

Module code: MOD011198	Version: 1 Date Amended: 17/Jun/2025
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1. Module Title
Fresh Produce Production

2a. Module Leader
Kambiz Baghalian

2b. School
Writtle School of Agriculture, Animal and Environmental Sciences

2c. Faculty
Faculty of Science and Engineering

3a. Level
5

3b. Module Type
Standard (fine graded)

4a. Credits
15

4b. Study Hours
150

5. Restrictions			
Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:	None		

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

In this module, you will explore the fast-evolving fresh produce sector, which plays a vital role in both public health and the global economy. Focusing on root, salad, and fruit crops, you will examine production systems, consumer trends, and the challenges of meeting demand for high-quality, sustainable produce both locally and globally.

You will analyse specific crops and their agronomy within the framework of Integrated Farm Management (IFM), promoting sustainable techniques for producing high-quality crops for retailers and niche markets. Management issues will be critically evaluated to understand the key factors needed for profitable production of high-value field crops while adhering to environmental sustainability and social responsibility. You will also gain opportunities to apply these concepts to novel crops and innovative production systems.

Current technological developments, especially those adhering to circular economic principles, will be assessed in relation to reducing ecological footprints and minimizing waste. Special attention will be given to the production of highly perishable crops and the future role these crops may play in efficient marketable produce production. As part of the module, you will have the opportunity to engage directly with the sector through visits to local farmers, processors, packers, and retailers, gaining practical insights into industry operations.

This module encourages you to research and understand crops that may be unfamiliar to you, fostering an appreciation for their unique requirements in terms of marketing, growing, harvesting, and storage. Central to the module is the application of Integrated Crop Management (ICM) principles, providing you with the opportunity to embed sustainability as a core theme. Peer evaluation will give you the chance to practice constructive feedback and refine your ability to assess work objectively and further enhance your social skills.

6b. Outline Content

1. Introduction to Fresh Produce Production
2. Agronomy of Key Crops
3. Integrated Farm Management (IFM)
4. Current Developments in Crop Technology
5. Production Systems and Consumer Behavior
6. Supply Chain and Marketability
7. Industry Engagement and Practical Experience
8. Research and Presentation Skills
9. Sustainability in Crop Production

6c. Key Texts/Literature

The reading list to support this module is available at: <https://readinglists.aru.ac.uk/>

6d. Specialist Learning Resources

None

7. Learning Outcomes (threshold standards)		
No.	Type	On successful completion of this module the student will be expected to be able to:
1	Knowledge and Understanding	Critically assess management techniques for producing vegetable, salad, and fruit crops, integrating sustainable innovations and modern technologies to enhance efficiency and yield.
2	Intellectual, practical, affective and transferrable skills	Explore advanced techniques, including AI and biotechnology, for maintaining fresh produce quality, nutrition, and market appeal, while promoting sustainable practices.
3	Intellectual, practical, affective and transferrable skills	Analyse the agronomic and ecological influences on fresh produce cultivation, including vegetables, salads, and fruits, within sustainable, integrated, and circular farming models.

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2026/7	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	Hours	Learning Outcomes	Details of Duration, frequency and other comments
Lectures	36	1-3	The module will include a combination of formal lectures, seminars, and practical sessions. With guidance, students will be expected to actively engage in discussions and debates on key issues. External links with growers and processors will be fostered through site visits and/or guest talks, offering valuable real-world insights and enhanced learning opportunities. Lecture topics include: Introduction to Fresh Produce Systems, Trends, Innovation, and Sustainability in Fresh Produce, Soft Fruit Production, Bulb and Tuber Production, and Top Fruit and Wired Fruit Production.
Other teacher managed learning	0	None	None
Student managed learning	114	1-3	Set reading, background reading, and seminar and presentation research. Students will receive guidance on appropriate reading and research material during the delivery of the module.
TOTAL:	150		

9. Assessment for the above Module Occurrence					
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Coursework	1-3	100 (%)	Fine Grade	30 (%)
A 3,000-word report focusing on two crops selected from different categories (e.g., Vegetables, Salads, and Fruits). The report must comprehensively address the production methods, storage practices, market dynamics, and sustainability considerations for each crop.					

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:

(a) achieve the qualifying mark for each element of fine graded assessment as specified above

(b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]