HIGHLIGHTS OF EASTERN STATES - NURSERIES INSPECTION

by A.J. Hart

The following brief notes are a summarized form of the main features of a recent visit to selected Eastern States nurseries by the writer in August of 1967.

N.S.W.

Commercial nurseries of very high standard; electronic eye control in mass production methods of seedling production of flowers for resale. U.C. system throughout and seed sterilisation before sowing.

Government and semi-governmental nurseries also of high standard but largely manual labour including semi-incapacitated. Muswellbrook the best seen in the N.S.W. Forest Commission output, gradually increasing,at present 60,000 tubes per season. Methyl bromide sterilization of soil.

A.C.T.

Drought has precluded plantings for four years in a row and nursery problems include weeds and soil pathogen control. Yarralumla nursery has been upgraded as regards procedures since 1964 with U.C. being introduced more fully and glass house misting propagation methods more widely used. Mr. Peter Satchell, a knowledgeable and capable technician, has some new ideas forthcoming.

VICTORIA

Commercial nurseries the best in Australia without doubt as regards hygiene. Commission nurseries about the same standard as our own but are looking to glass houses for further progress in the introduction of tip grafts and clone propagation in glass houses of elite tree material.

A.P.M. has moved into a new nursery site selection in "sterile" areas away from weeds and Rostile pathogens in remote, poorer class forest areas. Soil sterilization will be used with aerial fertilizing and mechanized weed control if required and mechanical lifting and pruning.

S.A.

Progress in Departmental nurseries is looked for in flying nurseries in the second Valley area innoculated with pine sawdust to overcome pathogens, weeds and wild life. Top pruning practiced in P. radiata and P. pinaster which appalled me! Old nurseries similar to Hamel have similar probelms but are accentuated by salt problems in water supplies, watering for 4 - 5 hours being necessary to leach out toxic salts.

Commercial nurseries equal to any seen in the Eastern States but are troubled with salt in water and are trying to get bore water at least of uniform salinity. Mist propagation also used with economic results.

Summaries of Part 1. and Part 11 of the report with recommendations are included herewith.

Summary of Part 1.

1. The concept of plant growth under U.C. or controlled environment conditions is outlined.
2. Apparent principles of methods and organisation in nurseries is outlined in association with (1) above.
3. Brief resume given of current practices in container seed treatment, glass houses, provenances of Euc. camaldulensis, fertilizer management, salinity problems and large scale field nurseries operations.

Summary of Part 11.

1. Current practices in fungicide and pathogen control in E.S. nurseries is outlined.
2. Weed control problems are outlined with means of control.
3. Watering systems currently being used in some E.S. nurseries are outlined.
4. Some pathological and general notes on mycorrhiza are included with a method of composting sawdust.
5. Species worthy of trial for hedge rows and salt tolerance are included.
6. Horticultural courses available are commented on.
7. A comparison of E.S. nurseries with W.A. standards is made.

Recommendations.

1. Precincts of the Hamel pottery shed, paths and standard areas be sealed with a bituminous compound.
2. Further details be obtained to guide the programmed introduction of a steam sterilization unit and glasshouse at this nursery, purchase being subject to inspection by Plant Engineers.
3. Technical details and costs be obtained with a view to procuring a soil mixer - blending machine.
4. Gradual replacement of earthenware pots be carried out with suitable types of disposable plastic pots; this is rather dependent on current tests and implementation of recommendations.
5. If plantation policy warrants the expansion, further investigations be made with a view to procuring the "Pottall" machine for filling collapsible plastic bags and tubes; otherwise the current method be continued.
6. The Department pay tuition and correspondence fees of any nursery supervisor prepared to complete the courses as set in paragraph 3 page 18 of the report.
7. Further experiments be carried out in the use of soil sterilants and equipment to perform this task efficiently.
8. Further trials with plastic containers be carried out to determine the most suitable pot for local purposes.
9. The medium sized methyl bromide gas dispenser be obtained to obviate risk of injury with current practices and improve quantities of soil which can be readily fumigated.
10. Inspection and procurement if considered suitable of "Perma-Rain" double barrelled filter for installation in the water mains reticulation of the nursery.

For anyone interested, this complete report is to be lodged in the Library.

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