

Table 3. Plant species and their density (individual m⁻²) in spring (S), late rainy season (L) and both spring and late rainy season (S+L) at the drain (S₁, S₂ & S₃) and pool sites (S₄, S₅ & S₆).

S.No.	Plant species	Family	Amanishah drain			Dye wastewater pools		
			S ₁	S ₂	S ₃	S ₄	S ₅	S ₆
I – Marshy species								
1.	<i>Alternanthera sessilis</i> D.C.	Amaranthaceae	S = 33 L = 26	S = 42	S = 116	-	S = 62 L = 24	-
2.	<i>Amaranthus spinosus</i> Linn.	Amaranthaceae	S = 2 L = 2	L = 1	L = 5	L = 1	L = 5	L = 1
3.	<i>Amaniam baccifera</i> Linn.	Lythraceae	L = 2	-	-	-	-	-
4.	<i>Anagallis arvensis</i> Linn.	Primulaceae	-	-	S = 1	S = 1	-	-
5.	<i>Bacopa monnieri</i> Pennell.	Scrophulariaceae	L = 3	-	-	-	-	-
6.	<i>Brachiaria reptans</i> Gard. & C.E.	Poaceae	L = 25	L = 34	L = 19	S = 1260 L = 758	-	S = 9 L = 4
7.	<i>Celostia argentea</i> Linn.	Amaranthaceae	L = 12	-	L = 24	-	-	-
8.	<i>Commelina forskalii</i> Vahl.	Commelinaceae	L = 4	-	-	-	-	L = 1
9.	<i>Croton bonplandianum</i> Baill.	Euphorbiaceae	-	S = 8 L = 3	-	S = 21 L = 8	S = 1 L = 5	S = 12 L = 11
10.	<i>Cynodon dactylon</i> Pers.	Poaceae	S = 662 L = 761	S = 253 L = 144	S = 1809 L = 1042	S = 6940 L = 810	S = 3753 L = 386	S = 1113 L = 149
11.	<i>Cyperus rotundus</i> Linn.	Cyperaceae	-	-	L = 40	-	-	L = 477
12.	<i>Eclipta alba</i> (Linn.) Hassk.	Asteraceae	S = 10 L = 5	-	S = 1	-	-	-
13.	<i>Euphorbia hirta</i> Linn.	Euphorbiaceae	-	-	-	-	L = 1	-
14.	<i>Ipomoea carnea</i> Jacq.	Convolvulaceae	L = 26	S = 3	-	-	-	-
15.	<i>Melilotus indica</i> All.	Leguminoceae	S = 1	-	-	S = 1	-	S = 1
16.	<i>Paspalum distichum</i> Linn.	Poaceae	S = 45 L = 221	-	L = 327	-	-	-
17.	<i>Phragmites karka</i> Steud.	Poaceae	S = 19 L = 7	-	-	-	-	-

Table 3 (Contd...)

S.No.	Plant species	Family	Amanishah drain						Dye wastewater pools		
			S ₁	S ₂	S ₃	S ₄	S ₅	S ₆			
36.	<i>Eragrostis ciliaris</i> R.Br.	Poaceae	-	-	L = 10	L = 112	L = 1	L = 14			
37.	<i>Heliotropium eichwaldi</i> Steud. ex DC.	Boraginaceae	-	-	-	S = 3	-	-			
38.	<i>Heteropogon contortus</i> Roem. & Schult.	Poaceae	-	-	-	L = 3	-	L = 40			
39.	<i>Indigofera enneaphylla</i> Linn.	Leguminosae	-	-	-	L = 1	L = 1	-			
40.	<i>Ocimum gratissimum</i> Linn.	Labiatae	-	-	-	L = 1	-	L = 1			
41.	<i>Parthenium hysterophorus</i> Linn.	Asteraceae	S = 18 L = 10	S = 5 L = 4	S = 11 L = 8	S = 38 L = 74	S = 26 L = 42	S = 81 L = 13			
42.	<i>Petalium murex</i> Linn.	Pedaliaceae	-	-	-	L = 2	L = 1	L = 1			
43.	<i>Peristrophe bicalyculata</i> Nees.	Acanthaceae	-	-	L = 5	L = 1	L = 12	L = 1			
44.	<i>Physalis minima</i> Linn.	Solanaceae	-	L = 3	-	L = 1	-	L = 2			
45.	<i>Pulicaria crispa</i> Sch.-Bip.	Asteraceae	-	-	-	L = 3	-	-			
46.	<i>Sida cordifolia</i> Linn.	Malvaceae	-	-	L = 3	-	-	-			
47.	<i>Solanum surattense</i> Burn. F.	Solanaceae	-	-	-	S = 1 L = 1	-	-			
48.	<i>Tephrosia purpurea</i> Pers.	Leguminosae	-	L = 1	-	L = 1	-	S = 5			
49.	<i>Trianthema portulacastrum</i> Linn.	Aizoaceae	-	L = 3	L = 14	-	-	-			
50.	<i>Tribulus terrestris</i> Linn.	Zygophyllaceae	-	-	-	L = 2	-	-			
51.	<i>Verbesina encelioides</i> (Cav.) Benth.	Asteraceae	S = 2 L = 2	-	-	-	-	-			
52.	<i>Withania somnifera</i> Dunal	Solanaceae	-	-	-	L = 1	-	-			
53.	<i>Xanthium strumarium</i> Linn.	Asteraceae	S = 2 L = 7	L = 5	L = 9	-	S = 27 L = 6	S = 7 L = 9			
54.	<i>Zizyphus nummularia</i> Wt. Arn.	Rhamnaceae	-	-	-	-	-	S = 2			
Grand Total:			17 (840) 22 (1109)	10 (326) 16 (388)	8 (2016) 18 (1524)	13 (8270) 26 (2657)	8 (3881) 16 (646)	12 (1240) 21 (962)			
			Spring season		Late rainy season						

