

MARRI PROVENANCE TRIALS - CLARKE ROAD, HARVEY

by A. J. HART

INTRODUCTION:

With further reliance tending to be placed on the resistance of marri (Eucalyptus calophylla) to dieback fungus to maintain adequate canopy cover in such areas, a need was felt to check the possibility of some provenances of the species having greater suitability than others for this purpose.

Accordingly, seven (7) provenances of the species were collected from areas ranging from Julimar forest in the north, to Crowea block in Pemberton division.

Included with these is E. haemotoxylon (mountain marri) ex North Dandalup, at the bottom of the Darling Scarp.

This note is to acquaint those interested with the fact, so that they can be inspected if desired.

SITE LOCATION AND PLOT DESIGN PREPARATION

LOCATION: A real grave yard area was selected to establish the trial. Soils are predominantly black gravel with whitish sand with large laterite rocks on the upper slope and inclusion of yellower sands on lower slopes. The whole area is an upland typified with a shallow drainage gully at the bottom of a rocky ridge.

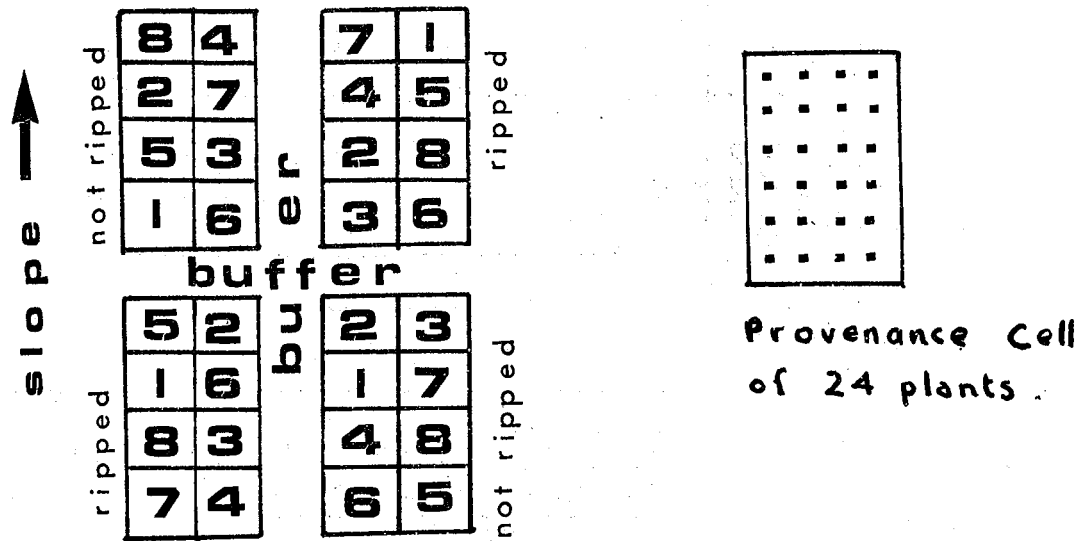
Rainfall is estimated at around 1250mm.

The site is located adjacent to the south side of Clarke Road (as per sketch). Map reference Harvey '80' DQ 61 4/9.

PLOT DESIGN: The design of the plot was prepared by T/O D. Ward as per sketch plan below with 2 replications of ripped and unripped, one on each of lower and upper slope situations for each of the total 8 species included in the trial.

Species included were as follows:-

- Plot No. 1 - Tree 1 Crowea
- 2 - West Manjimup
- 3 - Julimar S.F. (large seed)
- 4 - Willowdale
- 5 - Collie
- 6 - Chalk Block, Harvey
- 7 - Manjimup Reserve
- 8 - E. haemotoxylon ex North Dandalup



PREPARATION:

The site was prepared by removing logs from the site with D7 dozer and ripped plots ripped using a single ripper on a D7 to a depth of 1 metre.

Seedlings raised at Hamel were planted either into ripped lines or onto bare unripped but disturbed soil.

Fertilizing was carried out at P + 14 days with 100 gms of "Agras" 12:52.

SURVIVAL AT 6 MONTHS:

Counts in December, 1976 indicated no significant interactions, apart from that with Chalk Block, which exhibited worse survival in downhill ripped site at the 0.05% level.

The provenance from Manjimup Reserve at the .01% level showed worse survival upslope than downslope.

BASIC DATA OF PROVENANCES:

Listed in Table 2 are basic details of the provenances selected except for that of Willowdale provenance which is not available.

The plot layout and details should enable those interested to check the progress of this trial.

At present it is far from encouraging, probably due to the rather severe summer experienced following planting.

It is of interest also, that a provenance was established in Bussell's Arboretum Collie, which was also not inspiring when last inspected.

