

An Evaluation Of Northern Jarrah Forest Arboreta
For Potential Reafforestation Species

ATTACHMENT 1

DEL PARK ARBORETUM - FIELD GUIDE AND 1985 PERFORMANCE ANALYSIS

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DEL PARK

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INTRODUCTION

This booklet has been designed primarily for use as a directory for observers. It presents location maps, field guides, plot information and results for Del Park Arboretum.

Separate graphs are presented for height, diameter, form, vigour, survival and "Rating" (ie. equal combination of height, diameter, form and vigour). For each parameter measured, plots are presented in logical sequence (starting with plot 1). Hence, travelling through an arboretum the point on the graph corresponding to a particular plot can be readily located and compared with neighbouring plots (means and 95% confidence intervals are supplied for all graphs except that for survival).

Table DP-1

<u>PLOT</u>	DEL PARK ARBORETUM	
	<u>SPECIES</u>	<u>PROVENANCE</u>
1	<i>E.salmonophloia</i>	No details available
2	<i>E.diversicolor</i>	
3	<i>E.citriodora</i>	
4	<i>E.calophylla</i>	
5	<i>E.camaldulensis</i>	
6	<i>E.megacarpa</i>	
7	<i>E.marginata</i>	
8	<i>E.muellerana</i>	
9	<i>E.agglomerata</i>	
10	<i>E.saligna</i>	
11	<i>E.maculata</i>	
12	<i>E.globulua</i>	
13	<i>E.cypellocarpa</i>	
14	<i>E.crebra</i>	
15	<i>E.laeliae</i>	
16	<i>E.accedens</i>	
17	<i>E.wandoo</i>	
18	<i>E.patens</i>	
19	<i>E.resinifera</i>	
20	<i>E.gomphocephala</i>	
21	<i>E.longifolia</i>	
22	<i>E.microcorys</i>	
23	<i>E.grandis</i>	
24	<i>E.calophylla rosea</i>	
25	<i>E.falcata</i>	
26	<i>E.gardneri</i>	
27	<i>E.sideroxylon</i>	
28	<i>E.astringens</i>	
29	<i>E.polybrachtea</i>	
30	<i>E.kochii</i>	
31	<i>E.botryoides</i>	
32	<i>E.bosistoana</i>	
33	<i>E.paniculata</i>	
34	<i>E.cladocalyx</i>	
35	<i>E.propinqua</i>	
36	<i>E.notabilis</i>	

RESULTS

Plot by plot results detailing means, upper and lower 95% confidence limits for height, diameter, form, vigour and rating are listed in Table DP-3 towards the end of this booklet. Survival, and the presence/absence of evidence of stem borers, termites and cambial splits within each plot is also noted in Table DP-3.

Comparing the mean rating of each of the plots, the top 10 plots (ranked from best to worst) are listed in Table DP-2, below.

The following figures display plot-by-plot graphs of mean and 95% confidence interval for height (Figure DP-3), diameter (Figure DP-4) form (Figure DP-5), vigour (Figure DP-6) and mean for survival (Figure DP-7).

Figure DP-8 presents a plot-by-plot graph of Rating (ie combination of height, diameter, form and vigour).

TABLE DP-2 _BEST_10_SPECIES_AT_DEL_PARK

PLOT	SPECIES	SEEDLOT	DEFECT	BEST
12	E.globulus	unknown	B C	
34	E.cladocalyx	"	B	
8	E.muellerana	"		
2	E.diversicolor	"	B C	
22	E.microcorys	"	B	
13	E.cypellocarpa	"		
11	E.maculata	"	C	
35	E.propinqua	"	B	
6	E.megacarpa	"	C	
10	E.saligna	"		

SYMBOLS : B = BORER OCCURRENCE NOTED IN PLOT
 T = TERMITE OCCURRENCE NOTED IN PLOT
 C = CAMBIAL SPLITS NOTED IN PLOT
 S = SURVIVAL LESS THAN 50%

