)	0.48*	92.9(5.3)	67.2(7.6)	0.0	0.0	6.28(0.3)	0.81(0.1)	8.87	97.8	107.3	0.91	10.11	2.7(0.5)	3.1(0.3)	9.4(0.3)
Site 3																	
Ht	8.30(0.4)	1.50(0.1)	0.45*	117.8(7.3)	94.8(8.05)	0.0	0.0	5.88(0.5)	0.88(0.1)	8.73	140.5	181.2	0.87	8.78	-	8.3(0.9)	5.1(0.4)
D	8.90(0.1)	0.91(0.1)	0.49*	114.3(5.6)	111.5(10.9)	1.1(0.8)	0.6(0.2)	7.97(0.8)	0.74(0.1)	8.72	127.8	139.8	0.91	10.80	-	-	-
CBH	95.9(5.5)	0.82(0.1)	0.43*	87.2(7.4)	48.0(5.5)	2.2(1.0)	0.7(0.2)	4.58(4.5)	0.70(0.1)	5.28	127.0	148.8	0.88	8.50	-	-	-
Cr	2.31(0.2)	0.84(0.2)	0.37*	84.5(3.9)	60.8(4.5)	0.6(0.4)	1.2(0.3)	3.95(5.1)	0.40(0.1)	4.35	139.5	153.8	0.90	9.89	8.3(0.8)	4.0(0.3)	-
Site 4																	
Ht	7.27(0.8)	1.09(0.1)	0.38*	110.5(5.8)	77.1(7.2)	0.0	0.0	4.98(0.3)	0.83(0.1)	5.82	137.2	148.7	0.88	7.83	8.2(0.9)	7.5(0.9)	2.7(0.8)
D	8.17(0.2)	0.54(0.1)	0.48*	105.9(9.4)	83.0(7.5)	0.8(1.0)	0.7(0.5)	5.49(0.6)	0.41*	5.91	106.8	114.8	0.92	13.28	-	-	-
CBH	101.3(10.6)	0.91(0.1)	0.40*	99.4(7.02)	70.0(9.2)	4.8(2.0)	0.5(0.1)	5.38(0.8)	0.51(0.1)	5.89	118.8	129.9	0.92	10.52	-	-	-
Cr	3.45(0.3)	0.72(0.2)	0.38*	92.8(6.8)	70.7(8.6)	2.1(1.1)	0.0	8.19(0.8)	0.52(0.1)	8.72	105.0	114.0	0.92	11.72	-	-	-
Site 5																	
Ht	7.71(0.7)	1.52(0.2)	0.44*	120.1(6.8)	97.2(9.2)	2.3(1.0)	0.0	8.38(0.6)	0.70(0.1)	7.08	137.5	152.8	0.90	9.01	9.3(2.0)	8.0(3.2)	8.7(0.8)
D	5.83(0.2)	0.81(0.1)	0.47*	108.9(4.7)	79.7(7.5)	1.3(0.8)	1.0(0.5)	8.37(0.5)	0.54*	6.91	116.2	125.0	0.92	11.73	-	-	-
CBH	100.5(8.9)	0.70(0.1)	0.45*	91.0(4.9)	73.1(4.9)	0.0	1.4(0.3)	5.88(0.5)	0.58(0.1)	8.27	116.5	128.5	0.90	9.64	-	-	-
Cr	3.38(0.5)	0.58(0.1)	0.45*	90.5(4.2)	64.4(6.4)	0.0	3.1(0.5)	4.88(0.8)	0.53*	5.40	119.2	132.4	0.80	9.01	-	-	-
Site 6																	
Ht	8.13(0.6)	1.42(0.2)	0.39*	120.0(6.0)	91.8(8.9)	0.0	0.0	5.72(0.5)	0.81(0.1)	8.53	140.4	180.4	0.87	7.03	-	-	5.8(2.1)
D	8.03(0.6)	0.75(0.1)	0.47*	108.5(4.3)	83.0(8.5)	0.0	0.0	8.99(0.6)	0.60(0.1)	7.80	142.7	155.1	0.91	8.38	-	-	-
CBH	87.8(4.2)	1.02(0.2)	0.42*	92.0(5.9)	80.8(5.5)	5.0(1.4)	0.4(0.3)	3.90(0.4)	0.47*	4.38	138.7	155.8	0.91	8.13	-	-	-
Cr	3.48(0.3)	0.88(0.2)	0.42*	98.5(6.2)	57.5(5.5)	1.1(0.6)	0.2(0.1)	2.81(0.3)	0.25*	3.07	187.0	204.0	0.89	11.00	4.4(0.9)	5.0(0.7)	-
Site 7																	
Ht	9.33(0.8)	1.11(0.1)	0.45*	118.3(4.5)	86.0(6.5)	0.0	0.0	5.93(0.5)	0.70(0.1)	8.84	129.4	144.8	0.89	8.89	-	5.4(0.5)	5.8(0.8)
D	8.93(0.22)	0.90(0.2)	0.48*	92.7(5.8)	98.1(9.1)	0.0	1.1(0.4)	4.88(0.6)	0.51(0.1)	5.19	130.9	145.4	0.90	9.07	-	-	-
CBH	98.5(10.3)	1.12(0.1)	0.42*	95.2(5.9)	87.3(5.4)	0.0	0.8(0.2)	5.08(0.4)	0.53*	5.59	120.2	132.9	0.90	9.48	-	-	-
Cr	3.55(0.2)	0.90(0.2)	0.42*	87.4(6.2)	65.8(5.7)	3.8(1.4)	0.8(0.3)	5.00(0.5)	0.52(0.1)	5.53	118.9	131.4	0.90	9.51	-	-	-
Site 8																	
Ht	7.87(0.5)	0.27(0.2)	0.51*	115.8(5.1)	84.7(5.1)	4.5(0.3)	0.0	4.31(0.3)	0.50(0.1)	4.82	134.0	149.8	0.89	3.80	-	3.8(0.7)	8.3(1.4)
D	5.75(0.7)	0.33(0.2)	0.53*	78.2(9.5)	27.4(4.0)	0.0	2.2(0.7)	2.78(0.4)	0.38*	3.12	87.8	99.2	0.88	7.50	-	-	-
CBH	110.4(12.6)	0.98(0.2)	0.45*	97.3(10.1)	82.0(8.0)	1.7(1.2)	0.6(0.3)	5.20(0.8)	0.45*	5.85	109.8	119.0	0.92	11.58	-	-	-
Cr	3.55(0.3)	0.38(0.1)	0.58*	91.9(4.8)	55.0(6.2)	1.8(1.3)	0.0	5.05(0.8)	0.53(0.1)	5.58	116.3	128.8	0.90	9.49	5.4(0.4)	3.3(0.2)	4.7(0.9)

* = SE < 0.1
- = Reproductive Stage not recorded

Table 11: Observations of Growth parameters (1994-96) for *Bauhinia racemosa*

Months	LA	LD	LF	LWT	BWT	TWT	LAR	SLA	LWR	LW/BWT	IN/BR	FL/JN	FR/BR
Control													
Ht :6.53(2.1)	15.3(2.1)	0.0	0.0	1.13(0.1)	0.45*	1.58	96.8	135.3	0.75	2.50	5.1(1.6)	13.2(2.1)	6.4(1.8)
D :5.41(0.6)	19.7(4.1)	0.0	0.0	1.49(0.1)	0.38(0.1)	1.87	105.3	131.8	0.79	3.93	-	-	-
CBH:90.8(1.9)	23.7(5.3)	0.2(0.5)	0.0	2.24(0.1)	0.48(0.1)	2.72	86.9	105.6	0.82	4.64	-	-	-
Cr :3.81(0.2)	21.4(5.9)	0.0	0.0	1.60(0.1)	0.25*	1.85	115.2	133.6	0.86	6.26	-	-	-
Site 2													
Ht :5.12(1.1)	14.9(4.2)	0.6(1.4)	0.0	0.84(0.1)	0.32*	1.16	127.5	176.6	0.72	2.59	2.5(1.9)	5.3(2.2)	2.7(1.1)
D :4.12(0.5)	18.3(2.8)	2.0(4.8)	2.4(2.2)	1.24(0.1)	0.37*	1.62	113.3	148.8	0.76	3.35	-	-	-
CBH:89.4(4.8)	16.1(5.9)	1.6(2.4)	2.4(1.9)	1.23(0.1)	0.23(0.1)	1.47	109.7	130.4	0.52	5.27	-	-	-
Cr :3.47(1.2)	17.1(3.8)	2.1(1.1)	2.2(1.0)	1.15(0.1)	0.31(0.1)	1.47	116.1	148.0	0.78	3.64	-	-	-
Site 3													
Ht :5.52(0.4)	20.1(4.2)	0.0	0.0	1.28(0.1)	0.54*	1.83	109.9	156.9	0.69	2.33	4.4(2.2)	3.5(1.9)	3.2(1.6)
D :4.63(0.5)	20.6(5.6)	0.0	1.4(2.0)	0.99(0.5)	0.21*	1.20	172.1	208.6	0.82	4.71	-	-	-
CBH:81.3(8)	13.8(3.1)	0.0	2.4(1.9)	1.01(0.5)	0.35(0.1)	1.36	101.1	136.5	0.74	2.86	-	-	-
Cr :2.36(0.9)	15.6(6.1)	0.3(0.8)	4.6(1.8)	0.59(0.1)	0.13(0.1)	0.73	213.1	260.3	0.82	4.51	-	-	-
Site 5													
Ht :5.74(1.8)	16.3(5.5)	0.0	0.0	1.15(0.6)	0.22*	1.38	117.6	141.0	0.83	5.03	-	-	-
D :4.81(0.6)	18.5(3.2)	0.0	1.2(1.1)	1.23(0.8)	0.27(0.1)	1.50	123.3	150.4	0.82	4.55	4.6(0.9)	6.3(1.7)	2.1(0.6)
CBH:82.0(2.1)	17.0(2.6)	2.0(0.8)	1.8(1.9)	1.63(0.5)	0.32*	1.96	86.6	103.6	0.83	5.08	-	-	1.2(0.8)
Cr :3.42(0.2)	20.2(2.8)	0.0	0.0	0.93(0.4)	0.15(0.1)	1.08	185.8	216.4	0.86	6.07	-	-	-
Site 6													
Ht :5.04(1.8)	12.0(5.1)	0.0	0.0	0.87(0.1)	0.36(0.1)	1.24	96.5	137.0	0.70	2.38	3.2(1.0)	2.6(0.7)	1.1(0.8)
D :4.00(0.7)	32.8(4.2)	0.0	0.0	1.65(0.2)	0.68(0.1)	2.53	129.7	177.5	0.73	2.72	-	-	-
CBH:100.1(4.1)	6.2(2.1)	0.4(0.1)	2.3(1.0)	0.44(0.1)	0.08*	0.53	116.4	140.0	0.83	4.96	-	-	-
Cr :2.73(1.1)	5.7(2.1)	0.0	4.8(0.8)	0.29(0.1)	0.04(0.1)	0.34	166.0	192.6	0.85	6.25	-	-	-

