



**LINCOLN  
UNIVERSITY**  
Te Whare Pūrākau  
Learning, Teaching  
& Library

# Horticulture Careers



# What is Horticulture?

**Horticulture is the science and art of the development, sustainable production, marketing and use of high value, intensively cultivated food and ornamental plants. Horticultural crops include annual and perennial species, fruits and vegetables, decorative indoor plants and landscape plants. Horticulture contributes to quality of life, and the beauty, sustainability and rehabilitation of our environment and the human condition. Plants, crops and green spaces sustain and enrich our lives by providing nutritious food, enhancing the beauty of our homes and communities and reducing our carbon footprint.**

Practitioners of horticulture are as diverse as the crops that make up the industry and the discipline. They include a wide array of individuals and groups who farm, landscape, garden, research, advise, and manage all aspects of the horticulture supply chain. Environmental horticulture provides a range of green career paths including greenhouse production, wholesale brokers, commercial nurseries, garden centres, florists and landscape design and construction firms. There are also green jobs in private and community gardens, municipal parks, and national parks and conservation areas.

Effective pest management is vital to the success of the horticulture sector and provides another pathway into employment for individuals who have a passion for both horticultural practice and conservation activities. There is unanimous appreciation of the importance of pest management to protecting indigenous biodiversity, as well as economic and human health outcomes.





## Horticulture in New Zealand and the world

New Zealand's horticultural production – which supplies food/ produce for both domestic consumption and export – is focused on a number of key growing regions, many of which are close to urban centres. Key horticultural produce for the export market traditionally included kiwifruit, grape wine, apples, onions, and potatoes with the export value of avocados, cherries and hops increasing in recent years.

Industry challenges include labour, access to freshwater, meeting new regulations, and responding to climate change and other environmental factors. Increases in urbanisation and afforestation activity, as well as increased demand for house plants, domestic landscaping, and moves toward plant-based eating have put additional pressure on sector production. Despite these challenges, New Zealand's horticulture industry has demonstrated resilience and – globally – produce is more in demand than ever. Our reputation for the production of high quality and safe food, combined with excellent growing systems and novel products, is vital in maintaining Aotearoa's share of the global marketplace.

New Zealand's horticulture industry is booming and growing at such a fast rate it needs more capable and qualified people to keep up with the demand for its fresh and healthy produce. The importance of the horticulture industry is evident in the establishment of numerous industry-government partnerships focused on both science and skill development applicable across all facets of the sector.

## Skills and knowledge developed by studying horticulture

The types of skills gained from studying horticulture at Lincoln University are highly valued by employers. Coursework provides students with a solid base knowledge of both the biological sciences and facets of industry and commerce relevant to the horticultural sector. The applied learning and practical components of Lincoln's horticulture qualifications enable students to grow their career prospects and explore career pathways as they learn.

Employers seek well-rounded, engaged graduates with a strong work ethic. As in any sector, employers value those with a professional attitude. This includes good communication (including the ability to communicate to groups, as well as effective interpersonal and written communication), honesty, self-motivation, initiative, time management, and flexibility. The importance of these basic skills cannot be underestimated, even in voluntary or internship roles, as future job opportunities often arise from a good reputation and a varied network of contacts.

## Skills and knowledge valued in horticulture roles

Knowledge of plant systems

Effective communication skills

Knowledge of water cycles and irrigation systems

Practical competencies in plant propagation and general plant care

Interpersonal skills and the ability to interact with a wide range of people

Understanding of fertilisers, insecticides, and pesticides and their applications

Awareness of tikanga Māori

Hands-on practical skills

Knowledge of data collection and storage systems

Analytical capabilities for experimentation and reporting

Information technology (IT) skills

Plant and pest identification

Working knowledge of local and central legislation regulating horticulture activities

Business acumen and understanding of import/export processes

Excellent planning skills



## Where can horticulture graduates find work?

Places of employment for horticulture graduates include:

- Government department or body (e.g., Ministry for Primary Industries (MPI), New Zealand Customs Service, New Zealand Food Safety)
- Crown research institutes (e.g., Plant and Food Research, Landcare Research, AgResearch)
- Education and training (e.g., University, Secondary School)
- Finance and insurance (e.g., FMG, Rabobank)
- Food assurance services (e.g., AsureQuality, Eurofins)
- Local/ regional government (e.g., Auckland Council, Horowhenua District Council, Greater Wellington Regional Council, Nelson City Council)
- Private consultancy, recruitment or services firms (e.g., AgFirst NZ, Hortinvest, Scitex, Agstaff)
- Food/plant/produce growing, processing, manufacturing or exporting companies (e.g., DMS Progrowers, Bostock New Zealand, Balle Bros, Blueberry Country, Enza Zaden New Zealand, LeaderBrand Produce, Zespri, Talleys, Heinz Wattie's, Southern Paprika, Masterton Vegetable Seeds, Zest International, McCain Foods, Superb Herb Company, The Fresh Fruit Company of New Zealand)
- Nurseries and landscapers (e.g., Waimea Nurseries, Nga Rakau Nurseries, Gellert Nurseries, The Plant People)
- Genetics, seeds and seedling suppliers (e.g., ArborGen, Monsanto)
- Engineering, growing and control systems manufacturers and services (e.g., Powerplants Australia, PGO Horticulture)
- Self-employment or contracting
- Irrigation and greenhouse manufacturers and suppliers (e.g., Irrigation Services, Redpath)
- Integrated fresh produce groups (e.g., MG Marketing, T&G Global)
- Tech industries (e.g., Callaghan Innovation, Lincoln Agritech, Intech Instruments)
- Beverage or brewing industry (e.g., Zealong Teas, Nestlé, Fonterra, Monteith's Brewing Company)
- Grower and horticulture industry associations (e.g., Horticulture New Zealand, New Zealand Avocado, Vegetables New Zealand)
- Packing, cool storage or distribution (e.g., Seeka, EastPack, Coolpak Coolstores)

