

LANAgC3 – SQA Unit Code H58A 04

Monitor and maintain the healthy growth of crops



Overview

This standard covers monitoring and maintaining the healthy growth of crops.

You will be able to identify and implement actions that are required to maintain the healthy growth of the crop, and minimise and control risks to crops from pests, diseases, disorders and unwanted vegetation.

If you are working with chemicals or machinery you need to be appropriately trained in line with current legislation, and hold a relevant award where appropriate.

You must carry out your work in a way which will consider any impact on the natural environment and enhance its nature and conservation.

The standard is suitable for anyone who monitors and maintains the health growth of crops.

LANAgC3 – SQA Unit Code H58A 04

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Performance criteria

- You must be able to:*
- P1 assess the risks associated with the site and the required activity
 - P2 effectively monitor crops in accordance with specifications
 - P3 identify any potential problems and risks with the crop and take appropriate action
 - P4 seek technical advice regarding suitable actions where necessary
 - P5 select methods of minimising risks to crops from pests, diseases and disorders to achieve the best balance between production requirements, environmental impact and the purpose for which the crop is being grown
 - P6 implement methods of minimising risks to crops from pests, diseases and disorders in accordance with legal and organisational requirements
 - P7 select a suitable method for removal of unwanted vegetation
 - P8 implement the removal of unwanted vegetation safely and effectively
 - P9 where chemical are used ensure they are used in accordance with legal and organisational requirements
 - P10 monitor and evaluate the effectiveness of all actions taken to maintain the healthy growth of crops
 - P11 ensure equipment is used and maintained in a safe and effective condition
 - P12 ensure suitable levels of hygiene and biosecurity are maintained
 - P13 ensure work is carried out in a manner which minimises environmental damage
 - P14 ensure waste is dealt with safely and correctly in accordance with legislation
 - P15 carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
 - P16 ensure appropriate records are completed as required by relevant legislation and the organisation

LANAgC3 – SQA Unit Code H58A 04

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Knowledge and understanding

You need to know and understand:

- K1 how to identify hazards and assess risks
- K2 how to interpret risk assessments
- K3 the importance of carrying out an environmental assessment of the site before starting work and the findings which may affect proposed activity
- K4 the requirements, advantages and disadvantages of different crop production systems
- K5 the principles of sustainable crop production
- K6 the stages of plant development
- K7 how to determine the optimum time for monitoring crops given the crop requirements, the stage of growth, the time of year and potential risks from pests, diseases and disorders
- K8 effective methods, including thresholds and schedules, for monitoring the crop
- K9 how to recognise the presence of pests, diseases and disorders which may affect the crop and the actions which may be taken
- K10 how to identify different types of unwanted vegetation and suitable methods for removal
- K11 sources of technical advice regarding suitable actions to be taken to optimise crop growth
- K12 implications of not taking action
- K13 the range of different actions which may be taken to protect crops from pests, diseases and disorders in accordance with different farming production systems
- K14 types of scarers and repellents which may be used and how to maximise the effectiveness of these devices
- K15 the effects of beneficial insects
- K16 the purpose and use of chemicals on crops and possible implications for operator, crop, the environment and the consumer
- K17 the requirements of legislation in relation to the handling and use of chemicals
- K18 manufacturers labels and advice in relation to the preparation and use of chemicals and correct methods of application
- K19 the importance of maintaining hygiene and biosecurity while maintaining plant growth and the methods for achieving this
- K20 why it is important to maintain safety and security of equipment and machinery when on site
- K21 the potential impact of your work on the environment and how this can be minimised
- K22 the legal and organisational requirements for the handling, transport, storage and disposal of waste
- K23 your responsibilities under relevant environmental and health and

LANAgC3 – SQA Unit Code H58A 04

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K24 safety legislation, codes of practice and company policies
the records which need to be maintained

LANAgC3 – SQA Unit Code H58A 04

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Glossary

Specifications: schedules, method statements, Standard Operating procedures (SOPs), manufacturers' guidelines, customer requirements, crop requirements

Instructions: verbal or written

Monitor crops:

- desired healthy growth
- pests, diseases and disorders
 - animal
 - insect
 - viral
 - bacterial
 - fungal
 - nutrient
 - trace element deficiency
 - drought
 - water logging
- unwanted vegetation
 - competing
 - hazardous
 - excessive growth

Requirements:

- production
- legislative
- codes of practice
- environmental

Pest control:

- fencing
- scarers
- repellents
- shooting
- biological
- chemical

Sustainable agriculture: Meeting the requirements for food production while maintaining profitability and preserving the environment

Records: manual or computerised

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