* = SE < 0.1

- = Reproductive Stage not recorded

Table 12 : Observations of Growth parameters (1994-96) for *Cordia dichotoma*

Months		LA	LD	LF	LWt	BWt	TWt	LAR	SLA	LWR	LWt/BWt	IN/BR	FL/IN	FR/BR
Control														
Ht	:7.31(0.7)	110.1(5.6)	0.0	0.0	14.61(0.6)	2.39(0.1)	17.00	64.1	75.3	0.82	6.11	4.8(0.7)	10.3(0.8)	14.1(2.1)
D	:5.31(0.8)	90.4(6.2)	0.0	0.0	10.76(0.7)	1.57(0.2)	12.33	73.0	83.6	0.87	6.85	-	-	-
CBH	:98.3(13.3)	97.5(7.1)	0.0	0.0	12.67(0.9)	1.20(0.1)	13.88	70.2	76.9	0.90	10.52	-	-	-
Cr	:3.76(0.6)	102.1(1.8)	0.0	0.0	13.89(1.1)	1.21(0.1)	15.11	67.6	73.5	0.91	11.44	-	-	-
Site 2														
Ht	:6.26(2.3)	119.1(8.2)	0.0	0.0	8.86(0.8)	1.85(0.1)	10.17	111.2	134.4	0.82	4.79	4.2(2.2)	3.5(1.8)	13.5(2.1)
D	:4.81(0.9)	74.7(7.1)	2.2(6.6)	0.7(1.2)	6.85(0.4)	1.28(0.1)	8.13	91.9	109.1	0.84	5.35	-	-	-
CBH	:78.4(18.2)	89.2(6.2)	1.7(3.4)	0.5(0.8)	13.32(0.6)	2.34(0.1)	15.66	56.9	87.0	0.85	5.69	-	-	-
Cr	:3.31(0.7)	82.8(3.6)	5.0(4.2)	1.5(1.0)	10.58(0.7)	2.66(0.1)	13.24	62.5	76.2	0.79	3.97	-	-	-
Site 3														
Ht	:5.22(1.7)	90.6(3.1)	0.0	0.0	11.28(0.7)	1.98(0.1)	12.94	108.7	124.7	0.87	5.69	3.0(1.7)	4.2(1.4)	4.2(1.8)
D	:3.13(0.9)	74.1(2.8)	2.9(4.6)	0.7(1.5)	8.02(0.8)	1.03(0.1)	9.06	81.8	92.3	0.86	7.75	-	-	-
CBH	:76.0(26.8)	108.7(2.3)	4.1(6.7)	1.5(1.2)	13.58(0.4)	2.65(0.1)	16.23	91.5	109.5	0.83	5.12	-	-	-
Cr	:2.61(1.7)	98.4(4.1)	1.3(13.8)	0.8(1.2)	15.04(0.4)	1.75(0.1)	16.80	59.1	66.1	0.89	8.54	-	-	-
Site 5														
Ht	:7.76(0.8)	127.3(6.2)	0.8(1.5)	0.0	14.97(0.5)	2.49(0.1)	17.29	73.6	85.1	0.86	6.53	2.9(2.08)	3.5(1.9)	4.8(1.2)
D	:4.93(1.1)	80.4(3.6)	7.4(6.2)	0.7(0.8)	7.07(0.7)	0.78(0.1)	7.66	104.9	113.7	0.92	12.06	-	-	-
CBH	:110.3(24.8)	56.0(4.8)	1.6(3.5)	1.3(1.6)	6.86(0.6)	1.99(0.1)	8.66	64.6	81.6	0.79	3.82	-	-	-
Cr	:3.81(0.7)	74.4(7.2)	3.1(7.9)	2.1(2.6)	8.47(0.8)	1.37(0.1)	9.65	77.0	87.8	0.87	7.18	-	-	-
Site 6														
Ht	:5.75(2.9)	113.7(4.2)	2.5(3.2)	0.0	11.37(0.3)	1.92(0.1)	13.29	85.6	100.0	0.85	5.92	1.3(1.5)	2.4(1.4)	3.7(2.4)
D	:2.88(1.6)	80.7(5.1)	0.6(2.0)	1.4(2.7)	8.61(0.6)	1.48(0.1)	10.10	79.9	93.7	0.85	5.79	-	-	-
CBH	:83.5(26.3)	85.6(3.8)	8.7(9.5)	1.9(1.9)	9.75(0.4)	1.41(0.1)	11.16	76.6	87.7	0.87	6.90	-	-	-
Cr	:2.72(1.5)	43.7(4.3)	12.9(18.8)	4.7(4.3)	5.58(0.5)	1.99(0.1)	7.57	57.6	78.3	0.73	2.80	-	-	-
Site 7														
Ht	:6.70(3.1)	78.0(6.1)	0.0	0.0	4.43(0.1)	1.48(0.1)	5.91	132.0	176.1	0.74	2.99	1.5(1.7)	-	2.1(1.7)
D	:2.96(1.3)	60.1(7.2)	4.6(2.0)	4.3(2.7)	6.03(0.8)	0.51(0.1)	6.55	91.5	99.4	0.92	11.66	-	-	-
CBH	:75.7(16.1)	50.6(6.8)	4.0(2.1)	1.3(2.8)	8.44(0.6)	2.33(0.1)	10.75	50.3	64.1	0.78	3.62	-	-	-
Cr	:3.35(1.5)	54.1(8.1)	25.3(4.5)	3.5(2.9)	1.79(0.3)	1.52(0.1)	3.32	152.2	281.6	0.54	11.77	-	-	-
Site 8														
Ht	:5.16(1.9)	91.5(7.1)	0.0	0.0	10.17(0.6)	2.10(0.1)	12.28	74.6	90.0	0.82	4.84	4.6(0.8)	9.5(0.9)	9.6(1.8)
D	:3.09(1.4)	79.3(8.2)	5.9(6.9)	0.6(1.3)	8.87(0.5)	1.16(0.1)	10.03	79.0	89.4	0.88	7.64	-	-	-
CBH	:77.6(17.8)	82.5(7.9)	0.0	2.0(1.3)	10.94(0.6)	2.00(0.1)	12.94	63.7	75.4	0.84	5.46	-	-	-
Cr	:2.42(1.1)	90.2(6.8)	0.8(8.7)	1.3(1.2)	11.24(0.4)	1.97(0.1)	13.22	68.2	80.2	0.84	5.69	-	-	-

- = Reproductive Stage not recorded

Table 13 : Observations of Growth parameters (1994-98) for *Holoptelea integrifolia*