1

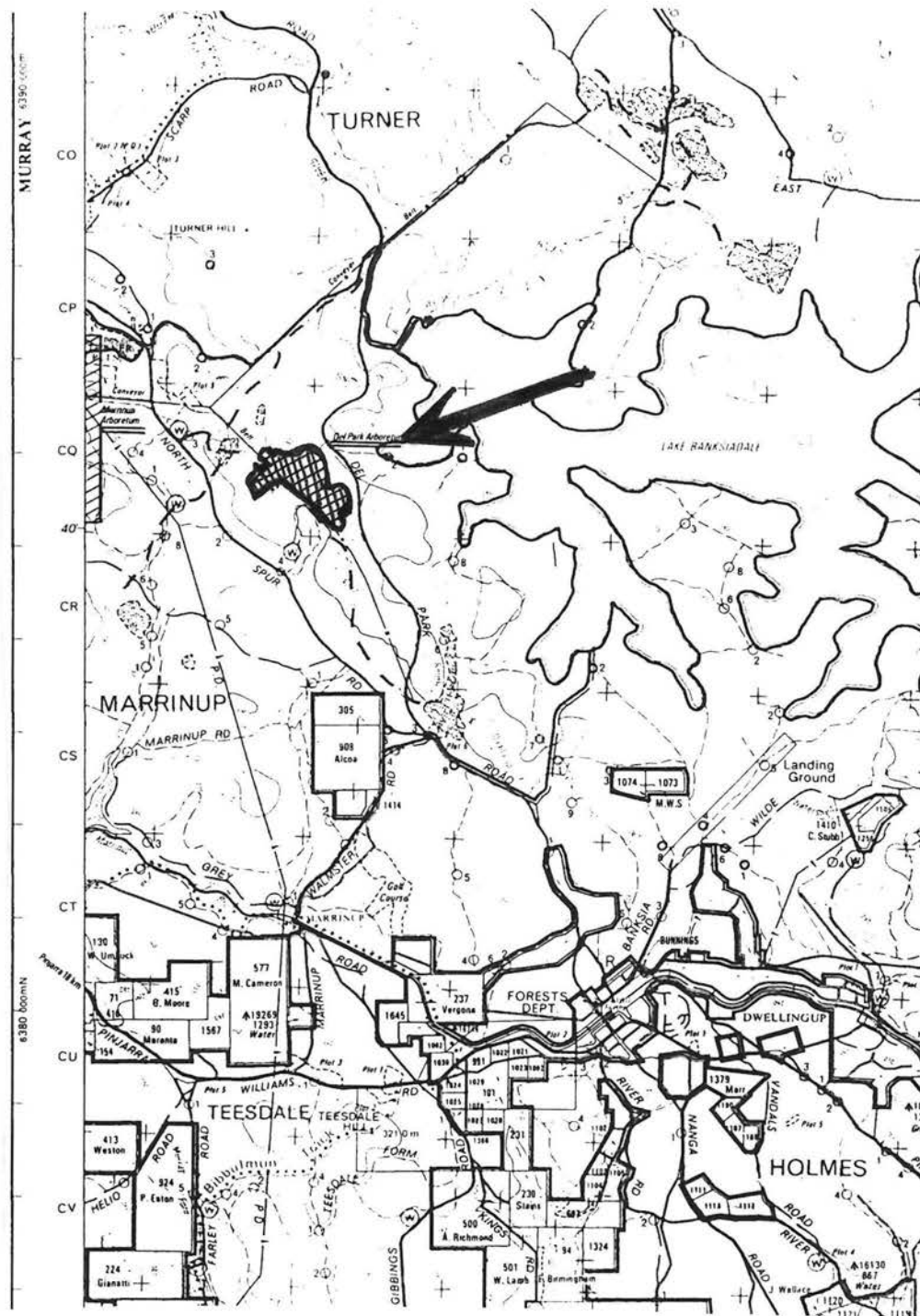
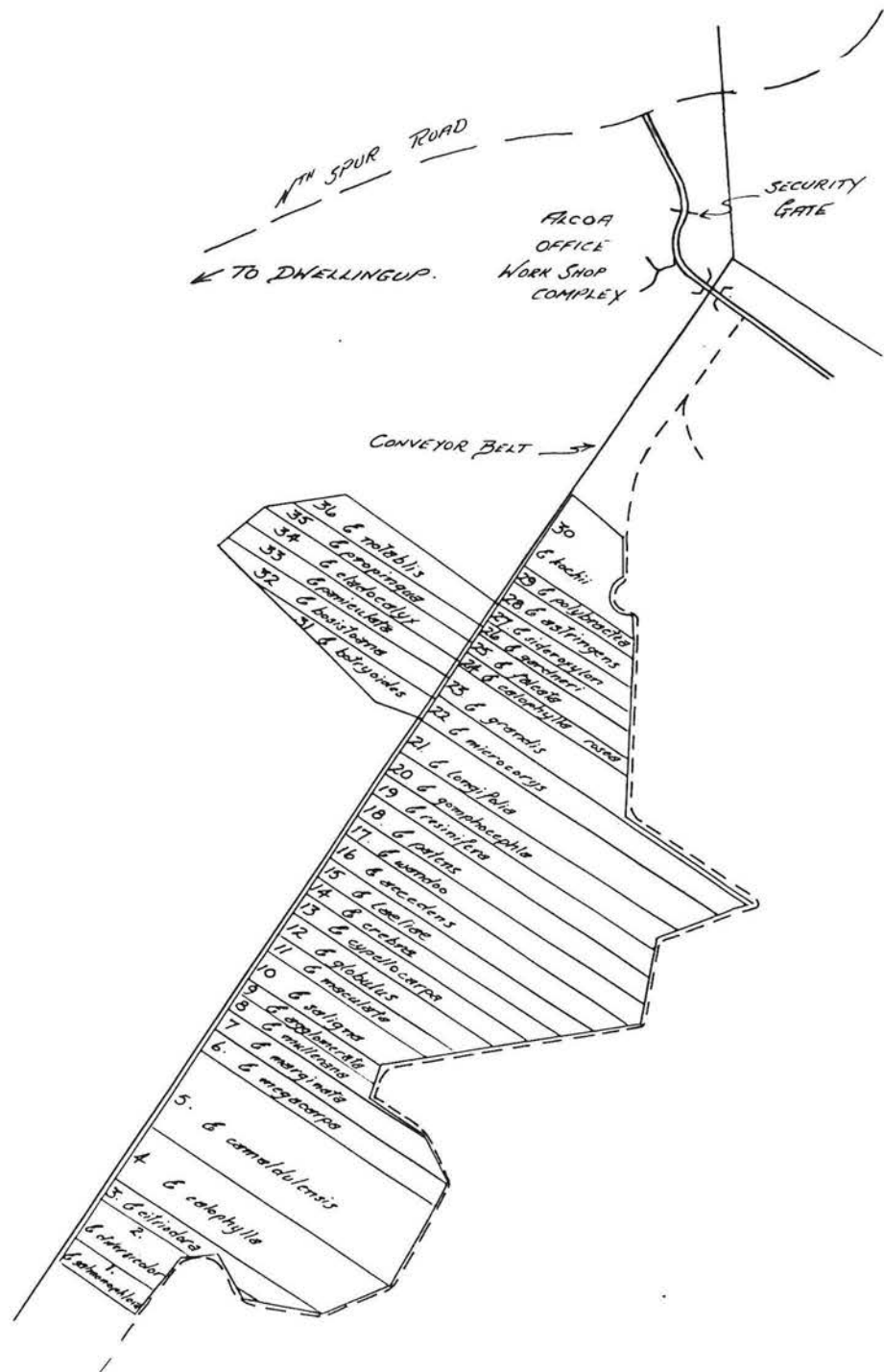


