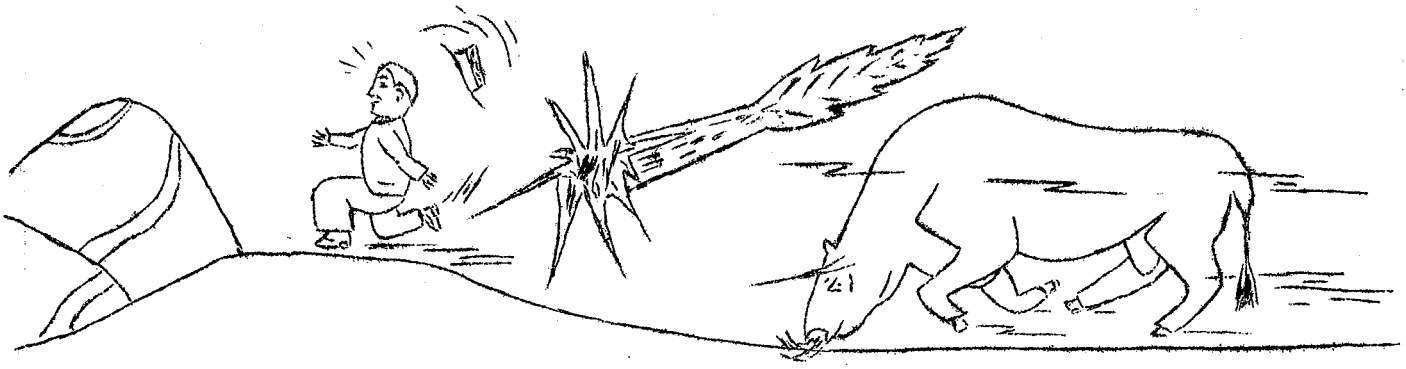

EUCALYPTUS CALOPHYLLA - THE TREE OF THE FUTURE

by D.H. Perry

Most of us tend to look upon the ubiquitous Marri as something of a nuisance, a species which does its level best to grow luxuriantly in those places where we are doing our best to grow something else, Jarrah for instance. Prior to hormone sprays it was a mighty difficult tree to discourage. It has occurred to me, that in view of such tenacity, we should change our ideas and reorient our thinking about this tree. We have a new tool at our disposal these days, which if we care to use it, could change the whole situation with regard to Marri, making of it a highly desirable and sought after tree. I refer of course to tree breeding.

How many of us have paused to consider the good qualities of this species, of which the following come to mind:-

1. Very adaptable as regards soil requirements.
2. More drought resistant than Jarrah.
3. Relatively easy to establish.
4. Very fire resistant.
5. Produces a timber that is strong, durable, easy to work and with an attractive grain, and seasons with a minimum of degrade.
6. A producer of top quality honey in quantity.
7. A rapid rate of growth.
8. Coppices freely.

There may be some more but that will do to go on with. Potentially this is a most valuable tree, but unfortunately to offset the qualities outlined above, the tree contains an excessive number of gum pockets and veins which render it uneconomic to mill. Some milling of this species has taken place in the past in favorable localities and is perhaps continuing. As hardwood becomes scarcer and more expensive its use will increase despite its disabilities.

Talking of milling Marri reminds me of the occasion some years ago when we were milling some logs of this species at Gnangara. I had just driven up to the mill to see George Reynolds, when he came staggering out, covered from head to foot with what at first glance looked like blood, and clutching what I thought was the stump of his arm. Closer inspection revealed the fact that the arm was still in place and all the blood was Marri kino. He had just cut through a large pocket of watery gum and the saw had thrown it all over him. Looking out he saw Dick Perry pull up and immediately thought there was a chance he could throw a scare into him. How right he was!

Milling operations have shown that Marri trees do occur which are almost entirely free of gum veins, and it is highly likely that this factor is under genetic control. In order to determine this point we will need to find some twenty or thirty plus trees with top vigor, high quality boles and an absolute minimum of gum defects. It should be possible with cooperation from Divisional Officers, to locate these trees during routine marking operations. Test cores could be extracted later for analysis, and in this connection I understand that C.K. Pawsey of South Australia is developing a power driven gadget for extracting 2" diameter cores. Another suggestion is that if milling of Marri is taking place at some centres and a log of outstandingly high quality is felled and milled, if the stump could be located and marked, scions for grafting could be obtained in due course from the resulting coppice.

Once the plus phenotypes have been located the rest is just a matter of time and perseverance. At present our breeding station is in over its ears with Pinus pinaster and Pinus radiata, but at least a start could be made to select the trees on which to base a breeding programme. Professor Pryor of the National University at Canberra has done a lot of the ground work in developing the techniques to enable the grafting and pollinating of Eucalypts to be carried out, so what are we waiting for?

Any comments from anyone that can be heard over the cries of auguish coming from the staff of our breeding station, would be appreciated.

****