	Months	IL	G	LA	LD	LF	LWt	BWT	TWT	LAR	SLA	LWR	LW/BWT	IN/BR	FL/IN	FR/BR
Control																
Ht	10.47(1.1)	1.71(0.3)	0.40*	35.1(2.6)	0.0	0.0	2.44(0.1)	0.27*	2.71	129.4	143.8	0.90	8.96	-	-	-
D	8.72(0.3)	2.47(0.2)	0.36(0.1)	46.3(1.8)	0.0	0.0	3.09(0.2)	0.50*	3.60	128.6	149.5	0.85	6.15	-	-	-
CBH	38.5(11.2)	2.35(0.2)	0.21*	40.8(2.0)	0.0	0.0	3.24(0.2)	0.56*	3.81	107.3	125.9	0.85	5.76	-	-	-
Cr	3.61(0.1)	1.90(0.2)	0.20*	37.9(3.3)	0.0	3.6(0.4)	3.66(0.3)	0.59(0.1)	4.26	89.1	103.6	0.85	6.12	7.2(1.2)	-	3.4(0.3)
Site 2																
Ht	6.30(0.6)	1.89(0.2)	0.21*	22.9(2.7)	0.0	1.6(0.9)	1.95(0.2)	0.36*	2.31	99.2	117.3	0.84	5.45	-	-	-
D	4.55(0.2)	1.71(0.2)	0.20*	33.2(4.5)	2.7(1.2)	0.6(0.5)	2.08(0.1)	0.35*	2.44	136.0	158.8	0.85	5.95	-	-	-
CBH	35.2(3.4)	2.37(0.2)	0.23*	31.1(3.2)	0.9(0.3)	0.0	2.81(0.2)	0.58(0.1)	3.40	91.3	110.5	0.82	4.77	16.0(3.1)	10.2(1.9)	28.5(4.2)
Cr	3.20(0.2)	2.83(0.2)	0.21*	32.8(3.2)	1.8(0.5)	0.7(0.3)	2.80(0.4)	0.52*	3.32	98.8	117.2	0.84	5.36	-	-	-
Site 3																
Ht	10.02(0.7)	1.73(0.1)	0.28*	36.1(1.6)	0.0	0.0	2.60(0.1)	0.33*	2.93	123.1	138.9	0.88	7.77	-	-	-
D	7.91(0.1)	2.03(0.1)	0.20*	41.1(2.2)	0.8(0.4)	0.6(0.1)	2.77(0.2)	0.43*	3.21	127.8	148.1	0.86	6.31	-	-	-
CBH	106.7(6.9)	2.08(0.1)	0.20*	35.8(2.5)	0.5(0.2)	1.1(0.3)	3.15(0.2)	0.50*	3.65	98.1	113.7	0.86	6.27	-	-	-
Cr	3.20(0.1)	2.01(0.1)	0.20*	20.9(3.8)	0.6(0.3)	5.6(0.7)	1.49(0.7)	0.50*	1.99	104.8	140.3	0.74	2.95	15.0(0.8)	10.0(0.2)	20.2(3.8)
Site 4																
Ht	7.44(0.5)	1.93(0.2)	0.32(0.1)	23.6(1.9)	0.7(0.2)	1.8(0.6)	1.44(0.1)	0.36*	1.80	130.7	163.6	0.80	3.96	-	-	-
D	5.59(0.1)	1.57(0.1)	0.25*	36.5(2.7)	0.5(0.2)	0.7(0.2)	2.50(0.1)	0.42*	2.93	124.4	145.6	0.85	5.85	-	-	-
CBH	110.2(9.7)	2.01(0.1)	0.22*	34.5(2.5)	1.2(0.4)	1.5(0.3)	2.85(0.1)	0.48*	3.33	103.6	121.0	0.85	5.94	-	-	-
Cr	3.10(0.1)	1.98(0.1)	0.20*	32.7(1.9)	1.5(0.4)	1.1(0.3)	3.25(0.2)	0.59(0.1)	3.84	85.3	100.8	0.84	5.48	5.1(0.8)	3.5(0.2)	2.7(0.6)
Site 5																
Ht	7.91(1.6)	1.53(0.2)	0.26*	29.8(2.2)	0.5(0.2)	0.9(0.6)	2.05(0.1)	0.27*	2.32	128.3	145.4	0.88	7.47	-	-	-
D	6.18(0.3)	1.89(0.1)	0.22*	38.0(3.2)	1.0(0.5)	1.0(0.2)	2.45(0.1)	0.43*	2.89	131.3	154.8	0.84	5.59	-	-	-
CBH	97.2(12.9)	2.15(0.1)	0.21*	30.0(1.1)	0.6(0.2)	0.6(0.1)	3.00(0.2)	0.57(0.1)	3.58	83.8	100.0	0.83	5.18	3.4(1.3)	6.6(1.8)	8.3(0.1)
Cr	2.96(0.3)	1.83(0.1)	0.22*	23.9(2.7)	3.5(0.7)	3.3(0.8)	2.67(0.3)	0.52(0.1)	3.20	74.6	89.4	0.83	5.05	-	-	-
Site 6																
Ht	8.25(0.2)	1.80(0.1)	0.27*	28.8(1.7)	0.5(0.2)	0.0	2.38(0.1)	0.41*	2.80	102.9	120.8	0.85	5.75	-	-	-
D	6.20(0.2)	1.98(0.1)	0.22*	40.1(3.0)	1.2(0.4)	0.7(0.2)	3.06(0.2)	0.52*	3.58	111.8	130.8	0.85	5.87	-	-	-
CBH	100.5(9.6)	2.08(0.1)	0.23*	28.4(3.0)	2.2(0.5)	2.6(0.5)	2.36(0.2)	0.46*	2.83	100.4	120.1	0.83	5.09	-	-	-
Cr	3.55(0.1)	1.77(0.1)	0.22*	7.2(2.5)	1.3(0.6)	7.7(0.7)	0.61(0.2)	0.39*	1.01	71.2	117.0	0.63	1.55	7.8(1.2)	2.9(1.7)	3.5(0.6)
Site 7																
Ht	8.95(1.1)	1.24(0.1)	0.27*	29.1(2.8)	1.8(0.4)	0.7(0.3)	1.88(0.3)	0.36*	2.25	129.5	154.7	0.83	5.14	-	-	-
D	7.15(0.1)	1.53(0.1)	0.17*	27.4(1.8)	2.2(0.6)	1.8(0.6)	1.78(0.1)	0.29*	2.08	131.6	153.5	0.85	6.01	-	-	-
CBH	96.5(11.0)	1.76(0.1)	0.21*	31.5(2.3)	0.7(0.3)	1.1(0.2)	2.54(0.2)	0.39*	2.93	107.5	124.1	0.86	6.47	-	-	-
Cr	3.22(0.2)	1.89(0.1)	0.22*	22.1(2.5)	2.2(0.5)	5.3(0.8)	1.85(0.2)	0.38*	2.24	98.4	118.8	0.82	4.82	-	-	-

* = SE < 0.1

- = Reproductive Stage not recorded

Table 14: Observations of Growth parameters (1994-96) for *Mangifera indica*

Months	IL	G	LA	LD	LF	LWT	BWT	TWt	LAR	SLA	LWR	LWt/BWt	FLJN	FR/BR
Control														
Ht :10.91(0.5)	0.92(0.2)	0.57*	77.5(5.2)	0.0	0.0	9.76(0.6)	0.74(0.1)	10.51	73.8	79.4	0.92	13.13	-	-
D :9.13(0.4)	0.70(0.2)	0.77(0.1)	84.8(8.6)	0.0	0.0	9.68(0.7)	0.80*	10.48	80.9	87.7	0.92	12.05	-	-
CBH:151.6(14.5)	0.36(0.1)	0.68*	89.2(7.9)	0.0	0.0	10.13(0.9)	0.74(0.1)	10.88	82.0	88.0	0.93	13.62	-	-
Cr :6.25(0.2)	0.68(0.2)	0.77(0.1)	76.0(8.6)	0.0	0.0	11.46(1.5)	0.78(0.1)	12.24	62.0	66.3	0.93	14.69	5.6(0.3)	14.3(1.2)
Site 2														
Ht :7.14(0.5)	0.97(0.2)	0.68*	89.6(4.4)	0.0	0.0	10.94(0.8)	1.36(0.1)	12.30	72.9	81.9	0.88	8.03	1.6(0.3)	7.5(0.7)
D :5.54(0.2)	0.76(0.1)	0.64*	76.6(4.5)	0.9(0.4)	1.4(0.2)	9.22(0.5)	0.82*	10.05	76.2	83.1	0.91	11.12	-	-
CBH:131.4(9.9)	0.77(0.1)	0.51*	72.5(5.2)	0.5(0.3)	1.0(0.2)	7.68(0.4)	0.83(0.1)	8.51	85.2	94.5	0.90	9.19	-	-
Cr :3.65(0.2)	0.97(0.1)	0.59*	80.6(4.7)	0.0	1.5(0.5)	9.80(0.7)	0.95(0.1)	10.76	74.9	82.2	0.91	10.12	4.8(0.4)	12.6(0.9)
Site 3														
Ht :8.12(0.8)	0.35(0.1)	0.70*	72.5(5.7)	0.0	0.0	9.33(0.7)	0.60(0.1)	9.93	73.0	77.7	0.93	15.36	-	-
D :6.51(0.1)	0.33(0.1)	0.60*	60.6(6.3)	0.0	0.6(0.2)	8.73(0.8)	0.70(0.1)	9.44	64.2	69.5	0.92	12.31	-	-
CBH:124.2(18.2)	0.67(0.1)	0.64*	72.3(6.9)	1.1(0.5)	0.6(0.2)	9.98(0.6)	0.83(0.1)	10.81	66.9	72.4	0.92	12.03	-	-
Cr :4.98(0.3)	0.54(0.1)	0.58*	57.6(4.4)	1.1(0.5)	1.0(0.3)	9.26(0.6)	0.75(0.1)	10.01	57.5	62.2	0.92	12.34	5.2(0.4)	-
Site 5														
Ht :10.75(1.6)	0.61(0.1)	0.57*	66.9(4.9)	1.7(0.7)	0.0	8.43(0.5)	0.71(0.3)	9.15	75.3	81.7	0.92	11.84	-	-
D :9.05(0.2)	0.40(0.1)	0.20*	51.1(3.6)	0.6(0.5)	0.0	7.05(0.5)	0.54*	7.59	67.3	72.5	0.92	13.05	-	-
CBH:148.0(18.4)	0.81(0.2)	0.54*	59.4(4.8)	0.0	0.5(0.2)	8.44(0.7)	0.76(0.1)	9.21	64.5	70.4	0.91	10.97	-	-
Cr :4.23(0.3)	0.58(0.1)	0.59*	51.9(3.4)	0.0	1.0(0.2)	7.76(0.5)	0.68(0.1)	8.45	61.5	66.9	0.91	11.31	1.2(0.6)	1.5(0.3)
Site 6														
Ht :9.23(0.8)	0.50(0.1)	0.64*	75.6(5.1)	2.1(1.3)	0.0	8.58(0.3)	0.54(0.1)	9.13	82.8	88.1	0.93	15.69	-	-
D :7.56(0.1)	0.72(0.1)	0.55*	65.2(4.6)	1.5(3.7)	1.3(0.9)	7.84(0.6)	0.62(0.1)	8.47	77.0	83.7	0.92	12.49	-	-
CBH:127.4(8.6)	0.72(0.1)	0.61*	72.5(4.5)	4.9(1.1)	1.1(0.2)	8.10(0.5)	0.57*	8.67	83.6	89.6	0.93	14.19	2.5(0.3)	-
Cr :3.97(0.1)	1.10(0.1)	0.55*	75.7(6.1)	11.4(2.5)	1.0(0.2)	8.98(0.6)	0.73(0.1)	9.72	77.8	84.2	0.92	12.19	-	-
Site 7														
Ht :9.91(0.3)	0.41(0.1)	0.69(0.1)	63.2(3.2)	0.5(0.3)	0.0	8.29(0.7)	0.43*	8.72	72.5	76.3	0.95	18.86	-	-
D :8.16(0.2)	0.25*	0.54*	53.9(5.5)	5.0(2.0)	0.8(0.3)	6.61(0.5)	0.40(0.5)	7.01	76.9	81.5	0.94	16.50	-	-
CBH:122.3(14.9)	0.42(0.1)	0.53*	54.8(4.0)	0.9(0.4)	0.7(0.2)	6.81(0.5)	0.40*	7.22	76.0	80.5	0.94	16.73	-	-
Cr :3.31(0.2)	0.57(0.1)	0.56*	57.2(4.6)	4.3(1.7)	0.8(0.2)	7.50(0.5)	0.54(0.1)	8.05	71.0	76.2	0.93	13.73	4.6(0.4)	-
Site 8														
Ht :7.08(0.3)	0.26(0.1)	0.78*	65.4(3.0)	0.8(0.2)	0.0	9.60(0.6)	0.81*	10.42	62.8	68.1	0.92	11.73	-	-
D :5.82(0.2)	0.39(0.1)	0.63*	59.6(5.1)	3.2(0.7)	2.8(0.3)	6.99(0.5)	0.62*	7.62	78.2	85.3	0.91	11.11	-	-
CBH:116.8(13.2)	0.68(0.1)	0.54*	64.1(4.5)	0.8(0.3)	0.6(0.1)	8.26(0.6)	0.57*	8.84	72.5	77.6	0.93	14.38	-	-
Cr :3.21(0.1)	0.90(0.1)	0.60*	65.4(4.1)	0.9(0.5)	0.8(0.2)	8.44(0.4)	0.79*	9.23	70.8	77.5	0.91	10.61	6.7(0.8)	6.0(1.4)