Table 3 (Contd...)

S.No.	Plant species	Family	Amanishah drain			Dye wastewater pools		
			S ₁	S ₂	S ₃	S ₄	S ₅	S ₆
Plant species occurring at the sites, but not recorded in quadrats studied:								
I – Marshy species								
1.	<i>Achyranthes aspera</i> Hook. f.	Amaranthaceae	-	-	S	-	-	S
2.	<i>Arundo donax</i> Linn.	Poaceae	-	-	S + L	-	-	-
3.	<i>Cyperus alopecuroides</i> Rottb.	Cyperaceae	L	-	-	-	-	-
4.	<i>Echinochloa stagnina</i> Beauv.	Poaceae	L	-	-	-	-	-
5.	<i>Ranunculus sceleratus</i> Linn.	Ranunculaceae	-	-	L	-	-	-
6.	<i>Saccharum spontaneum</i> Linn.	Poaceae	S + L	-	S + L	-	S + L	S + L
7.	<i>Sesbania sesban</i> Merr.	Leguminosae	-	-	-	-	-	L
8.	<i>Sonchus asper</i> Hill.	Asteraceae	-	-	-	-	-	S
II – Terrestrial species								
9.	<i>Acanthospermum hispidum</i> DC.	Asteraceae	-	-	-	L	-	-
10.	<i>Acacia nilotica</i> Linn.	Leguminosae	-	-	-	-	L	L
11.	<i>Azadirachta indica</i> A. Juss.	Meliaceae	-	-	-	L	-	L
12.	<i>Brassica campestris</i> Prain	Cruciferae	-	-	S	-	-	-
13.	<i>Citrullus colocynthis</i> Schrad.	Cucurbitaceae	-	-	-	L	-	-
14.	<i>Holoptelea integrifolia</i> Planch.	Ulmaceae	-	L	-	-	-	L
15.	<i>Leucas aspera</i> Spring	Labiatae	-	-	-	-	-	L
16.	<i>Phaseolus</i> sp.	Leguminosae	L	-	-	-	-	-
17.	<i>Phyllanthus niruri</i> Hook. F.	Euphorbiaceae	-	-	-	-	L	-
18.	<i>Ricinus communis</i> Linn.	Euphorbiaceae	L	-	S	S	-	-
19.	<i>Tridax procumbens</i> Linn.	Asteraceae	-	-	-	-	-	S
20.	<i>Trigonella foenum-graecum</i> Linn.	Leguminosae	-	-	-	S	-	S
Grand Total: Spring season			1	0	5	2	1	5

Table 5. Biomass (g m⁻²) of plant species at different sites during spring and late-rainy season.