Figure DP-2: Plot Layout of Del Park



HEIGHT (M)

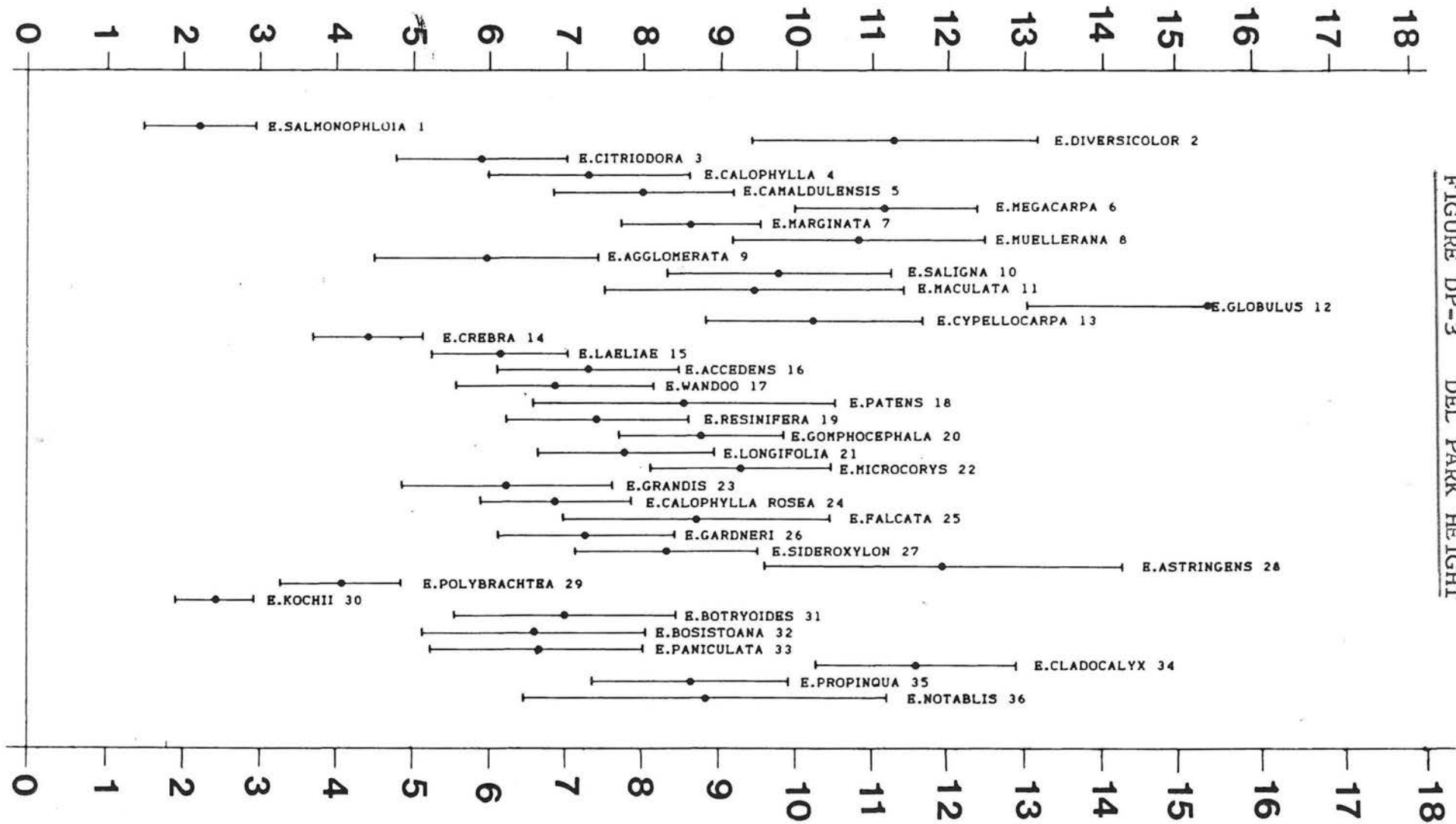


FIGURE DP-3 DEL PARK HEIGHT

DIAMETER (CM)