* = SE < 0.1

- = Reproductive Stage not recorded

Table 15 : Observations of Growth parameters (1994-96) for *Mimulus hexandra*

	Months	IL	G	LA	LD	LF	LWt	BWt	TWt	LAR	SLA	LWR	LW/BWt	FL/BR	FR/BR
Control															
Ht	10.91(1.6)	1.08(0.1)	0.58*	35.0(2.1)	0.0	0.0	5.07(0.3)	0.68(0.1)	5.76	60.8	69.0	0.87	7.4	-	-
D	8.61(1.4)	0.88(0.3)	0.44*	36.6(2.1)	0.0	0.0	3.99(0.3)	0.67(0.1)	4.66	78.5	91.7	0.86	5.95	-	-
CBH	136.3(49.1)	0.44(0.1)	0.38*	35.0(4.1)	0.0	0.0	4.50(0.5)	0.57(0.1)	5.07	69.0	77.8	0.90	7.87	6.8(0.6)	-
Cr	4.27(0.3)	0.79(0.2)	0.53*	24.2(2.2)	0.0	0.0	3.92(0.2)	0.53(0.1)	4.45	54.4	61.8	0.88	7.37	5.2(0.3)	4.4(0.2)
Site 2															
Ht	7.89*(0.07)	1.13(0.1)	0.54*	33.2(3.1)	0.0	0.0	3.91(0.3)	0.64(0.1)	4.56	72.9	84.8	0.86	6.07	-	1.8(0.3)
D	5.79(1.0)	1.06(0.1)	0.42*	25.7(2.3)	3.8(0.7)	0.0	2.91(0.2)	0.60(0.1)	3.51	73.1	88.3	0.82	4.82	-	-
CBH	156.3(8.2)	1.12(0.1)	0.40*	25.8(1.3)	4.1(0.8)	4.1(0.4)	2.96(0.2)	0.71(0.1)	3.67	70.4	87.2	0.80	4.17	-	-
Cr	3.85(0.2)	0.93(0.1)	0.37*	27.5(2.9)	4.7(0.7)	4.7(0.7)	3.55(0.3)	0.68(0.1)	4.23	65.0	77.5	0.83	5.22	15.2(0.4)	-
Site 4															
Ht	10.87(1.3)	0.61(0.1)	0.33*	24.1(1.9)	2.6(1.2)	0.0	3.07(0.3)	0.39(0.1)	3.46	69.6	78.4	0.88	7.89	-	0.2(0.3)
D	9.07(1.2)	0.99(0.2)	0.38*	26.9(2.3)	2.4(1.2)	0.0	2.78(0.2)	0.46(0.1)	3.25	82.7	96.6	0.84	5.95	-	-
CBH	162.7(29.5)	0.52(0.1)	0.36*	23.1(2.2)	2.7(0.3)	2.1(0.2)	2.12(0.2)	0.22(0.1)	2.35	98.2	108.8	0.95	9.3	-	-
Cr	5.91(0.6)	0.27(0.1)	0.31*	12.1(2.5)	1.7(0.8)	6.2(0.9)	2.32(0.2)	0.23*	2.55	47.6	52.3	0.92	10.06	-	-
Site 5															
Ht	7.10(1.4)	0.95(0.1)	0.54*	31.6(2.5)	0.0	0.0	3.86(0.3)	0.64(0.1)	4.51	70.1	81.8	0.84	5.99	-	-
D	5.05(1.3)	1.07(0.1)	0.50*	31.3(3.6)	0.0	0.0	3.34(0.2)	0.70(0.1)	4.04	77.6	94.0	0.82	4.73	-	1.0(0.3)
CBH	160.6(17.1)	0.66(0.1)	0.44*	27.5(3.0)	0.0	0.0	3.21(0.2)	0.59(0.1)	3.8	72.4	85.7	0.84	5.45	-	-
Cr	3.14(0.3)	0.56(0.1)	0.46*	25.9(2.8)	0.0	0.0	3.28(0.2)	0.49(0.1)	3.77	68.7	78.9	0.86	6.69	-	-