Plant species	Spring season						Late-rainy season					
	S ₁	S ₂	S ₃	S ₄	S ₅	S ₆	S ₁	S ₂	S ₃	S ₄	S ₅	S ₆
A. Grasses and Sedges												
<i>Bracharia reptans</i>	-	-	-	-	-	-	2.6	14.3	12.7	65.7	-	0.2
<i>Bulbostylis barbata</i>	-	-	-	-	-	-	-	-	0.1	1.2	-	-
<i>Cynodon dactylon</i>	382.2	16.8	355.0	60.2	15.5	17.1	717.8	28.4	320.1	55.0	70.0	3.4
<i>Cyperus compressus</i>	-	-	-	-	-	-	-	-	-	4.4	19.8	36.8
<i>Cyperus rotundus</i>	-	-	-	-	-	-	-	11.1	8.0	-	-	0.2
<i>Dactyloctenium aegyptium</i>	-	-	-	-	-	-	-	10.9	4.8	14.6	45.7	58.4
<i>Eragrostis ciliaris</i>	-	-	-	-	-	-	-	-	1.1	-	0.1	1.2
<i>Heteropogon contortus</i>	-	-	-	-	-	-	3.0	-	-	8.0	-	2.6
<i>Paspalum distichum</i>	-	-	-	-	-	-	210.5	-	248.0	-	-	-
<i>Phragmites karka</i>	-	-	-	-	-	-	61.5	-	-	-	-	-
<i>Typha elephanitina</i>	32.3	-	-	-	-	-	62.1	-	-	-	-	-
B. Forbs												
<i>Alternanthera sessilis</i>	32.5	3.5	315.1	-	1.4	-	0.6	-	20.5	-	3.0	-
<i>Amaranthus spinosus</i>	-	-	-	-	-	-	1.2	-	81.0	-	29.3	0.1
<i>Argemone mexicana</i>	-	14.5	-	-	-	-	-	-	-	-	-	-
<i>Boerhavia diffusa</i>	-	-	-	-	0.3	1.4	-	-	-	1.0	-	-
<i>Calotropis procera</i>	-	6.3	-	-	26.7	-	-	7.4	-	-	-	0.1
<i>Cannabis sativa</i>	1.6	-	-	-	-	-	-	-	-	-	-	-
<i>Cassia tora</i>	-	46.8	-	-	-	-	-	8.6	-	-	-	-
<i>Celosia argentea</i>	-	-	-	-	-	-	52.0	-	-	-	-	-
<i>Chenopodium album</i>	18.8	1.2	71.9	2.0	0.9	-	-	-	-	0.6	2.7	-
<i>Commelina forskalii</i>	-	-	-	-	-	-	-	-	1.6	-	-	-

Contd.

Plant species	Spring season						Late-rainy season					
	S ₁	S ₂	S ₃	S ₄	S ₅	S ₆	S ₁	S ₂	S ₃	S ₄	S ₅	S ₆
<i>Corchorus tridens</i>	-	-	-	-	-	-	-	-	-	-	-	0.6
<i>Croton bonplandianum</i>	-	26.2	-	17.9	7.5	22.4	-	96.6	-	40.7	0.7	34.1
<i>Datura stramonium</i>	-	36.3	-	-	-	-	-	-	-	-	-	-
<i>Eclipta alba</i>	11.6	-	-	-	-	-	1.2	-	-	-	-	-
<i>Heliotropium eichwaldi</i>	-	-	-	67.7	-	-	-	-	-	-	-	-
<i>Indigofera enneaphylla</i>	-	-	-	-	-	-	-	-	1.2	-	-	-
<i>Ipomoea carnea</i>	-	22.7	-	-	-	-	2.8	-	-	-	-	-
<i>Melilotus indica</i>	0.4	-	-	-	-	-	-	-	-	-	-	-
<i>Ocimum gratissimum</i>	-	-	-	-	-	-	-	-	-	-	-	2.4
<i>Parthenium hysterophorus</i>	20.0	85.0	-	110.9	27.5	46.1	-	28.3	10.0	38.9	145.3	60.8
<i>Pedaliium murex</i>	-	-	-	-	-	-	-	-	-	3.1	7.8	2.6
<i>Peristrophe bicalyculata</i>	-	-	-	-	-	-	-	-	11.5	-	15.9	1.4
<i>Physalis minima</i>	-	-	-	-	-	-	-	12.6	-	1.9	-	2.0
<i>Polygonum glabrum</i>	-	-	105.8	-	-	-	20.5	-	11.2	-	-	-
<i>Rostellularia diffusa</i>	-	-	-	-	-	-	-	-	-	3.3	-	4.8
<i>Trinthena portulacastrum</i>	-	-	-	-	-	-	-	2.8	-	-	-	-
<i>Tribulus terrestris</i>	-	-	-	-	-	-	-	-	-	3.4	-	-
<i>Verbesina encelioides</i>	0.5	-	-	-	-	-	-	-	-	-	-	-
<i>Withania somnifera</i>	-	-	-	-	-	-	-	-	-	0.2	-	-
<i>Xanthium strumarium</i>	-	-	-	-	51.3	-	41.8	33.8	49.9	6.2	43.7	90.9
Grand Total	499.9	259.3	847.8	258.7	131.1	87.0	1177.6	254.8	780.5	249.4	384.0	302.6