

# HORTICULTURAL RESEARCH AND DEVELOPMENT CORPORATION



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DEVELOPMENT CORPORATION

The Research Arm of the  
Australian Horticultural Industries

## FINAL REPORT

### Nursery Irrigation, Drainage and Recycling

NY312

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December 1994

**Project title:** NURSERY IRRIGATION, DRAINAGE AND RECYCLING

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**Objective of project:** To publish and distribute a book on irrigation and drainage of containerised nursery plants.

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**Commencement date:** 1 January 1994

**Completion date:** 1 July 1994

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**Voluntary contributors:** Nursery Industry Association of Australia  
Suite 402, 16/18 Cambridge St  
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**External funding:**

Year	HRDC contribution	Industry contribution	Total
1994	\$12500	\$12500	\$25000

## SUMMARY

The nursery industry in Australia, which is valued at \$2.5 billion, depends extensively on irrigation at both the production and retail level. If not managed effectively irrigation water can cause runoff, which may contain undesirable levels of nutrients and pesticides. If uncontrolled, this runoff can have adverse effects on the surrounding environment. To prevent these adverse effects from irrigating containerised nursery plants requires a thorough understanding of irrigation and drainage techniques, and acceptable methods of reuse or disposal of runoff water.

The aim of this project was to publish a reference book for the nursery industry to promote understanding of irrigation, drainage and water recycling. The text of this book was prepared by NSW Agriculture officers with the help of nursery operators. Until its production there were no similar publications available, either in Australia or internationally.

This 164-page publication is a practical reference to irrigation, drainage and water cycling in containerised plant nurseries. It is a compilation of information on topics that are relevant to nursery operators and others involved in managing water in plant nurseries. As such, this publication is the foundation in NSW of an extension project that will focus on improving water management in plant nurseries.

Two thousand copies of *Managing Water in Plant Nurseries* have been printed and are being distributed by both Australian Nursery Industry Association and NSW Agriculture, as a way of reaching as wide a market as possible. The price to Nursery Industry Association members is \$42 and to other purchasers, \$60. Wholesaler and bulk discounts are also available and special offers will be made to encourage sales (see attached offer sent out to all nursery operators in NSW and printed in *North Coast Nursery File*).

## RECOMMENDATIONS

### **Extension/adoption by industry of research findings**

An indication of this is book sales since it was launched at the National Nursery Industry Conference in February 1994. The Australian Nursery Industry Association had exclusive marketing rights to the publication until August 1994, and as part of the funding agreement took 780 copies to sell and recoup its investment and that of HRDC. Over 400 copies have been sold to date by ANIA.

The book has also been available through NSW Agriculture and around 100 copies have been sold. An offer has recently gone out to all registered nursery operators in NSW and enquiries to sell it have come from wholesalers and retailers in Tasmania, Victoria and Queensland. As well, a commercial horticulture magazine is selling the book in New Zealand and there has been positive feedback about it from the Irrigation Association of Australia, University of Queensland (Gatton Campus) and NSW TAFE.

### **Directions for future activities supported by HRDC**

A workshop program, called WATERWORK, is being developed by NSW Agriculture with the aim of improving nursery irrigation, drainage and recycling practices. These industry training workshops have been funded by HRDC and Horticultural Stock and Nurseries Act Advisory Committee (Project NY414). The reference text for these workshops will be *Managing Water in Plant Nurseries*.

A pilot workshop has already been held at Windsor, and another is scheduled for February on the north coast. A further eight workshops have been scheduled for 1995-96. A request has also been received to hold a similar workshop in Victoria and to make the workshop material available in Western Australia.

Special  
book offer

# Managing Water in Plant Nurseries



A guide to irrigation,  
drainage and water recycling  
in containerised plant nurseries

- \* \$42 + postage and handling (normal retail \$60)
- \* 163 pages packed with information PLUS detailed photographs and sketches.
- \* Special offer to NSW nursery operators.
- \* Written by experts from NSW Agriculture, and supported by the Horticultural Research and Development Corporation and the Nursery Industry Association of Australia.
- \* Order form on back

## Contents include:

- Nursery irrigation
- Water supply
- Water quality and treatment
- System design
- Potting mixes & their effect on irrigation management
- Plant disease
- Irrigation layouts and systems
- Nursery fertigation
- Misting systems for propagation beds
- Guide to measurements
- Nursery filtration systems
- Typical layouts of sprinklers
- Drainage and recycling runoff
- Operation and maintenance of nursery irrigation systems



NSW Agriculture

‘ The initiators of the publication are to be congratulated... It brings together the expertise of many and an extensive breadth of technical information.

The quality and clarity of the diagrams, tables and photographs (colour) are very good. In conjunction with the high quality of paper and easy-to-read print and layout, it is a very friendly publication. ’

*Geoff Connellan in "Australian Horticulture, May 1994".*



**Managing Water in Plant Nurseries - Special book offer**

Send order form with cheque or postal order to:

Nursery book offer,  
NSW Agriculture  
Wollongbar Agricultural Institute  
Wollongbar NSW 2477

Please send ..... copies to:

Name:

Address:

Phone:

Book cost: \$42  
Postage and handling: \$5 (within NSW only)  
**TOTAL COST: \$47 (make payable to NSW Agriculture)**