* = SE < 0.1

-- = Reproductive Stage not recorded

Table 16 : Observations of growth parameters for *Moringa pterygosperma*

Sites	Months	IL	G	LA	LWt	BWt	TWt	LAR	SLA	LWR	LWt/BWt	FLJN	IN/BR	FR/BR
Control														
Ht: 7.81(0.1)	May	2.13(0.3)	0.73*	201.8(20.3)	13.47(0.5)	4.42(0.3)	17.89	112.7	149.7	0.75	3.04	-	-	-
CBH: 117.6(12.1)	Aug	2.18(0.2)	0.81*	95.5(8.6)	9.05(0.5)	1.34(0.1)	10.41	91.7	105.3	0.87	6.76	-	-	-
Cr: 4.19(0.2)	Nov	2.10(0.3)	0.74*	191.8(9.7)	13.13(0.6)	2.16(0.2)	15.29	125.4	146.0	0.85	6.07	26.8(1.2)	18.0(4.8)	-
	Feb	1.29(0.2)	0.76*	151.6(9.1)	15.85(0.7)	3.04(0.4)	18.89	80.2	95.6	0.83	5.21	25.2(1.1)	14.3(3.1)	3.8(0.8)
Site 2														
Ht: 6.01(0.1)		0.72(0.1)	0.39*	62.4(11.2)	4.64(0.5)	0.66(0.1)	5.30	117.5	134.3	0.87	7.03	-	-	-
CBH: 120.0(13.6)		2.47(0.4)	0.62*	154.8(33.5)	8.33(0.8)	2.39(0.8)	10.73	144.1	185.6	0.77	3.48	-	-	-
Cr: 2.44(0.3)		3.44(0.6)	0.66*	131.7(13.3)	9.25(0.1)	2.95(0.6)	12.20	107.8	142.0	0.75	3.13	19.0(4.1)	6.8(2.1)	-
		1.91(0.2)	0.55*	87.3(6.3)	11.02(0.8)	1.82(0.2)	12.84	67.9	79.2	0.85	6.05	7.5(4.3)	7.3(2.2)	3.0(0.4)
Site 3														
Ht: 5.64(0.4)		2.72(0.5)	0.72*	154.0(12.1)	9.82(0.7)	2.40(0.4)	12.22	125.9	156.8	0.80	4.09	-	-	3.6(0.9)
CBH: 85.4(7.1)		3.02(0.4)	0.71*	202.8(16.1)	10.59(1.5)	2.92(0.6)	13.51	150.0	191.4	0.78	3.62	-	-	-
Cr: 2.41(0.3)		1.49(0.1)	0.49*	32.3(4.8)	5.72(0.6)	0.61*	6.34	50.2	56.3	0.90	9.37	-	-	-
		1.23(0.1)	0.58*	45.0(3.9)	5.82(0.4)	0.83(0.1)	6.66	67.5	77.2	0.87	7.01	12.1(0.6)	4.2(1.3)	-
Site 4														
Ht: 5.43(0.1)		3.60(0.3)	0.77(0.1)	125.4(6.0)	11.87(0.8)	2.77(0.3)	14.65	85.5	105.5	0.81	4.28	-	-	3.1(0.2)
CBH: 100.0(6.5)		1.71(0.2)	0.57*	80.3(7.6)	4.74(0.3)	0.90(0.1)	5.65	142.0	169.2	0.83	5.26	-	-	-
Cr: 3.21(0.1)		1.89(0.2)	0.69*	177.3(21.1)	13.36(1.0)	2.28(0.3)	15.64	113.3	132.7	0.85	5.85	-	-	-
		2.22(0.2)	0.65*	138.3(7.8)	14.52(0.8)	3.42(0.3)	17.95	77.0	95.2	0.80	4.24	13.7(3.6)	7.0(0.5)	3.2(0.7)
Site 5														
Ht: 4.72(0.5)		2.69(0.5)	0.70*	184.6(31.6)	9.63(0.7)	1.08(0.1)	10.71	172.2	191.6	0.89	8.91	5.0(2.7)	15.1(4.2)	2.3(0.8)
CBH: 103.0(7.0)		1.90(0.2)	0.59*	110.3(10.1)	7.79(0.7)	1.31(0.1)	9.11	121.0	141.4	0.85	5.94	-	-	-
Cr: 2.86(0.2)		0.74(0.1)	0.63*	64.7(5.2)	7.62(0.9)	0.81(0.1)	8.43	76.7	84.8	0.90	9.40	16.0(5.1)	3.1(1.0)	-
		0.89(0.1)	0.63*	67.1(6.9)	8.08(0.7)	1.26(0.2)	9.35	71.8	82.9	0.86	6.41	-	-	2.0(0.7)
Site 6														
Ht: 6.19(0.1)		3.13(0.4)	0.68*	137.2(16.5)	8.45(0.7)	2.32(0.3)	10.78	127.2	162.2	0.78	3.64	-	-	-
CBH: 112.2(7.3)		2.50(0.5)	0.95(0.1)	210.4(34.3)	12.68(1.3)	2.43(0.3)	15.11	139.1	165.8	0.83	5.21	13.1(0.5)	3.0(1.2)	-
Cr: 2.57(0.2)		2.12(0.2)	0.66*	143.8(14.2)	12.30(1.2)	2.18(0.2)	14.48	99.3	116.9	0.84	5.64	-	-	-
		1.04(0.1)	0.64*	74.5(9.6)	8.91(1.3)	1.20(0.2)	10.11	73.6	83.6	0.88	7.42	12.6(0.3)	4.6(1.8)	0.6(0.1)
Site 7														
Ht: 6.03(0.3)		1.46(0.2)	0.57*	79.4(7.2)	5.15(2.2)	1.27(0.1)	6.34	125.3	154.1	0.81	4.05	17.0(3.1)	4.0(2.0)	-
CBH: 97.5(5.8)		1.32(0.1)	0.54*	94.0(10.3)	5.91(0.6)	0.95(0.1)	6.66	136.9	158.9	0.86	6.22	-	-	-
Cr: 2.11(0.2)		1.52(0.2)	0.54*	65.2(5.3)	7.35(0.6)	1.30(0.1)	8.65	75.3	88.7	0.84	5.65	-	-	-
		1.57(0.1)	0.64*	79.0(9.6)	9.18(0.9)	1.57(0.3)	10.76	76.4	86.0	0.85	5.84	24.0(4.1)	9.2(2.5)	1.5(0.6)

* = SE < 0.1

- = Reproductive Stage not recorded

Table 17 : Observations of Growth parameters (1994-96) for *Pithecellobium dulce*

Months	IL	G	LA	LD	LF	LWT	BWT	TWT	LAR	SLA	LWR	LWBWT	INER	FRIN	FRIBR
Control															
Ht : 8.33(1.1)	2.17(0.2)	0.22*	11.1(0.4)	0.0	0.0	0.66(0.1)	0.21*	0.88	125.5	166.6	0.75	3.06	-	-	-
D : 6.83(1.0)	1.86(0.1)	0.14*	12.8(1.4)	0.0	0.0	0.77(0.1)	0.28(0.1)	1.05	121.9	168.8	0.73	2.71	-	-	-
CBH:117.2(6.6)	1.99(0.1)	0.15*	11.8(1.0)	0.0	0.0	0.81(0.1)	0.14*	0.88	121.3	143.3	0.84	5.51	4.5(0.3)	5.1(0.1)	-
Cr :4.82(1.0)	1.98(0.2)	0.14*	8.1(0.8)	0.0	0.0	0.62(0.1)	0.16*	0.76	114.9	143.9	0.78	3.92	13.7(0.1)	5.2(0.3)	6.3(0.2)
Site 2															
Ht :8.66(0.7)	1.45(0.1)	0.17(0.1)	8.7(0.6)	0.0	0.0	0.67*	0.22*	0.88	92.1	151.0	0.75	2.50	-	-	-
D :4.72(0.3)	1.55(0.1)	0.14*	11.7(1.3)	0.0	0.0(0.2)	0.66(0.1)	0.16*	0.72	161.6	238.1	0.77	3.31	-	-	-
CBH:95.1(8.3)	1.53(0.1)	0.13*	10.3(0.7)	0.0	1.4(0.6)	0.64(0.1)	0.18*	0.72	125.1	171.3	0.88	2.39	3.5(0.4)	5.1(0.5)	-
Cr :2.37(0.2)	1.72(0.1)	0.17*	10.0(1.0)	0.7(0.3)	0.0	0.58(0.1)	0.20*	0.76	104.6	156.4	0.74	1.77	10.3(0.6)	5.2(0.7)	5.5(0.8)
Site 3															
Ht :8.62(0.7)	1.50(0.1)	0.20*	10.8(1.3)	0.0	0.0	0.63(0.1)	0.14*	0.88	180.8	202.9	0.77	3.72	-	-	-
D :6.65(0.2)	1.53(0.1)	0.14*	12.2(1.2)	0.0	1.0(0.5)	0.62(0.1)	0.09*	0.81	166.8	231.3	0.85	5.70	-	-	-
CBH:105.1(9.3)	1.96(0.1)	0.15*	9.3(1.2)	0.0	2.1(0.5)	0.45(0.1)	0.11*	0.58	187.5	204.3	0.80	3.97	6.0(0.5)	7.6(0.4)	-
Cr :2.88(0.3)	1.54(0.1)	0.18*	6.7(0.9)	0.0	0.0	0.36*	0.09*	0.46	144.8	184.8	0.76	3.66	-	-	3.7(0.3)
Site 4															
Ht :8.45(0.5)	1.59(0.2)	0.21*	5.7(1.3)	0.3(0.3)	0.0	0.41(0.1)	0.11*	0.92	107.4	135.4	0.78	3.46	-	-	-
D :6.96(0.3)	1.46(0.1)	0.15*	5.2(0.8)	0.3(0.3)	0.0	0.27*	0.05*	0.82	162.1	193.6	0.84	5.14	-	-	-
CBH:102.3(6.3)	1.59(0.1)	0.12*	5.3(0.6)	0.0	0.0(0.5)	0.28*	0.05*	0.34	155.4	188.8	0.82	4.95	-	-	-
Cr :4.60(0.8)	1.50(0.1)	0.17*	3.9(0.5)	0.3(0.2)	0.9(0.4)	0.30*	0.07*	0.37	102.4	127.7	0.81	4.05	3.8(0.2)	5.1(0.2)	0.5(0.3)
Site 5															
Ht :6.62(0.6)	1.58(0.1)	0.21*	10.8(1.3)	0.0	0.0	0.57(0.1)	0.15*	0.72	148.1	185.3	0.78	3.73	-	2.4(0.1)	4.0(0.1)
D :5.02(0.2)	1.48(0.1)	0.17*	10.3(0.8)	0.0	0.0(0.3)	0.45(0.1)	0.09*	0.55	187.0	228.4	0.91	4.74	-	-	-
CBH:81.25(3.4)	1.64(0.1)	0.16(0.1)	8.8(0.1)	0.0	1.0(0.5)	0.50(0.1)	0.11*	0.82	142.6	175.7	0.80	4.30	2.5(0.6)	5.5(0.3)	-
Cr :3.35(0.2)	1.53(0.1)	0.20*	7.2(1.0)	0.0	1.1(0.4)	0.42*	0.13*	0.55	130.9	171.5	0.76	3.22	-	-	-
Site 6															
Ht :8.29(0.7)	1.34(0.1)	0.26*	12.0(2.1)	0.0	0.0	0.51*	0.12*	0.63	188.2	232.5	0.80	4.24	-	-	-
D :6.65(0.4)	1.41(0.1)	0.12*	9.8(1.3)	0.0	1.3(0.8)	0.40(0.1)	0.10*	0.50	193.5	243.0	0.80	3.91	-	-	-
CBH:102.0(6.1)	1.48(0.1)	0.13*	6.5(0.9)	0.8(0.4)	0.0	0.47*	0.08*	0.56	118.1	193.1	0.83	5.83	11.2(0.5)	3.5(0.3)	-
Cr :2.48(0.4)	1.45(0.1)	0.15*	3.7(0.8)	0.3*	1.0(0.6)	0.22*	0.10*	0.33	113.6	168.0	0.68	2.08	-	10.1(0.4)	1.2(0.2)
Site 7															
Ht :8.62(0.6)	1.55(0.1)	0.24*	11.1(2.1)	0.0	1.7(0.5)	0.45(0.1)	0.16*	0.67	164.3	228.8	0.71	2.54	-	-	-
D :8.14(0.3)	1.49(0.1)	0.18*	8.1(0.8)	0.0	1.4(0.4)	0.46(0.1)	0.12*	0.62	130.2	163.4	0.78	3.91	-	-	-
CBH:88.7(8.3)	1.83(0.1)	0.15(0.1)	9.5(1.3)	1.0(0.5)	0.0	0.62*	0.10*	0.62	152.4	182.7	0.83	5.01	-	-	-
Cr :3.21(0.4)	1.66(0.1)	0.22*	10.7(1.8)	1.1(0.6)	1.1(0.4)	0.63(0.1)	0.27(0.1)	0.90	118.2	169.3	0.70	2.31	11.5(0.5)	5.3(0.6)	6.0(0.4)
Site 8															
Ht :6.85(0.1)	1.42(0.1)	0.25*	7.8(0.8)	0.0	0.0	0.48(0.1)	0.09*	0.57	136.2	163.5	0.84	4.98	-	-	-
D :4.85(0.4)	1.35(0.1)	0.13*	9.4(1.1)	0.0	1.2(0.7)	0.46(0.1)	0.12*	0.59	156.2	202.4	0.77	3.68	-	-	-
CBH:79.2(5.7)	1.59(0.1)	0.16*	5.9(0.8)	0.0	0.0	0.54(0.1)	0.08*	0.83	88.1	108.0	0.65	6.28	-	8.3(1.6)	-
Cr :2.53(0.1)	1.67(0.3)	0.21*	9.7(0.9)	0.4(0.2)	1.3(0.4)	0.44*	0.10*	0.55	174.5	216.8	0.80	4.14	2.1(0.2)	6.2(1.0)	1.4(0.6)