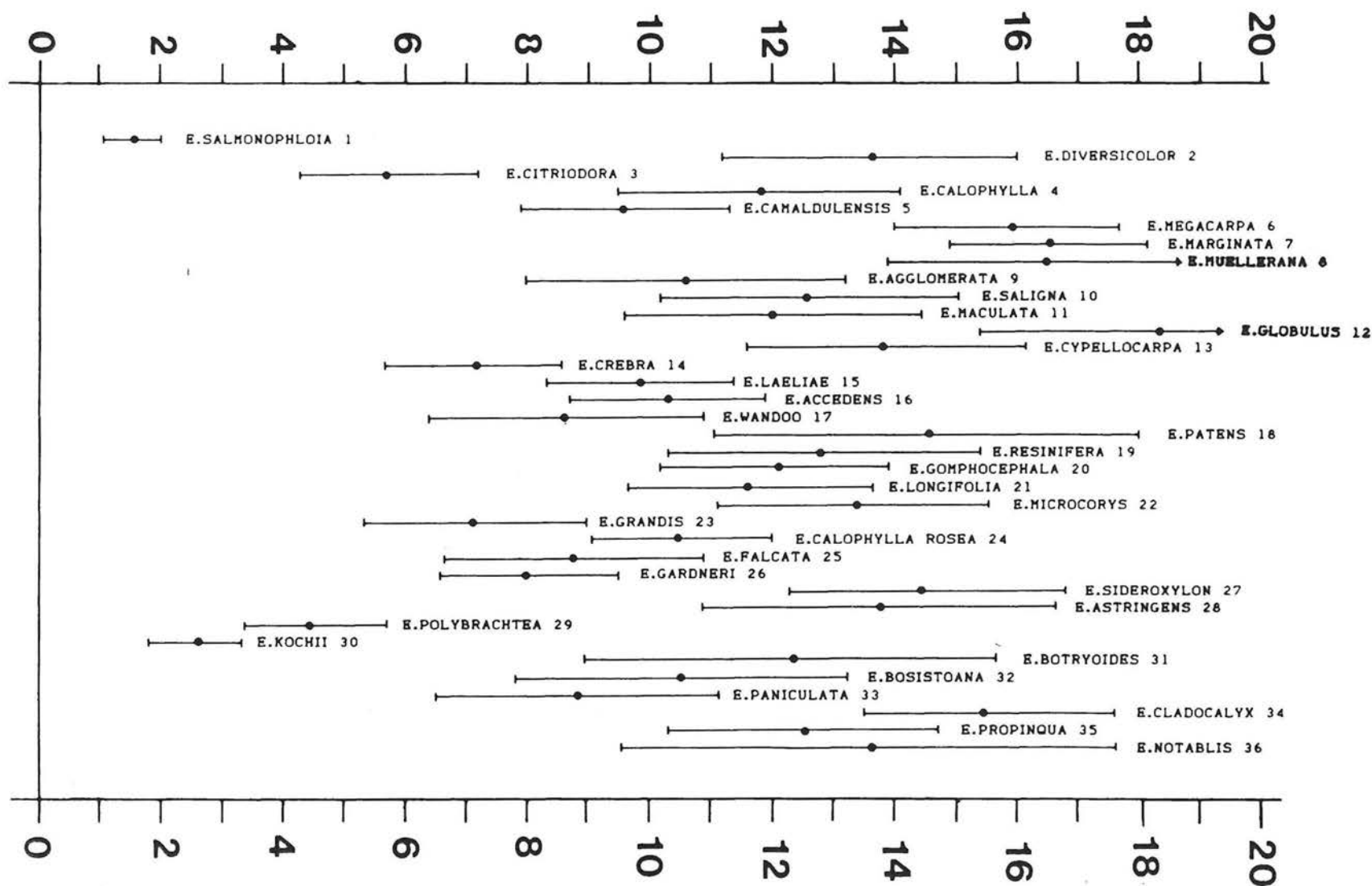


FIGURE DP-4 DEL PARK DIAMETER

FORM (POINTS)

