



**THE ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE  
EXAMINATIONS NOTICE 1985**

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PURSUANT to the Royal New Zealand Institute of Horticulture Act 1953, the Minister of Agriculture and Fisheries hereby gives the following notice.

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NOTICE

**1. Title and commencement**—(1) This notice may be cited as the Royal New Zealand Institute of Horticulture Examinations Notice 1985.

(2) This notice shall come into force on the day after the date of its notification in the *Gazette*.

**2. Approval of scheme of examination**—The Minister of Agriculture and Fisheries hereby approves the scheme submitted by the Examining Board of the Royal New Zealand Institute of Horticulture Incorporated, with the authority of the said Institute, for the examination of candidates for the Certificate in Horticultural Theory (C.H.T.), set out in the Schedule hereto.

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SCHEDULE

SCHEME FOR THE EXAMINATION OF CANDIDATES FOR THE CERTIFICATE IN  
HORTICULTURAL THEORY (C.H.T.)

1. In this scheme, unless the context otherwise requires,—
  - “Certificate” means the Certificate in Horticultural Theory granted by the Institute:
  - “Examining Board” means the Examining Board of the Royal New Zealand Institute of Horticulture Incorporated:
  - “The Institute” means the Royal New Zealand Institute of Horticulture Incorporated:
  - “Pest” means any mammal, bird, arthropod, mollusc, nematode or other worm, fungus, bacterium, virus or mycoplasma harmful to horticultural plants.

*Award of Certificate in Horticultural Theory*

2. The Institute, on the recommendation of the Examining Board, may issue a Certificate in Horticultural Theory to a candidate who complies with all the conditions and requirements hereinafter prescribed and who passes the examinations hereinafter prescribed.

SCHEDULE—*continued**General Requirements*

3. (1) The examinations shall be open to a candidate who—
- (a) Is a member of the Institute; and
  - (b) Registers with the Institute by the 31st day of May in the year the first examination is to be taken; and
  - (c) Pays such registration fee, not exceeding \$50, as may be prescribed by the Examining Board; and
  - (d) Is aged 15 years or over; and
  - (e) Satisfies the Examining Board that the candidate is competent to proceed with the examinations of the Institute; and
  - (f) Gives written notice to the Examining Board of intention to sit an examination in such manner as the Examining Board may determine not later than the 31st day of July preceding the date fixed for the conduct of the examination. Such notice shall be accompanied by payment of the prescribed fee.
- (2) The Certificate may be awarded only to a candidate who has passed the Institute's examinations for all subjects specified in clause 6 of this scheme.

*Examination Fees*

4. Every candidate for any examination for the Certificate shall pay to the Institute such fee, not exceeding \$50, as the Examining Board may prescribe in respect of each subject the candidate wishes to be examined in.

*Conduct of Examinations*

5. (1) The examinations for the Certificate shall be held in November in each year at such times and at such centres as shall be decided by the Examining Board.

(2) There shall be one examination for each of the subjects specified in clause 6 of this scheme.

(3) Each examination shall be one 3-hour paper.

(4) A candidate may take the examination in more than one of the subjects specified in clause 6 of this scheme when examinations for the Certificate are held.

*Subjects of Examination*

6. The subjects of each examination shall be—

(1) *Horticultural Botany*

Elementary plant classification including botanical nomenclature and plant naming.

Elementary plant morphology and anatomy.

Plant life cycles and life forms (angiosperms, gymnosperms, ferns, mosses, liverworts, biennial, perennial, evergreen, deciduous, herbaceous, woody).

Plant reproduction (asexual, sexual, seed germination, elementary genetics).

Introductory ecological aspects of the plant and its environment.

Requirements of plants for growth and development.

(Note: In this examination a candidate's ability to relate botanical principles to horticulture will be tested.)

SCHEDULE—*continued*(2) *Plant Pests and Disorders*

An elementary knowledge of plant pests.

Identification of important horticultural pests and damage they cause.

Identification of symptoms of common physiological disorders that affect horticultural plants and plant parts.

The safe use of chemicals used for plant protection.

Principles of control of pests and physiological disorders (including biological, chemical, cultural, and quarantine methods where appropriate).

Plant quarantine in New Zealand.

*(Note: In this examination a detailed knowledge of specific pest life cycles is not required.)*

(3) *Soil Properties and Processes*

Soil formation and development.

The major physical, chemical, and biological soil properties of significance to horticultural production.

Soils of New Zealand. *(Note: Candidates will be required to have only an elementary knowledge.)*

(4) *Horticultural Practices*

Safety on horticultural properties.

The scope and location of amenity and commercial horticultural production in New Zealand.

Measures used to improve environmental conditions for the growth of horticultural plants.

Introduction to plant propagation including propagation methods, sexual and asexual propagation, propagation media, and equipment.

Principles of plant pruning and training.

Amenity, orchard, vegetable production, nursery, and floricultural practices throughout the year. *(Note: A detailed knowledge of crop production is not required. However, candidates will be required to demonstrate a general knowledge of the type of work and equipment on different types of horticultural properties.)*

Elementary record keeping including diaries and specimens.

(5) *Plant Classification*

Systematic botany and taxonomy. Horticultural nomenclature and botanical terms used in classification.