* = SE < 0.1

-- = Reproductive Stage not recorded

Table 18 : Observations of Growth parameters (1994-96) for *Strobilus asper*

Months	IL	G	LA	LD	LF	LWR	BWR	TWT	LAR	SLA	LWR	LWBW	INBR	FLIN	FRBR
Control															
Ht :4.64(1.1)	1.18(0.2)	0.22*	8.7(0.8)	0.0	0.0	0.80(0.1)	0.13*	0.73	119.2	145.7	0.85	4.49	-	-	-
D :3.77(0.7)	1.26(0.1)	0.22*	18.4(1.7)	0.0	0.0	1.13(0.1)	0.14*	1.28	144.1	162.6	0.91	7.79	-	-	-
CBH:96.5(11.1)	1.05(0.2)	0.16*	14.2(2.7)	0.0	0.0	1.12(0.2)	0.13(0.1)	1.26	111.7	125.4	0.91	8.15	-	-	-
Cr :1.84(1.5)	0.95(0.1)	0.16*	13.8(1.5)	0.0	0.0	0.95(0.1)	0.13*	1.08	127.5	145.2	0.87	7.17	4.9(0.5)	4.0(0.6)	8.0(0.5)
Site 2															
Ht :4.60(2.1)	0.82(0.1)	0.21(0.1)	9.8(1.2)	0.0	0.0	0.79*	0.11*	0.90	108.7	123.7	0.87	7.24	-	-	-
D :3.71(0.8)	1.14(0.1)	0.30(0.1)	9.8(0.8)	0.3(0.2)	1.4(0.4)	0.57(0.1)	0.10*	0.67	146.1	172.8	0.85	5.47	-	-	-
CBH:99.1(18.1)	0.76(0.1)	0.17*	7.9(1.1)	0.3(0.3)	1.3(0.4)	0.62(0.1)	0.11*	0.73	108.1	127.6	0.84	5.54	5.5(0.6)	3.2(0.5)	5.8(0.4)
Cr :1.98(0.2)	0.71(0.1)	0.15(0.1)	6.5(0.8)	0.2(0.3)	1.8(0.4)	0.57(0.1)	0.10*	0.67	96.8	113.8	0.85	5.70	4.5(0.6)	6.0(0.5)	-
Site 3															
Ht :4.21(0.6)	0.57(0.08)	0.28*	5.6(1.4)	0.0	0.0	0.89(0.1)	0.12*	1.02	55.4	63.0	0.87	7.24	-	-	-
D :2.99(0.3)	0.97(0.1)	0.18*	20.6(3.2)	0.3(0.3)	0.6(0.3)	1.23(0.2)	0.16*	1.39	147.5	166.6	0.88	7.72	-	-	-
CBH:98.1(7.2)	1.11(0.1)	0.16(0.1)	9.5(1.2)	0.0	1.9(0.5)	0.85(0.1)	0.11*	0.96	98.8	112.5	0.88	7.23	3.5(0.6)	3.0(0.3)	-
Cr :1.51(0.2)	0.91(0.1)	0.17*	11.9(2.3)	0.0	2.1(0.6)	0.72(0.1)	0.12*	0.84	140.7	164.7	0.85	5.86	4.4(0.6)	-	1.6(0.7)
Site 4															
Ht :3.85(0.2)	0.91(0.1)	0.21*	13.1(2.3)	0.0	0.0	0.90(0.1)	0.16*	1.07	122.8	145.1	0.84	5.51	4.2(0.7)	10.1(0.8)	3.7(0.8)
D :2.67(0.2)	0.78(0.1)	0.20*	14.0(2.1)	0.2(0.2)	1.7(0.6)	0.74(0.1)	0.13*	0.87	160.4	188.5	0.85	5.69	-	-	-
CBH:98.7(0.3)	0.77(0.1)	0.13*	12.1(1.6)	0.4(0.3)	0.7(0.3)	0.87(0.1)	0.10*	1.07	112.6	125.1	0.90	9.05	-	-	-
Cr :1.73(0.2)	0.66(0.1)	0.13*	10.4(1.6)	0.0	1.2(0.5)	0.82(0.1)	0.14*	0.96	108.3	126.9	0.85	5.83	-	-	-
Site 5															
Ht :4.62(0.6)	0.89(0.1)	0.30*	11.1(3.1)	1.8(0.8)	0.0	0.89(0.1)	0.16*	1.05	104.5	123.8	0.84	5.43	-	-	3.3(0.9)
D :4.21(0.8)	0.88(0.1)	0.20*	14.6(2.1)	0.0	2.0(1.1)	0.72(0.1)	0.14*	0.96	168.8	201.7	0.83	5.13	-	-	-
CBH:96.0(5.1)	0.98(0.1)	0.18*	9.4(1.6)	0.0	2.3(0.5)	0.73(0.1)	0.13*	0.87	107.9	128.2	0.83	5.30	3.1(0.6)	3.6(0.3)	-
Cr :1.68(0.4)	0.77(0.2)	0.18*	8.6(2.1)	0.4(0.1)	1.7(0.4)	0.63(0.1)	0.13*	0.77	111.5	135.7	0.81	4.59	3.6(0.5)	-	-
Site 6															
Ht :4.06(0.6)	0.89(0.1)	0.22(0.1)	9.9(1.3)	0.8(0.4)	0.0	0.73(0.1)	0.13*	0.86	114.2	134.3	0.84	5.67	-	-	-
D :3.37(0.5)	1.17(0.2)	0.19*	18.0(2.5)	0.0	0.4(0.2)	1.21(0.1)	0.28*	1.50	119.5	147.7	0.80	4.25	-	-	-
CBH:103.0(7.9)	0.79(0.1)	0.18*	12.8(2.1)	1.2(0.5)	2.1(0.5)	0.70(0.1)	0.10*	0.81	158.8	183.2	0.86	6.53	2.5(0.4)	-	-
Cr :1.44(0.15)	0.35(0.1)	0.14*	8.1(1.3)	0.6(0.4)	3.1(0.6)	0.31*	0.08*	0.37	214.9	259.4	0.83	4.82	3.9(0.5)	1.1(0.8)	1.6(0.8)
Site 7															
Ht :4.51(0.3)	0.61(0.1)	0.28*	8.5(0.7)	0.3(0.2)	0.6(0.3)	0.74(0.1)	0.12(0.1)	0.87	98.6	114.5	0.85	6.18	-	-	2.2(0.5)
D :3.59(0.5)	0.85(0.1)	0.18*	16.5(1.7)	0.8(0.4)	1.0(0.4)	1.14(0.1)	0.16*	1.30	126.1	144.4	0.87	6.90	-	-	-
CBH:95.0(13.1)	0.89(0.1)	0.18*	9.4(1.9)	1.1(0.5)	1.1(0.5)	0.74(0.1)	0.11*	0.85	108.6	125.8	0.87	6.76	3.7(0.4)	-	-
Cr :1.32(0.2)	0.99(0.1)	0.19(0.1)	8.7(2.1)	0.3(0.4)	2.7(0.9)	0.80(0.1)	0.10*	0.70	124.9	146.1	0.85	5.91	3.7(0.5)	2.4(0.6)	-
Site 8															
Ht :2.71(0.4)	0.71(0.1)	0.28*	5.3(1.1)	0.3(0.2)	0.0	0.45(0.1)	0.14(0.1)	1.05	50.7	117.1	0.42	3.22	-	-	-
D :1.89(0.2)	0.97(0.1)	0.16*	7.9(6.3)	0.2(0.3)	0.6(0.3)	0.61(0.2)	0.17(0.1)	0.78	100.7	128.6	0.78	3.60	-	-	-
CBH:86.2(12.7)	1.00(0.1)	0.19*	4.3(2.0)	0.0	0.8(0.3)	0.44(0.1)	0.15(0.1)	0.59	72.7	98.2	0.74	2.84	-	-	-
Cr :1.05(0.1)	1.55(0.2)	0.19*	3.4(1.1)	0.0	1.8(0.5)	0.35(0.1)	0.08*	0.45	75.2	94.4	0.74	3.91	2.5(0.7)	1.1(0.8)	2.1(0.4)