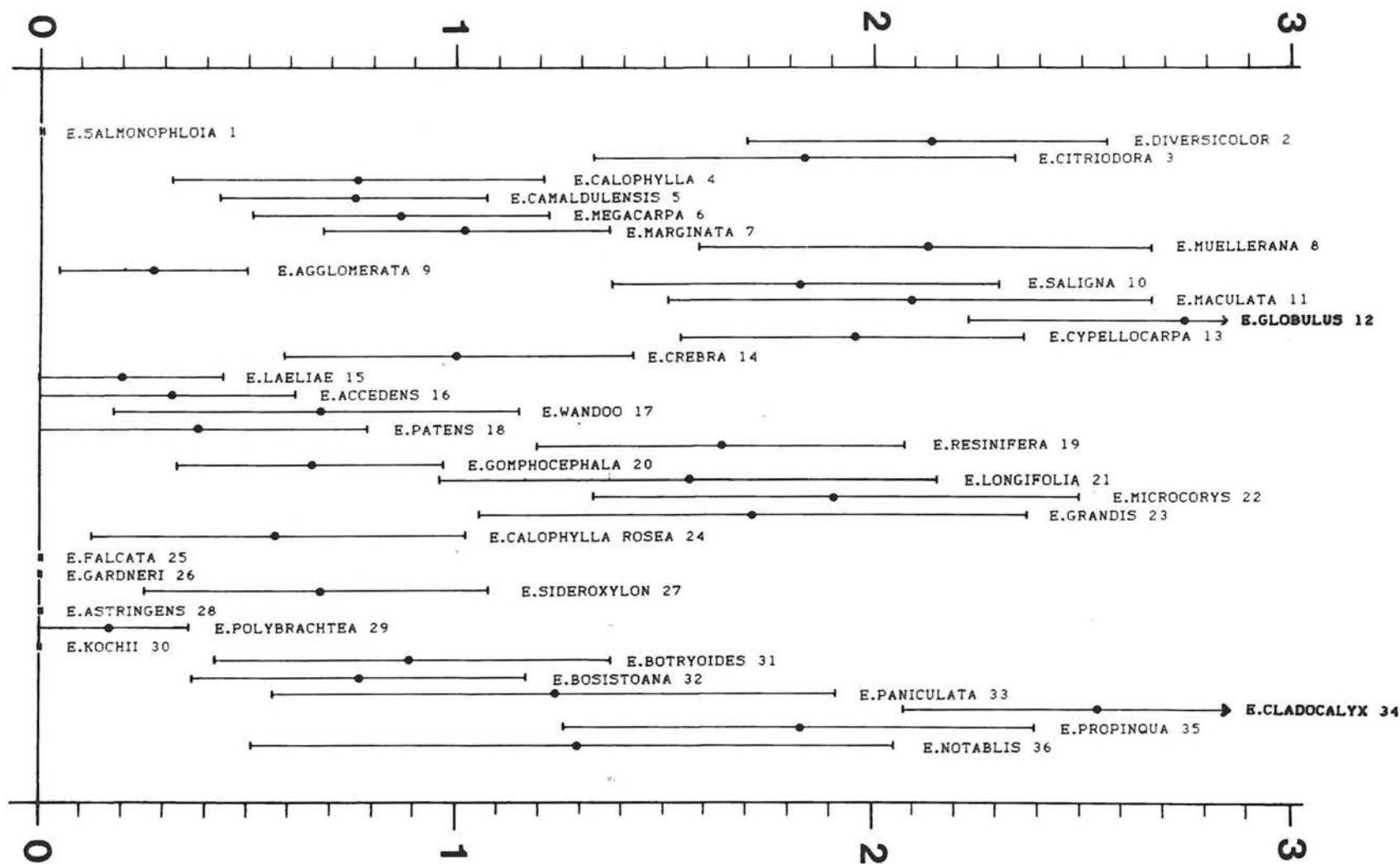


FIGURE DP-5 DEL PARK FORM

VIGOUR (POINTS)