## Horticulture job titles

Agribusiness Manager (Horticulture)	Irrigation Consultant/ Designer/ Engineer
Agronomist (Horticulture)	Journalist/ Writer
Agromony Technician	Landscape and Amenity Horticulture Industry Sales Manager
Biosecurity Officer	Landscape Gardener
Crop Production Assistant/ Manager	Nursery Worker/ Technician/ Manager
Customer Service Representative	Orchard Farmer/ Manager
Exporter	Plant Grower/ Breeder/ Propagator
Field Representative	Product Manager (fruit/ vegetables/produce)
Forage Breeding Technician	Production Manager
Gardener	Quarantine Officer
Glasshouse Manager	Research Assistant/ Technologist
Groundsperson	Sales Representative
Grower Account Manager	Scientist – Entomology, Plant Science, Soil Science
Grower Liaison Coordinator	Seed Processing Warehouse Supervisor
Growing/ Horticultural Assistant	Soil Fertility Consultant
Horticulture/ Agriculture Secondary Teacher	Technical Advisor
Horticulture Exporter	Turf Manager
Horticultural Consultant	Warehouse Supervisor
Horticultural Technician	
Horticulturalist	
Horticulture/ Landscape Team Leader	





## Pay rate indications: full time equivalent (FTE) \$NZ per annum<sup>1</sup>

Most starting salaries for graduates of bachelor degrees fall between 50,000 - 70,000. Entry level jobs are stepping stones to roles with increased responsibilities and remuneration. Your employability is enhanced by all of your life experiences, be they employment related, or the transferable skills and competencies gained from community involvement, volunteer work, or previous work or study - all of which can grow competency, expand networks, and demonstrate enthusiasm to future employers.

<sup>1</sup> Rates sourced from SEEK, MBIE, Careers NZ, Universities NZ, PayScale, PQOS survey data

Job title	Indicative rate
Horticultural Field Representative	55,000 – 120,000
Horticultural Technician	45,000 – 85,000
Academic Lecturer	75,000 – 200,000+
Turf Manager/ Grounds Person	45,000 – 100,000
Horticulture Scientist	65,000 – 150,000
Orchard Farmer/ Manager	55,000 – 180,000
Horticultural Consultant	50,000 – 150,000
Production Manager	80,000 – 150,000
Secondary Teacher	50,000 – 100,000+
Biosecurity Officer	65,000 – 100,000
Journalist/ Writer	45,000 – 100,000

## Horticulture tasks

The following list includes the types of tasks that horticulture graduates might undertake.

Complete yield analysis and advise on ways to increase crop production

Research and development to breed new varieties of plants

All aspects of plant production including preparation, growing, and harvesting

Commercial activities including sales, marketing, and business development

Trial planning and execution

Manage pest and weed control activities

Make best practice recommendations to stakeholders

Advise on soil additive use to improve productivity and performance

Manage supply chain systems

Understand and comply with domestic and international regulations and import/export guidelines

Perform administrative tasks including record keeping, data input, and budgeting

Actively keep up with professional development

Provide training to team members

Communicate effectively with internal and external stakeholders, including presentations and demonstrations

Job tasks are role-specific, so the above is an indication only. For more information on roles, registered Lincoln University students can search LU Career Centre (online) for job titles similar to those they are interested in. Job descriptions, including tasks and skills required, are often available.





## Industry bodies

Membership of an industry specific body enhances the professional status of graduates. By joining a professional body, members can research career options, access training and events, and network and collaborate with industry colleagues at all levels.

Examples of horticulture industry bodies include:

Horticulture New Zealand  
[www.hortnz.co.nz](http://www.hortnz.co.nz)

New Zealand Plant Producers Incorporated  
[www.nzppi.co.nz](http://www.nzppi.co.nz)

Royal New Zealand Institute of Horticulture  
[www.rnzih.org.nz](http://www.rnzih.org.nz)

New Zealand Institute of Primary Industry Management  
[www.nzipim.co.nz](http://www.nzipim.co.nz)

New Zealand Fruitgrowers Charitable Trust  
[www.nzfct.org.nz](http://www.nzfct.org.nz)

Vegetables New Zealand Incorporated  
[www.freshvegetables.co.nz](http://www.freshvegetables.co.nz)

Summerfruit New Zealand  
[www.summerfruitnz.co.nz](http://www.summerfruitnz.co.nz)

Horticulture Export Authority New Zealand  
[www.hea.co.nz](http://www.hea.co.nz)

New Zealand Institute of Agricultural & Horticultural Science  
[www.agscience.org.nz](http://www.agscience.org.nz)

New Zealand Apples & Pears  
[www.applesandpears.nz](http://www.applesandpears.nz)

New Zealand Avocado  
[www.industry.nzavocado.co.nz](http://www.industry.nzavocado.co.nz)

Hawke's Bay Fruit Growers Association  
[www.hbfa.co.nz](http://www.hbfa.co.nz)

Potatoes New Zealand  
[www.potatoesnz.co.nz](http://www.potatoesnz.co.nz)



### Find out more:

#### Career Centre

Learning, Teaching and Library  
E: [lucareercentre@lincoln.ac.nz](mailto:lucareercentre@lincoln.ac.nz)



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