* = SE < 0.1

-- = Reproductive Stage not recorded

Table 19 : Observations of Growth parameters (1994-96) for *Tamarindus indica*

Months	IL	G	LA	LD	LF	LWT	BWT	TWT	LAR	SLA	LWR	LW/BWT	IN/ER	FL/IN	FR/ER
Control															
Ht : 7.55(0.31)	1.62(0.1)	0.17*	20.8(1.3)	0.0	0.0	0.72(0.1)	0.18*	0.91	226.2	256.1	0.79	3.83	-	-	-
D : 5.58(0.4)	1.50(0.2)	0.17*	14.5(0.8)	0.0	0.0	0.67*	0.18*	0.86	168.3	215.1	0.77	3.59	-	-	-
Aug	1.49(0.5)	0.20*	23.6(1.1)	0.0	0.0	1.25(0.1)	0.33(0.1)	1.59	148.3	188.6	0.78	3.67	1.8(0.2)	4.4(1.1)	3.5(0.6)
Nov	1.46(0.3)	0.18*	19.2(1.7)	0.0	0.0	1.05(0.1)	0.26*	1.32	145.8	181.7	0.80	4.06	-	-	-
Feb	1.44(0.1)	0.25*	22.3(1.3)	0.5*	0.0	0.90(0.1)	0.28*	1.19	187.0	246.0	0.75	3.17	-	-	-
Ht : 6.39(0.7)	1.81(0.1)	0.15*	15.0(0.9)	0.0	1.3(0.3)	0.65*	0.19(0.1)	0.85	240.6	311.5	0.76	3.39	1.8(0.2)	3.1(1.2)	1.0(0.2)
D : 4.79(0.6)	1.69(0.7)	0.18*	21.8(0.8)	0.0	0.0	0.83(0.1)	0.24(0.1)	1.08	203.0	262.2	0.77	3.43	0.7(0.5)	1.2(0.9)	1.4(0.1)
Aug	1.68(0.1)	0.21*	19.2(0.7)	1.2(0.3)	0.7(0.2)	0.82(0.2)	0.27(0.1)	1.10	190.2	253.0	0.74	3.02	-	-	3.3(0.5)
Nov	1.74(0.2)	0.18(0.1)	15.5(2.4)	0.4(0.1)	0.0	0.93(0.1)	0.22*	1.16	133.5	165.7	0.80	4.14	-	-	-
D : 4.53(0.3)	1.63(0.2)	0.24(0.1)	11.9(1.1)	0.0	1.0(0.1)	0.83(0.1)	0.22*	1.06	112.6	143.5	0.78	3.64	-	-	-
Aug	1.44(0.1)	0.19*	17.3(2.4)	0.0	0.0	0.77(0.1)	0.32(0.1)	1.10	157.4	223.1	0.70	2.39	1.2(0.4)	2.7(0.5)	1.5(0.3)
Nov	1.46(0.1)	0.15*	17.5(1.6)	0.3(0.1)	1.1(0.1)	1.08(0.1)	0.36(0.1)	1.45	120.9	161.5	0.75	2.97	-	-	1.6(0.3)
Feb	1.22(0.1)	0.21(0.1)	14.1(1.4)	2.0(0.1)	0.0	0.87(0.1)	0.23*	1.20	117.0	180.2	0.72	3.74	-	-	-
Ht : 6.35(0.4)	1.72(0.1)	0.15*	1.7(1.0)	0.0	8.4(0.1)	0.06(0.1)	0.12*	0.20	87.6	260.7	0.31	0.5	-	-	-
D : 4.65(0.3)	1.29(0.2)	0.12*	8.5(0.8)	0.0	0.0	0.53(0.1)	0.07*	0.60	157.0	177.9	0.88	7.52	0.1(0.5)	0.8(0.3)	-
Aug	2.07(0.2)	0.15*	12.9(1.5)	1.1(0.1)	1.0(0.1)	0.70(0.1)	0.17*	0.88	146.7	182.7	0.79	4.07	-	-	-
Nov	1.18(0.1)	0.22*	18.9(1.3)	0.0	0.0	0.92(0.1)	0.21*	1.14	165.8	204.2	0.80	4.32	-	-	-
D : 4.95(0.2)	1.63(0.1)	0.14*	15.3(1.1)	0.0	0.0	0.66(0.1)	0.24*	0.92	167.3	228.9	0.72	2.72	1.9(0.3)	3.2(1.5)	-
Aug	1.57(0.1)	0.19*	16.7(1.3)	0.0	0.0	0.69(0.1)	0.25*	0.95	176.6	241.2	0.73	2.74	1.0(0.2)	2.5(0.3)	1.8(0.2)
Nov	1.42(0.1)	0.17*	16.2(1.5)	0.0	0.0	0.94(0.1)	0.39*	1.33	122.3	171.3	0.71	2.49	-	-	1.1(0.5)
Feb	1.44(0.1)	0.18*	14.3(3.1)	1.4(0.9)	2.1*	0.92(0.1)	0.12*	1.05	136.8	155.4	0.88	7.36	-	-	-
Ht : 6.41(0.8)	1.40(0.1)	0.19*	16.2(2.7)	0.0	0.0	0.97(0.1)	0.18*	1.10	147.7	177.4	0.82	4.95	-	-	-
D : 4.71(0.1)	1.88(0.1)	0.17*	16.3(1.6)	1.3(0.5)	1.4(0.3)	0.78*	0.39*	1.16	140.7	213.1	0.85	1.94	0.1(0.2)	0.4(0.4)	-
Aug	1.88(0.2)	0.17*	11.0(1.6)	1.1(0.5)	1.2(0.4)	0.59*	0.15*	0.74	147.7	185.7	0.79	3.88	-	-	0.2(0.1)
Nov															
Feb															

* = SE < 0.1

- = Reproductive Stage not recorded

Table 20 : Tagging experiment

Trees	Months	Control				Site 2				Site 3			
		SL	IL	ML	Ab	SL	IL	ML	Ab	SL	IL	ML	Ab
<i>Azadirachta</i>	1	6.8	0.0	10.1	0.0	6.2	4.6	5.8	0.0	6.7	0.0	9.9	0.0
	2	6.8	0.0	10.1	0.0	7.3	0.0	10.4	0.0	6.7	0.0	0.0	9.9
	3	12.0	15.1	0.0	10.1	10.2	10.3	0.0	10.4	6.9	0.2	0.0	0.0
	4	19.5	10.9	15.1	0.0	16.4	8.1	10.3	0.0	14.8	9.5	0.0	0.0
<i>Holoptelea</i>	1	19.4	0.0	10.0	0.0	19.8	0.0	10.0	0.0	18.1	5.0	4.9	0.0
	2	19.4	0.0	10.0	0.0	20.0	0.0	10.0	0.0	18.1	0.0	2.1	7.8
	3	20.8	2.1	0.0	10.0	20.4	0.0	0.0	10.0	18.1	0.0	0.0	2.1
	4	26.5 ⁰	7.8	2.1	0.0	25.9 ⁰	9.7	0.0	0.0	22.2 ⁰	6.9	0.0	0.0
<i>Mangifera</i>	1	6.7	2.2	8.0	0.0	6.7	1.5	8.4	0.0	6.6	0.0	8.2	0.0
	2	8.8	0.0	10.2	0.0	8.1	0.0	9.9	0.0	6.6	0.0	5.7	2.5
	3	8.8	3.2	9.4	0.8	8.1	5.3	7.8	2.1	10.1	8.9	2.4	3.3
	4	14.3	9.9	5.8	6.8	11.9	6.0	6.2	6.9	11.2	2.4	8.0	3.3
<i>Streblus</i>	1	7.6	10.1	0.0	0.0	7.8	9.0	0.0	0.0	7.7	0.0	7.1	0.0
	2	7.9	2.1	5.4	4.7	8.2	0.0	8.2	1.0	8.5	9.0	3.0	4.1
	3	9.0	5.8	8.2	4.0	12.2	10.3	5.0	3.2	9.8	6.9	5.8	5.2
	4	14.7	3.1	1.8	12.2	12.2	0.0	11.0	4.2	11.8	6.0	4.7	8.0
<i>Tamarindus</i>	1	19.1	6.9	3.2	0.0	14.0	6.8	3.0	0.0	#			
	2	20.3	0.0	10.1	0.0	14.2	0.0	7.1	2.7				
	3	20.5	0.8	10.1	0.0	14.2	0.0	1.9	5.1				
	4	23.6	5.8	2.3	8.6	16.7	4.2	2.6	1.9				

