

Overview

This standard covers the ability to discriminate between crop damage directly induced by environmental factors, damage caused by pests and pathogens and possible methods which may be adopted for prevention.

This standard is for those responsible advising on causes of crop disorders.

You must carry out your work in a way which will minimise any impact on the natural environment

If you are working with machinery you need to be appropriately trained or certificated in line with current legislation

Performance criteria

You must be able to:

- P1 identify damage due to disorders
- P2 evaluate damage
- P3 identify methods available for preventing and limiting particular crop disorders, and the appropriate selection of corrective treatments
- P4 identify crops which have a specific susceptibility to particular disorders and an understanding of the procedures that are suitable for their treatment

Knowledge and understanding

You need to know and understand:

- K1 symptoms of unsatisfactory growth
- K2 crop damage induced by adverse physical soil conditions
- K3 crop damage caused by unsuitable pH status, nutrient imbalance, nutrient deficiencies and the misuse of crop protection materials
- K4 crop damage caused by adverse soil moisture
- K5 crop damage induced by extreme weather factors
- K6 types of plant damage caused by pollutants from the atmosphere, soil and irrigation water
- K7 how to determine the likely duration of the stress in current and future crops
- K8 how to compare and contrast environmental damage with the types which may be caused by pests and pathogens of crops
- K9 the procedures necessary for the notification and confirmation of possible causes by specialists
- K10 relate crop growth and development to equivalent stages in unaffected, potentially high yielding crops
- K11 how to estimate the extent of current and future crop damage
- K12 the possible causes and cures of particular problems
- K13 the alternative crops and varieties which are less susceptible to particular disorders
- K14 practices and materials for the rectification of pH and nutrient problems
- K15 procedures for optimising soil moisture status
- K16 cultural practices that might alleviate particular disorders
- K17 how to examine uneven crops for symptoms of damage and poor growth
- K18 the specific instances where damage and poor growth is not attributable to pests and disease, or weed competition
- K19 how to examine particular soils for evidence of compaction, inadequate drainage or moisture stress
- K20 how to interpret the results of chemical analysis of particular plants and soil samples
- K21 how to relate types of topography and crop structure to damage likely from wind, hail, frost and snow
- K22 how to relate specific symptoms to past or present conditions of the physical and chemical nature of soil, irrigation of water or adverse atmospheric factors
- K23 how to make decisions on measures to correct abnormal crop growth and prevent its recurrence

LANAgM17

Advise on the causes of crop disorders



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