

## TYRE TREE GUARDS FOR FARM TREES

by N. Caporn

Extensive plantings of over 100 species have been established in Helms Arboretum 15 km north of Esperance. This is a notorious area for rabbits and considered by the A.P.B. to be the worst in the State. All recent plantings have been surrounded by rabbit proof fencing. Since 1973 various attempts were made to establish unprotected avenue plantings adjacent to the main entrance road without success. The road runs between pasture and mature Pinus pinaster and was subject to daily migrations of rabbits, kangaroos and occasionally wallabies, looking for a feed.

The rabbit population was controlled to some extent by trails of 1080 in oats but this was insufficient to avoid total losses.

Protection by conventional means was extremely expensive, estimated at about \$5.00 a tree in an avenue configuration, so the idea of using old tyres was borrowed from Tasmanian agroforesters.

A total of 1 km of double row avenue was planted in June, 1980, using Eucalyptus gomphocephala (tuart) and Euc. cornuta (yate) in one row on which the trial was carried out and in the adjacent row Euc. rudis, Euc. spathulata and Euc. melliodora.

Agras No 1 was applied at the rate of 100gms/tree in late July.

Treatments: (1) No tyre (2) 1 tyre and (3) 2 tyres.

The trial was evaluated in June 1981.

Treatment:	(1) Nil	Survival	35%	$\bar{X}$ Height	0.51 m
	(2) 1 tyre	"	64%	"	0.78 m
	(3) 2 tyres	"	89%	"	0.73 m

The survival proportions show clear differences (D. Ward):

- (1) 21-49%
- (2) 49-77%
- (3) 80-98%

Discussion:

The number of tyres had a most significant effect on survival, results clearly show that one tyre is insufficient - perhaps the bunnies can climb over it or the tree is more obvious to browsing kangaroos.

It appears that once the one tyre trees escape early predation and are established there is no difference in growth rate. The tyres may also help by giving protection from drying winds.

The untreated row of Eucalyptus rudis, spathulata and meliiodora was completely wiped out and this may indicate that some species are more attractive to predators.

The only costs involved were the carting to site, and labour to place the tyres in position. The tyres are normally burnt and were, in the main, steel radials which cannot be recycled and, in fact, disposal presents a problem to the tyre industry, especially in the city where their burning is prohibited.