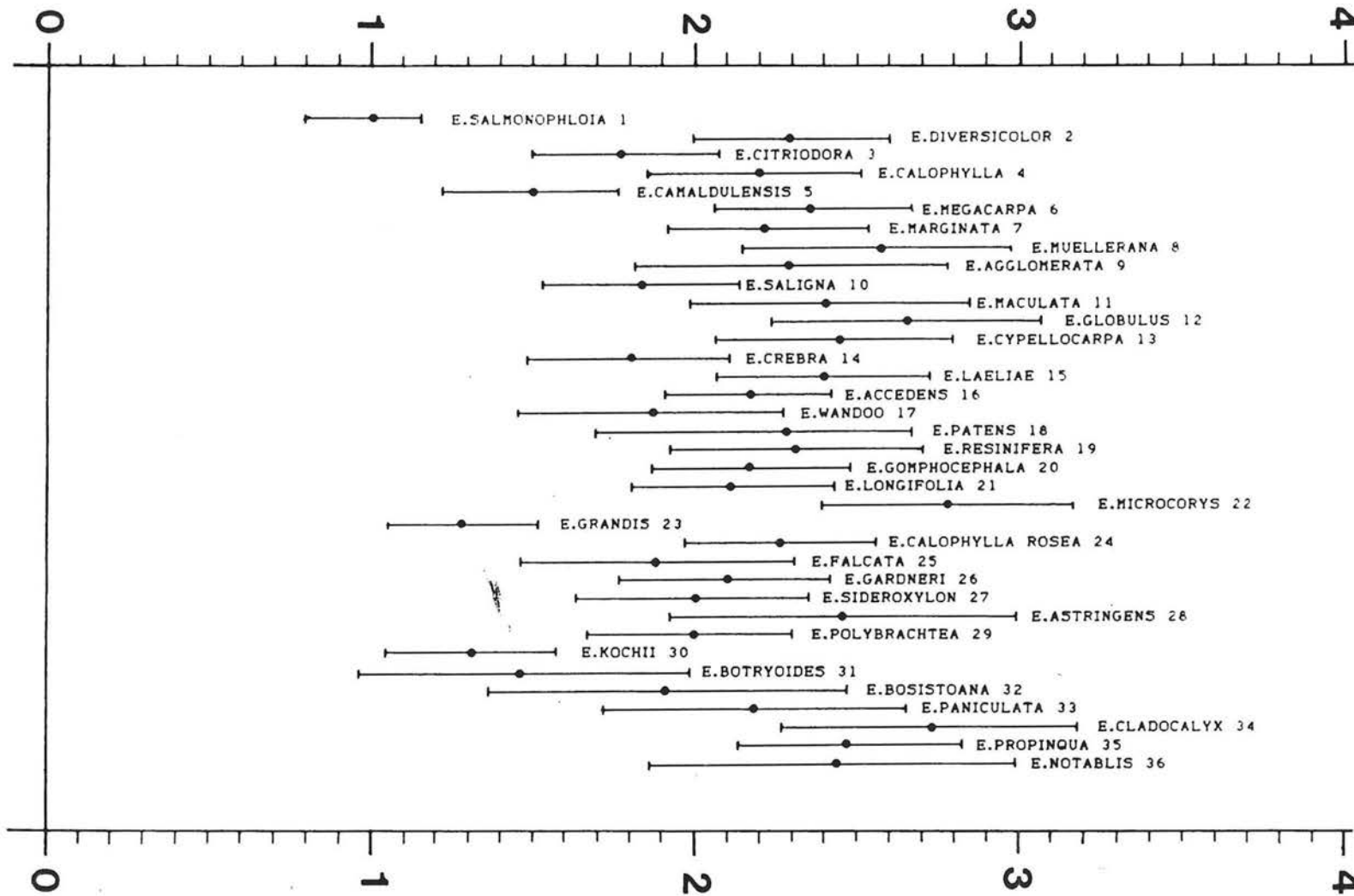


FIGURE DP-6 DEL PARK VIGOUR

FIGURE DP-7 DEL PARK SURVIVAL

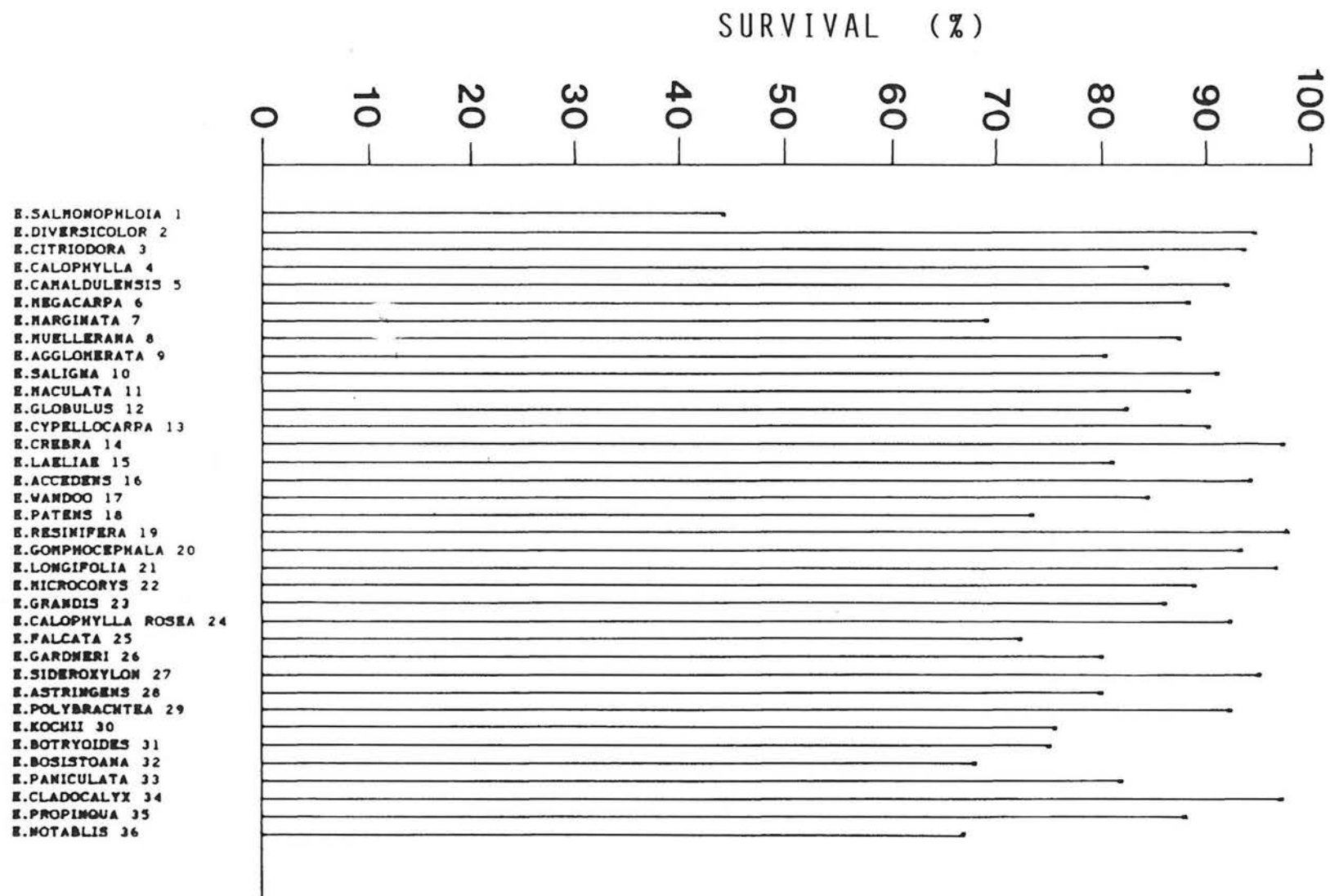


FIGURE DP-8

GRAPH OF RATING (PLOTS RANKED IN ORDER)

DEL PARK

(THIS IS NOT CORRECT DATA...
SHOULD BE SEVERAL, NOT
(RANKED))