Trees	Site 4				Site 6				Site 7				Site 8			
	SL	IL	ML	Ab	SL	IL	ML	Ab	SL	IL	ML	Ab	SL	IL	ML	Ab
<i>Azadirachta</i>	6.2	10.0	0.0	0.0	4.2	0.0	10.0	0.0	5.7	4.2	5.9	0.0	6.5	3.3	7.1	0.0
	6.4	0.0	6.9	3.1	4.2	0.0	3.2	6.8	6.1	0.0	10.1	0.0	6.5	0.0	8.1	2.3
	9.3	12.7	4.0	2.9	5.7	7.8	0.0	3.2	11.8	3.8	7.1	3.0	6.5	0.0	6.1	2.0
	17.9	8.0	9.7	3.0	10.5	6.3	7.8	0.0	12.8	5.2	3.8	7.1	9.3	10.1	0.0	0.0
<i>Holoptelea</i>	12.0	0.0	9.1	0.0	13.4	0.8	9.2	0.0	13.2	0.0	9.0	0.0	#			
	12.0	0.0	9.1	0.0	13.8	0.0	10.0	0.0	13.5	0.0	9.0	0.0				
	12.0	0.0	0.0	9.1	13.3 ⁰	0.0	1.2	8.8	13.5	0.0	0.0	9.0				
	17.8 ⁰	4.1	0.0	0.0	16.1	0.0	0.0	3.4	15.8 ⁰	6.2	0.0	0.0				
<i>Mangifera</i>	#				5.8	0.0	9.1	0.0	6.3	9.7	0.0	0.0	6.6	9.8	0.0	0.0
					6.3*	0.0	6.7	2.4	7.3	0.0	9.7	0.0	6.6*	0.0	9.8	0.0
					6.7	6.0	0.0	6.7	7.3*	0.0	5.0	4.7	6.6*	0.0	8.7	1.1
					7.3*	0.8	6.0	0.0	8.5	4.2	0.0	5.0	9.0	8.2	0.0	8.7
<i>Streblus</i>	7.2	7.2	0.0	0.0	7.1	4.3	5.6	0.0	7.3	0.0	8.1	0.0	#			
	7.6	0.0	4.1	3.1	7.8	0.0	3.0	6.9	7.3*	0.0	5.0	3.1				
	7.6*	0.0	2.0	2.1	7.8*	0.0	0.0	3.0	7.3*	0.0	1.7	3.3				
	9.0	8.0	0.0	2.0	7.2*	2.9	0.0	0.0	8.4	6.8	0.0	1.7				
<i>Tamarindus</i>	9.5	6.2	0.0	0.0	#				#				#			
	10.6	7.1	3.8	2.4												
	10.7*	0.0	0.0	10.9												
	14.4	6.1	0.0	0.0												

1-4 indicating growth observations at an interval of 65 ($\pm$ 1) day, starting from 1st wk. of Oct. 1995.

SL : Shoot length (cm) IL : Immature leaves ML : Mature leaves Ab : absent of fallen leaves, # : species absent

* : indicating apical tip aborted (in some of the observations) and there by either stagment or reduced SL.

⁰ : indicating further growth by means of lateral branches without apical bud abortion and ⁰ with abortion.

: Species not present.

Table 21 : Dust deposition (gm-2)

Trees	Sites							
	Control	2	3	4	5	6	7	8
	May	Nov						
<i>Acacia</i>	0.11	0.24	0.49	0.74	0.61	0.27	*	*
<i>Anogeissus</i>	0.93	0.40	1.05	1.44	5.20	0.83	1.98	0.58
<i>Azadirachta</i>	0.23	0.50	0.28	0.28	0.72	0.83	0.68	0.41
<i>Bauhinia</i>	1.68	1.01	1.45	2.47	1.75	1.86	*	*
<i>Cordia</i>	2.35	0.60	0.78	1.80	2.10	0.95	*	*
<i>Holoptelea</i>	1.28	0.95	1.40	3.21	2.53	2.89	2.27	0.90
<i>Mangifera</i>	0.65	0.68	1.78	2.23	2.63	0.36	*	*
<i>Mimusops</i>	0.61	0.37	0.79	3.59	*	*	2.75	0.54
<i>Pithecellobium</i>	0.38	0.49	0.93	1.36	2.09	1.23	2.19	0.94
<i>Stebius</i>	0.57	0.51	2.56	1.81	2.58	0.57	2.11	0.99
<i>Tamarindus</i>	0.34	0.52	1.02	1.21	1.18	0.18	0.43	0.49

Above readings are averages of 9-18 replicates and SE did not exceed 0.65

* indicate the absence of tree species.

Table 22 : Sulphur content (mgg-1)

(Leaves)					(Stems)		(Leaves)					(Stems)	
<i>Acacia nilotica</i>							<i>Mangifera indica</i>						
Sites	May	Aug.	Nov.	Feb.	May	Nov.	Sites	May	Aug	Nov	Feb	May	Nov
1	3.496	6.001	5.439	3.811	1.385	3.214	1	1.850	2.568	2.107	2.689	0.466	0.784
2	2.358	6.223	4.189	2.612	1.868	3.673	2	3.006	3.439	2.621	3.424	0.756	1.813
3	2.034	6.736	4.777	4.644	2.078	4.867	3	3.144	3.734	2.450	2.747	0.386	1.347
6	3.746	6.708	7.056	4.044	1.579	5.533	6	5.596	2.309	2.646	5.050	0.371	1.843
<i>Anogeissus latifolia</i>							<i>Mimusops hexandra</i>						
1	4.301	1.489	2.572	3.012	0.418	1.638	1	6.336	4.744	6.934	6.540	1.804	6.612
2	3.702	3.381	2.254	3.889	0.515	3.442	2	7.816	3.125	6.543	6.753	1.894	3.122
3	5.133	2.164	2.866	3.908	1.724	1.249	4	7.307	3.508	7.393	7.716	2.094	6.612
4	8.324	3.245	2.425	5.669	1.626	2.842							
6	4.532	2.330	5.267	6.172	2.014	0.220							
<i>Azadirachta indica</i>							<i>Moringa pterygosperma</i>						
1	9.218	5.806	3.111	2.864	2.577	1.745	1	13.901	2.211	12.857	13.107	6.187	8.158
2	6.382	3.805	3.209	3.986	1.820	3.191	2	13.663	0.687	10.166	14.015	10.311	11.123
3	6.197	4.526	5.120	4.411	1.272	2.732	3	13.083	5.297	13.308	14.943	10.279	12.225
4	10.144	4.622	5.488	1.741	2.513	3.903	4	14.099	3.439	11.762	12.092	13.534	9.065
6	8.937	3.948	6.027	3.308	1.788	2.617	6	9.796	7.241	13.308	9.924	10.843	9.236
<i>Bauhinia racemosa</i>							<i>Pithecellobium dulce</i>						
1	4.263	2.009	2.058	1.693	2.058	1.225	1	13.713	6.031	8.311	10.457	8.124	2.204
2	5.831	1.960	1.813	2.021	1.127	1.715	2	13.273	6.821	10.575	10.604	3.093	1.423
3	5.145	1.715	5.047	2.161	1.323	1.813	3	12.765	4.745	7.714	10.062	6.718	1.216
4	4.900	2.793	4.018	1.980	3.479	2.107	4	12.533	5.021	6.888	10.294	9.119	2.250
6	6.234	2.009	8.624	4.016	0.980	1.901	6	12.950	7.528	10.033	9.408	7.508	12.582
<i>Cordia dichotoma</i>							<i>Streblus asper</i>						
1	2.646	1.201	3.185	2.408	3.432	1.109	1	6.474	1.812	5.022	5.601	1.627	1.356
2	2.009	1.421	6.027	4.018	2.107	2.303	2	4.486	2.335	6.027	5.137	2.771	1.911
3	1.372	4.439	5.557	5.047	3.577	5.439	3	4.948	4.629	4.630	7.011	1.546	3.228
6	1.617	2.499	6.566	3.320	1.568	2.499	4	3.422	6.511	6.933	3.879	5.381	3.038
							6	3.052	2.967	5.243	5.450	6.573	6.990
<i>Holoptelea integrifolia</i>							<i>Tamarindus indica</i>						
1	12.718	3.614	5.602	5.398	7.908	4.336	1	3.873	1.683	2.335	5.166	0.789	4.752
2	11.146	4.671	5.648	5.379	3.746	4.777	2	2.728	3.038	2.561	3.579	1.643	4.982
3	11.053	4.426	9.229	10.043	5.827	5.782	3	3.468	1.586	3.254	3.328	1.385	8.265
4	13.042	10.775	7.117	6.269	7.677	4.998	4	7.353	3.289	3.705	2.457	1.627	5.877
6	15.540	5.362	13.110	7.314	9.897	5.022	6	1.393	1.586	2.963	6.869	2.573	5.257

SE < 0.87