-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number - 0088223 -Session-1988-89

-Superclass- SD

-Title- PRINCIPLES OF ORGANIC PRODUCTION (x¹/₂)

-DESCRIPTION-

Purpose

This module introduces students to the concepts of organic production and provides an understanding of defined organic standards.

It will be of interest to students following a programme of modules in horticulture, arable agriculture, or livestock production.

This module is designed to give students an appreciation of the methods required for the conversion of a conventional system to an organic system.

The module is intended to be introductory, and included as the first of a series of modules on organic production.

Preferred Entry level

61003 Communication 3 and

12 months practical experience on a farm or holding and an appropriate land based Management Module.

Learning Outcomes

The student should:

- 1. interpret the requirements of the main organic standards applicable in the United Kingdom;
- 2. plan the conversion of a conventional production enterprise to an approved organic production standard.

Content/ Context

Safety regulations, safe working practices and procedures and legal requirements should be observed at all times.

The student should use industrial experience of a farm or holding as a reference to compare conventional and organic practices. The student will use vocational experience, extend knowledge to recognise the differences between conventional and organic production systems, and to plan a conversion to organic production.

Corresponding to Learning Outcomes 1 and 2:

1. Differences between conventional and organic systems should be highlighted, and examples of specific organic objectives should include:

working as much as possible within a closed system, using local resources

maintenance of long-term soil fertility

avoidance of pollution

minimisation of energy use

avoidance of the use of synthetic fertilisers, pesticides, growth regulators and feed additives

use of biological pest control techniques

quality and quantity of food production

livestock requirements

conditions for workers

maintenance of wildlife and their habitats.

Review of standards in use in the UK, to include 2 independent standards (e.g. Soil Association, Organic Farmers and Growers, Demeter) and any statutory standards (e.g. EEC definition, UK Register of Organic Food Standards).

2. Planning the conversion of a conventional system, consideration should be given to:

objectives of organic husbandry

the requirements of the chosen standard

phasing the conversion

rotations for soil fertility, pest control and livestock health

variety and breed selection

current soil, weed, pest and animal health problems

markets for organic produce

financial appraisal

labour requirements and machinery requirements.

Suggested Learning and Teaching Approaches

Examples used in this module should be biased towards appropriate systems associated with the specialisms of the students, for example:

arable farming livestock production market gardening.

Small group discussions will allow a variety of ideas to be raised, and visual aids showing contrasts between conventional and organic systems should be included.

An integral part of the module is the opportunity to visit an organic unit, and to use guest speakers, to allow students access to specialist producers.

Assessment Procedures

Acceptable performance in the module will be satisfactory achievement of all the performance criteria specified for each Learning Outcome.

The following abbreviations are used below:

LO Learning Outcome

IA Instrument of Assessment

PC Performance Criteria

LO₁

INTERPRET THE REQUIREMENTS OF THE MAIN ORGANIC STANDARDS APPLICABLE IN THE UNITED KINGDOM

PC The student should:

- (a) list the main objectives of organic production systems;
- (b) describe husbandry techniques required to combat specific problems.

IA(1)Short Answer/IA(2) Restricted Response Questions.

The student will be presented with an exercise to test the understanding of practices acceptable for use in organic production enterprises within the United Kingdom.

For the first part of the exercise the student will be set 5 short answer questions to test the knowledge of the main objectives used in organic production systems. The student will be expected to list 5 main objectives of organic production systems.

For the second part of the exercise 5 restricted response questions will be used to elicit recommendations for specific problems related to husbandry techniques.

The student will be required to describe the techniques used in terms of a defined standard.

All recommended techniques must comply with one standard from a given list.

The exercise should include 5 husbandry problems related to the following:

- (I) soil nutrition and manure management
- (ii) crop protection from fungal infection of plants
- (iii) livestock husbandry

plus

two other problems related directly to the students chosen specialism.

Satisfactory achievement of the Learning Outcome will be based on the student producing five correct responses for both parts of the exercise.

PLAN THE CONVERSION OF A CONVENTIONAL PRODUCTION ENTERPRISE TO AN APPROVED ORGANIC PRODUCTION STANDARD

PC The student should:

- (a) state organic standard selected for use;
- (b) outline sequence and timing of planned conversion;
- (c) estimate conversion costs:
- (d) predict yield of crops and livestock.

IA Case Study.

The student will be expected to complete a case study giving details of the planned conversion of a given conventional holding to a specific organic standard.

The student should indicate prior to embarking on the study which standard has been selected.

The case study should show the conversion period plus one year of production under the chosen organic standard.

LO₂

The study must highlight details of the following:

show an awareness of controlling current and potential husbandry problems; phasing of the conversion; suggestions for appropriate rotation; estimate of labour requirements; choice of suitable product outputs; realistic yield estimates; statement of assumptions related to marketing plan to maintain soil fertility; adherence to a specific organic production standard.

Satisfactory achievement of the Learning Outcome will be based on the student producing a conversion plan which could be adopted in a practical situation.

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