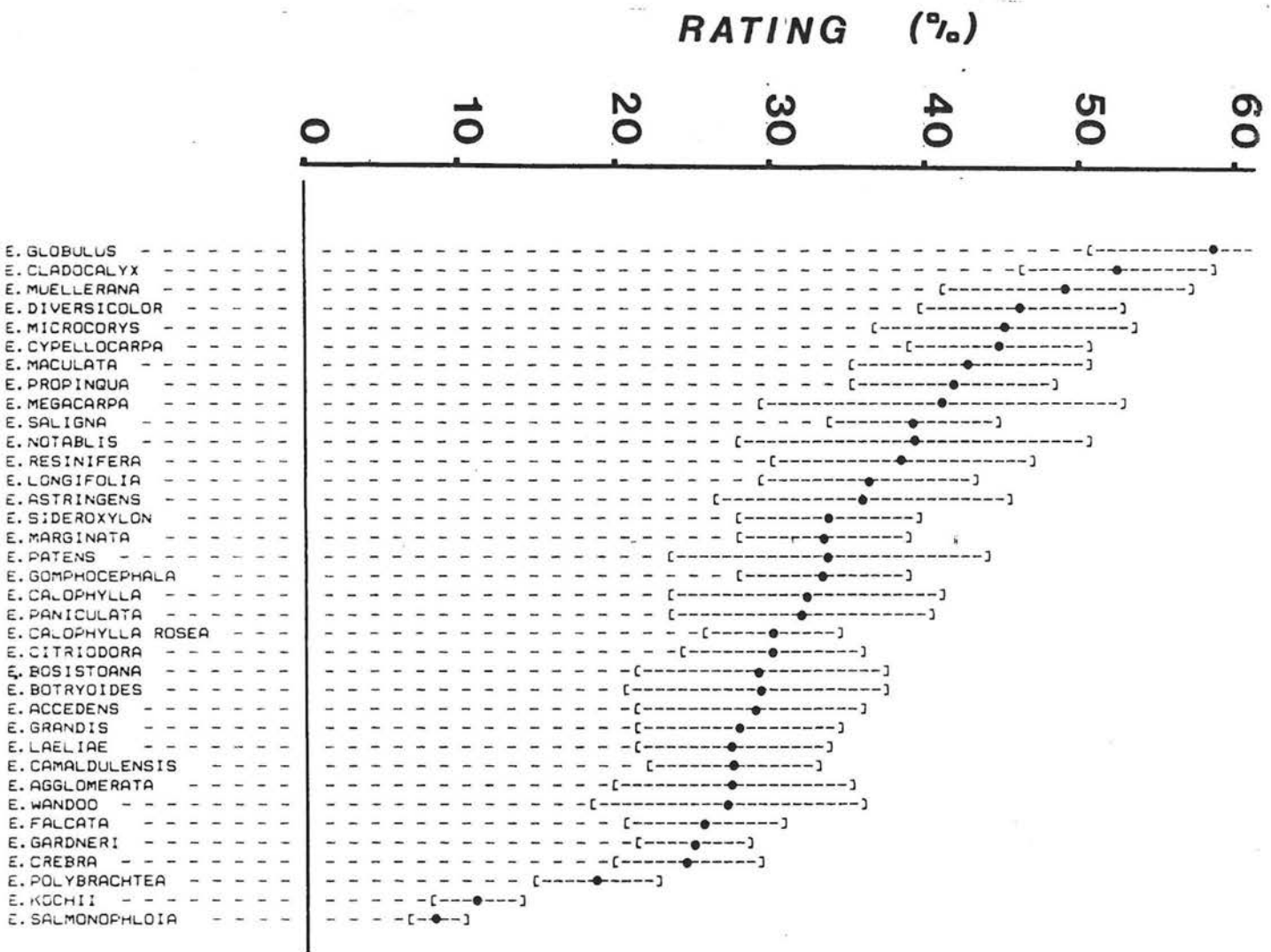


TABLE DP-3

PLOT BY PLOT TABLE OF RESULTS
-MEANS AND 95% CONFIDENCE INTERVALS-

		<u>-MEANS AND 95% CONFIDENCE INTERVALS-</u>																			
PLOT NO	SPECIES & SEEDLOT	ARB SURVIVS (%)	B S	HEIGHT			DIAMETER			FORM			VIGOUR			RATING					
				CU	YOU	X	CU	YOU	X	CU	YOU	X	CU	YOU	X	CU	YOU	X			
1	E. SALMONOPHLOIA	DP	44	-	2.97	1.54	2.25	2.0	1.1	1.6	0.00	0.00	0.00	1.18	0.82	1.00	12.1	7.9	10.0		
2	E. DIVERSICOLOR	DP	95	Y	13.19	9.51	11.35	16.0	11.2	13.6	2.55	1.71	2.13	2.60	2.00	2.30	60.1	45.3	52.7		
3	E. CITRIDDORA	DP	94	-	7.04	4.83	5.94	7.2	4.3	5.7	2.34	1.33	1.83	2.07	1.51	1.79	40.9	28.0	34.5		
4	E. CALOPHYLLA	DP	84	Y	6.65	6.05	7.33	14.1	9.5	11.8	1.21	0.32	0.76	2.52	1.86	2.19	47.1	27.0	37.0		
5	E. CAMALDULENSIS	DP	92	-	9.23	6.89	8.06	11.3	7.9	9.6	1.07	0.43	0.75	1.77	1.23	1.50	37.6	25.5	31.6		
6	E. MEGACARPA	DP	66	-	12.42	10.07	11.24	17.7	14.0	15.9	1.22	0.51	0.85	2.66	2.07	2.36	50.0	34.0	47.0		
7	E. MARGINATA	7 DP	69	-	9.57	7.76	8.68	18.1	14.9	16.5	1.37	0.66	1.02	2.54	1.92	2.23	44.7	32.3	38.5		
8	E. MUELLERANA	DP	87	-	12.49	9.23	10.86	19.3	13.9	16.6	2.67	1.59	2.13	2.98	2.16	2.57	55.5	46.7	56.1		
9	E. AGGLOMERATA	DP	80	-	7.43	4.54	5.99	13.2	8.0	10.6	0.50-0.10	0.20	2.78	1.82	2.30	40.5	22.6	31.6			
10	E. SALIGNA	DP	91	-	11.29	8.41	9.85	13.0	10.2	12.6	2.30	1.37	1.83	2.13	1.54	1.83	51.5	36.9	45.2		
11	E. MACULATA	DP	86	-	11.46	7.57	9.51	14.4	9.6	12.0	2.67	1.81	2.09	2.83	1.99	2.41	58.3	40.8	49.5		
12	E. GLOBULUS	DP	82	Y	17.74	13.09	15.41	21.3	15.4	18.3	3.27	2.23	2.75	3.07	2.23	2.65	78.1	57.5	67.6		
13	E. CYPELLOCARPA	DP	90	-	11.68	8.68	10.28	16.1	11.6	13.8	2.37	1.54	1.96	2.80	2.07	2.43	58.3	44.4	51.4		
14	E. CREBRA	DP	97	-	5.18	3.77	4.47	8.6	5.7	7.1	1.42	0.58	1.00	2.11	1.49	1.80	33.9	23.1	28.5		
15	E. LAELIAE	DP	81	Y	7.05	5.30	6.18	11.3	8.3	9.8	0.43-0.03	0.20	2.72	2.08	2.40	38.6	24.7	31.6			
16	E. ACCEDENS	DP	94	Y	8.49	6.17	7.33	11.9	8.7	10.3	0.61	0.03	0.32	2.41	1.91	2.16	41.1	24.5	32.7		