Plant identification and the use of simple keys.

A general outline of the classification and diversity of plants with emphasis on important horticultural families. *(Note: Candidates will be required to classify horticultural plants according to a classification system approved by the Examining Board. Candidates will be required to know the general characters of plant families, to have studied one or two examples of each and to be able to refer to some of the more important genera and species cultivated in gardens. Candidates will not be required to have a detailed knowledge of all the characters of each family, but will be required to have a sufficient knowledge to enable them as horticulturists to recognise certain family characters.)*

(6) *Weed Control and Horticultural Chemicals*

Weed identification and weed control principles. Legislation relating to weed control.

Herbicides and their uses.

SCHEDULE—*continued*

Chemicals used for plant protection purposes including formulation, mode of action and use. Legislation governing the storage and use of plant protection chemicals.

(7) *Soil Management*

Soil water management; drainage and irrigation principles. (*Note: A detailed knowledge of specific equipment and installation and operating procedures is not required.*)

Soil and plant nutrient testing.

Fertilisers and their use.

Soil tillage.

Suitability and management of soils for horticultural use.

(8) *Horticultural Plant Science*

Assimilation including photosynthesis, translocation, and mobilisation.

Plant growth and development including juvenility, senescence, flowering, fruiting, dormancy, and hormonal control of plant growth including the effects of the application of growth substances.

Mineral nutrition and deficiency symptoms.

Respiration.

Transpiration.

Environmental influences on plant growth including wind, light, temperature, and water availability. Plant ecology sufficient to demonstrate a knowledge of the principles of plant growth in controlled environments.

(*Note: In this examination a candidate's ability to relate botanical principles to horticulture will be tested.*)

(9) *Amenity Horticulture Principles*

A general knowledge of trees and shrubs commonly used for amenity, urban forestry, hedging and shelter purposes including transporting, planting, transplanting, general management, pruning, and tree surgery.

The use and cultivation of annual, biennial and perennial plants and the provision of seasonal displays.

The preparation, sowing, laying, and maintenance of amenity turf areas.

The cultivation of ornamental plants in plant houses.

or

*Fruit Production Principles*

Selection of land, crops, rootstocks, and fruit cultivars.

Orchard layout including buildings, roading, and shelter.

The principles of fruit plant propagation.

Crop production practices including planting, training, pruning, orchard floor maintenance, thinning, fertiliser use, and irrigation. (*Note: A detailed knowledge of machinery and equipment is not required.*)

Harvesting, including fruit maturity and post harvest physiology.

(*Note: In this examination a detailed knowledge of the production, harvesting, and marketing of any particular fruit crop is not required.*)

or

*Vegetable Production Principles*

Selection of land, crops and cultivars.

Vegetable holding layout including buildings, roading, and shelter.

Vegetable plant propagation including drilling, and producing and using transplants.

SCHEDULE—*continued*

Crop production practices both indoor and outdoor including supporting, thinning, fertiliser use, irrigation, and rotation. (*Note: A detailed knowledge of machinery and equipment is not required.*)

Seed and seed treatments.

The greenhouse environment.

Harvesting including crop maturity and post harvest physiology.

(*Note: In this examination a detailed knowledge of the production, harvesting, and marketing of any particular vegetable crop is not required.*)

or

*Nursery Production Principles*

Areas of nursery production in New Zealand. Relationship of nursery production to locality and potential markets.

The structure of the nursery industry in New Zealand.

Nursery layout including buildings, roading, and shelter.

Nursery production practices including open ground production, container production, and plant house plant production.

Propagation management and planning. The selection, collection, and preparation of propagating material. Micropropagation.

Marketing including marketing channels, packing, presentation, transport, storage, and promotion. Retail selling. Exporting.

Recording and budgeting. (*Note: Candidates will be required to have only an elementary knowledge.*)

(*Note: In this examination a detailed knowledge of the production, harvesting, and marketing of any particular nursery crop is not required.*)

or

*Floricultural Production Principles*

Areas of floricultural production in New Zealand. Relationship of floricultural production to locality and potential markets.

The structure of the floriculture industry in New Zealand.

The layout of properties producing cut flowers and foliage including buildings, roading, and shelter.

Floricultural production practices including outdoor and plant house production practices.

Propagation management and planning. The selection, collection, and preparation of propagating material.

Marketing including marketing channels, packing, presentation, transport, storage, and promotion. Exporting.

Recording and budgeting. (*Note: Candidates will be required to have only an elementary knowledge.*)

(*Note: In this examination a detailed knowledge of the production, harvesting, and marketing of any particular floricultural crop is not required.*)

Dated at Wellington this 22nd day of May 1985.

COLIN MOYLE,  
Minister of Agriculture and Fisheries.

## EXPLANATORY NOTE

*This note is not part of the notice, but is intended to indicate its general effect.*

This notice gives effect to a scheme for examination for the Certificate in Horticultural Theory (C.H.T.) of the Royal New Zealand Institute of Horticulture.

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Issued under the authority of the Regulations Act 1936.

Date of notification in *Gazette*: 24 May 1985.

This notice is administered in the Ministry of Agriculture and Fisheries.