

INTERIM REPORT ON RESULTS OF DIRECT SEEDING TRIALS
WITH EUCALYPTUS WANDOO IN STATE FOREST, MUNDARING (1981)

by A.J. Hart

Results so far of direct sowings made in Eucalyptus wandoo forest along Helena Road in Mundaring division are shown in the following tables.

These include preliminary tests on pellet formulations prepared and carried out by T/A P. Hewett.

Direct seeding was carried out on 16 July, 1981, using the M.F. 165 and seeder, mounted on the M.F. 2-disc plow.

Moisture content of soils at the time of sowing was:

1. Upper slope : 17.12% (red brown gritty loam)
2. Mid slope : 21.22% (brown yellow loam)

RESULTS

A. Laboratory Tests on Pellet Mixes

The efficiency and suitability of the pelleting medium was approached from two aspects - firstly, the relative germination percentage for each mix (using Eucalyptus falcata). Secondly, a measure of comparative solubility was established by timing length of time to dissolve in two solutions, viz: water at N.F.P. and water at 30°C using blotting paper to measure dispersal of pellet materials during breakdown. The results obtained are shown in Tables 1 and 2; graphs 1-3 also refer.

Mixes tested are shown in Table 3.

B. Field Trials (Helena Road - Mundaring - S.F. Eucalyptus wandoo).

Interim results of the field trial at Mundaring indicate that: (see also Tables 4 and 5).

1. Placement of fertilizer accurately, significantly improves strike rate of sowings and subsequent development.
2. Apart from the pellet obtained from Forestry Supplies, Canberra, the pellet of Mix No 6 is giving better results so far.
3. All results have been impaired due to foraging and damage by kangaroos and possibly rabbits.
4. At present there seems little difference in results from the two topographical positions.
5. Sowing on a downhill sod placement is beneficial.

CONCLUSIONS

1. Accuracy in placement of fertilizer is essential to successful establishment.
2. Mix No 6 is the best local pellet formulation.
3. Faunal damage and grazing has had an unknown impact on establishment results to date.