

Monitor and control the growth of crops or plants

Overview

This standard is for those who monitor and control the growth of crops or plants in outdoor or protected conditions.

This will include establishing measures, and in some cases, supervising operatives in the maintenance of crop or plant growth.

This includes planting crops or plants in any horticulture setting, whether amenity (green roofs, gardens, sports turf etc) or production (fruit, vegetables, flowers, trees etc).

You will require considerable knowledge of the principles of plant growth and development and plant health.

If you are working with chemicals or machinery you should be trained and hold certification where required in line with relevant legislation.

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Performance criteria

You must be able to:

1. assess the risks associated with monitoring and controlling the growth of crops or plants
2. confirm that suitable clothing and personal protective equipment (PPE) is worn
3. carry out an environmental assessment of the site before starting work
4. identify and plan suitable methods to monitor and control the growth of crops or plants in accordance with specifications
5. confirm that the working methods for monitoring and controlling the growth of crops or plants are established and clearly communicated
6. identify and confirm the availability of resources required for monitoring and controlling the growth of crops or plants
7. establish measures to maintain suitable levels of hygiene and biosecurity when monitoring the growth of crops or plants
8. establish measures for the recycling or disposal of waste in accordance with legal and organisational requirements
9. inspect crops or plants to assess their condition
10. identify ways to optimise the growth and development of crops or plants
11. identify any threats to crop or plant health and take appropriate action
12. check that equipment is used and maintained safely and correctly
13. check crops or plants are handled in a manner which prevents damage
14. confirm records are completed as required by relevant legislation and organisational requirements
15. confirm that environmental and health and safety policies and risk assessment requirements are implemented across your area of responsibility

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Knowledge and understanding

You need to know and understand:

1. how to identify hazards, assess risks and interpret risk assessments
2. the type of clothing and personal protective equipment (PPE) suitable for the activity
3. the importance of carrying out an environmental assessment of the site before commencing work and the findings which may affect activities
4. the importance of confirming that the activities involved in monitoring and controlling the growth of crops or plants are completed in accordance with specifications
5. the equipment and materials required for monitoring and controlling the growth of crops or plants and how to check they are used and maintained in a safe and effective condition and stored securely
6. methods of maintaining hygiene and biosecurity when monitoring and controlling the growth of crops or plants and the reasons why it is important
7. the legal and organisational requirements for the handling, transporting and disposal of waste
8. stages of crop or plant development
9. the importance of inspecting crops or plants in accordance with specifications
10. methods for maintaining and optimising crop or plant health and development
11. signs of damage or threats to crop or plant health and the appropriate action to take
12. the effective and efficient use of resources when monitoring and controlling the growth of crops or plants
13. the control methods which can be used for pest, disease and weed control
14. the crop or plant's requirements for nutrients and moisture and how these can be adjusted to promote crop or plant health
15. correct methods of handling crops or plants to prevent damage
16. the problems that may arise when monitoring and controlling the growth of crops or plants and how these should be dealt with
17. the importance of maintaining effective communication with those involved in monitoring and controlling the growth of crops or

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plants

18. the records that need to be kept and their significance to crop or plant growth
19. the importance of following environmental and ecological best practice to help minimise the impact of your work on the environment
20. your responsibilities under relevant environmental and health and safety legislation, codes of practice and organisational policies

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Scope/range

- A. identify the following issues with crop or plant growth:
 - 1. moisture problems
 - 2. nutrient problems
 - 3. damaged plants
 - 4. excessive or inappropriate growth

- B. identify the following unwanted plant material:
 - 1. damaged plants
 - 2. weeds
 - 3. plant debris

- C. implement the following methods to maintain crop production/plant development:
 - 1. protection from pests and diseases
 - 2. weed control measures
 - 3. weather protection
 - 4. pruning and trimming
 - 5. supporting
 - 6. feeding
 - 7. reducing
 - 8. controlled watering
 - 9. growth regulators
 - 10. lighting and shading

- D. dispose of the following types of waste:
 - 1. organic
 - 2. inorganic

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Glossary

Control methods:

- mechanical
- chemical
- cultural

Instructions: verbal or written.

Methods for maintaining plant development:

- protection from pests and diseases
- weed control measures
- weather protection
- control of temperature, humidity, ventilation, light and shade
- pruning and trimming
- supporting
- nutrient provision
- provision of water

Plants:

- herbaceous perennials
- sedums
- arable crops
- crops for human consumption (e.g. strawberries, mushrooms, vines)
- plants for sale or propagation

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, organisational policies

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Suite Horticulture; Waterproof Membrane Roofing Systems

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