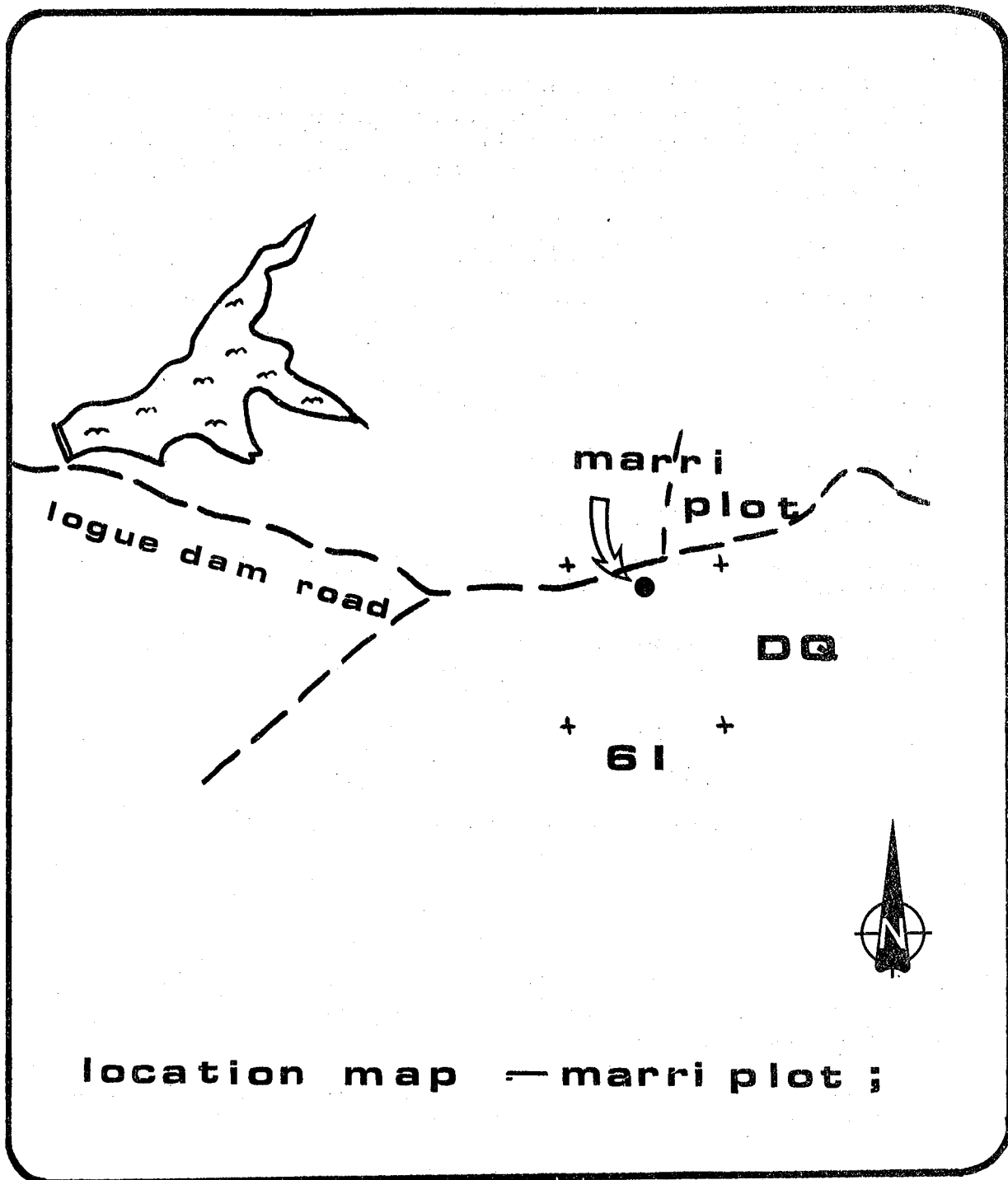
ACKNOWLEDGEMENTS:

The assistance of T/O D. Ward in provision of a design and statistical analysis of data, is greatly appreciated and Harvey personnel, in setting up this trial.

MARRI (EUCALYPTUS CALOPHYLLA) PROVENANCES TRIAL - HARVEY 1976
 INCLUDING EUCALYPTUS HAEMOTOXYLON (MOUNTAIN MARRI)

SAMPLE NO.	ORIGIN	MAP REFERENCE	WT OF SEED VESSELS SAMPLED	WT OF SEED EXTRACTED	TRASH WT.	TRASH AS % OF SEED WT.	NO. SEED PER GRAM	COLOR OF TRASH	CAPSULE SIZE	ESTD RAINFALL (mm)	LINEAR DISTANCE TO KNOWN MOUNTAIN MARRI	TO TRIAL PLOT
1	JULIMAR S.F. (a) Large	LF 77	970.00	310.00	155gm	50.0	5.32	Pale straw coloured	Large (17.3 gm/vessel)	500-600	100km	✓
	(b) Medium		N/avail	454.00	262gm	58.0	4.70	" " (Lge pces)	Medium			
2	NTH DANDALUP (Mtn marri)	CG 57	9.1 N/Avail	56	N/Av.	N/Av.	23.5	Reddish color	Small (Typical)	1000	-	✓
3	HARVEY (Chalk Block Block)	DU 76	2.6 N/Avail	N/Av.	N/Av.	N/Av.	14.0	Unknown	Small	875	30km	✓
4	COLLIE	ET 56	4.7 900	18	10	55.5	12.7	Reddish colored	Small (7.2 gm/vessel)	1150	10km	✓
5	MANJIMUP-(1) -PEMBERTON	HV 65	3.9 840	9.72	-	-	27.58	Pale orange/red	8.8gm/vessel)	1300	110km	✓
	(2) (Crow block)		1.8 872	27.40	-	-	12.21	Dark orange/red	9.7gm/vessel)		110km	✓
	(3)	West Mjp	N/Avail	N/Av.	-	-	14.72	N/Av.			80km	✓

NOTE: Details of seed vessels etc., for WILLOWDALE and MANJIMUP RESERVE provenances not available.



location map — marri plot ;