17	E. WANDOO	DP	84	-	8.18	5.63	6.90	10.9	6.4	8.6	1.13	0.18	0.67	2.27	1.46	1.87	41.2	21.0	31.1		
18	E. PATENS	DP	73	-	10.57	6.62	8.60	16.0	11.1	14.6	0.78-0.03	0.38	2.68	1.70	2.19	50.0	26.9	38.4			
19	E. RESINIFERA	DP	98	Y	8.63	6.28	7.45	15.3	10.3	12.8	2.08	1.20	1.64	2.70	1.94	2.32	54.1	34.4	44.2		
20	E. GOMPHOCEPHALA	DP	93	Y	5.87	7.76	8.82	13.9	10.2	12.1	0.97	0.33	0.63	2.46	1.87	2.17	44.5	31.9	38.2		
21	E. LONGIFOLIA	DP	97	-	8.97	6.68	7.82	13.6	9.7	11.6	2.16	0.86	1.56	2.43	1.81	2.12	49.9	34.1	42.0		
22	E. MICRODORYS	DP	89	Y	10.49	8.19	9.34	15.5	11.2	13.3	2.50	1.33	1.91	3.17	2.40	2.78	60.9	42.4	51.7		
23	E. GRANDIS	DP	66	Y	7.65	4.93	6.25	8.9	5.3	7.1	2.37	1.06	1.71	1.92	1.05	1.29	39.3	24.8	32.0		
24	E. CALOPHYLLA ROSEA	DP	92	Y	7.88	5.93	6.90	12.0	9.1	10.5	1.01	0.12	0.57	2.58	1.97	2.26	39.7	29.5	34.6		
25	E. FALCATA	DP	72	-	10.50	7.01	8.75	10.9	6.7	8.8	0.00	0.00	0.00	2.31	1.45	1.68	35.4	23.8	29.6		
26	E. BARDNERI	DP	80	-	8.43	6.27	7.35	9.5	6.6	8.1	0.00	0.00	0.00	2.42	1.78	2.10	32.6	24.5	28.6		
27	E. SIDEROXYLON	DP	95	-	9.54	7.21	8.38	16.6	12.3	14.5	1.08	0.25	0.67	2.36	1.64	2.00	45.4	32.0	38.7		
28	E. ASTRINGENS	DP	80	Y	14.19	9.61	11.90	16.6	10.9	13.7	0.00	0.00	0.00	2.99	1.92	2.45	52.2	30.3	41.3		
29	E. POLYBACHTER	DP	92	-	4.88	3.33	4.10	5.6	3.4	4.3	0.36-0.03	0.17	2.31	1.69	2.00	26.4	17.4	21.9			
30	E. KOCHII	DP	76	-	2.97	1.93	2.46	3.3	1.8	2.6	0.00	0.00	0.00	1.57	1.06	1.32	16.6	9.3	12.9		
31	E. BOTRYOIDES	DP	75	Y	8.46	5.99	7.02	15.7	9.0	12.3	1.37	0.42	0.89	1.98	0.97	1.47	43.2	23.5	33.3		
32	E. BOSISTORNA	DP	68	Y	8.06	5.16	6.61	13.2	7.8	10.5	1.17	0.37	0.77	2.47	1.38	1.92	42.6	24.2	33.4		
33	E. PANICULATA	DP	82	Y	8.02	5.27	6.64	11.1	6.5	8.8	1.91	0.56	1.24	2.64	1.72	2.18	46.2	26.9	36.5		
34	E. CLADOCALYX	DP	97	Y	12.96	10.36	11.66	17.6	13.5	15.5	2.99	2.08	2.54	3.16	2.26	2.73	67.0	52.7	59.8		
35	E. PROPINQUA	DP	86	Y	9.97	7.41	8.69	14.7	10.3	12.5	2.39	1.26	1.63	2.82	2.13	2.46	55.2	40.2	47.7		
36	E. NOTABILIS	DP	67	-	11.26	6.54	8.90	17.6	9.5	13.6	2.05	0.52	1.29	2.99	1.87	2.43	56.2	31.3	45.1		