

## 5<sup>th</sup> Year Ag Science Test - Kale

### **Short Questions:** (40m)

- (a) What is a catch crop? Give 2 examples. (3m for definition, 1m per named crop)
- (b) List three advantages of catch crops. (2m for first two, 1m for last)
- (c) List three disadvantages of catch crops. (2m for first two, 1m for last)
- (d) What can be done to prevent club root? (5m)
- (e) What type of soil is ideal for the growth of Kale? 2 points. (3m for first, 2m for second)
- (f) Circle the correct answer. Kale is biennial/perennial. (5m)
- (g) Name three types of Kale varieties. (2m for first two, 1m for last)
- (h) What family does Kale belong to. (5m)

### **Structured Question:** (30m)

Outline the lifespan of Kale on the farm under the following headings.  
Mention 3 points of information regarding each one.

- Soil Suitability (3m per point)
- Seedbed Preparation and Sowing (3m per point)
- Seed Selection (Mention type & advantage of type) (3m per point)
- Weed/Pest Control (3m per point)
- Benefits of Kale (3m per point)

### **Synoptic Question:** (30m)

- What are two health and safety measures one should take while working with Kale? (5m each)
- When feeding Kale to livestock as winter fodder what must be considered? Refer to the factor that must be considered and give a solution. (5m per point)
- Where could you go ,online or in person, if you wanted to get information on the growth of Kale. Refer to a reliable source of information and say why it is reliable. (4m for site & 6m for why)

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## *Marking Scheme*

### **Short Questions** (40m)

- (a) What is a catch crop? Give 2 examples. A catch crop is a fast-growing crop grown between two main crops on land that would otherwise be left idle. Eg: Kale/Cabbage. (3m for definition, 1m per named crop)
- (b) List three advantages of catch crops. Fast growing/High yielding/Prevent N leaching etc. (2m for first two, 1m for last)
- (c) List three disadvantages of catch crops. Labour intensive/Vulnerable to pests/Usually low in fibre. (2m for first two, 1m for last)
- (d) What can be done to prevent club root? Crop Rotation/any other valid answer. (5m)
- (e) What type of soil is ideal for the growth of Kale? 2 points. pH 6-7/sandy, free-draining loam. (3m for first, 2m for second)
- (f) Circle the correct answer. Kale is biennial/perennial. biennial (5m)
- (g) Name three types of Kale varieties. Keeper/Caledonian/Maris Kestrel/Grampian (2m for first two, 1m for last)
- (h) What family does Kale belong to. Brassicaceae (5m)

### **Structured Question:** (30m)

Outline the lifespan of Kale on the farm under the following headings. Mention 3 points of information regarding each one.

-Soil Suitability (3m per point)

pH 6-7/free-draining sandy loam/flat land/ not too close to a watercourse.

-Seedbed Preparation and Sowing (3m per point)

Soil test 8 weeks prior/Plough/Harrow/depth of 10mm/ roll after

-Seed Selection (Mention type & advantage of type) (3m per point)

Caledonian-Good yield, high leaf to stem ratio/ Keeper-high yield, winter hardy/ Maris Kestrel-good yield, high leaf to stem ratio

-Weed/Pest Control (3m per point)

Rotation/pesticides/herbicides/fungicides/insecticides/any named pest or disease i.e. Flea beetle

-Benefits of Kale (3m per point)

Winter fodder/reduce housing costs/reduces labour for feeding & silage production/economical etc.

### **Synoptic Question:** (30m)

-What are two health and safety measures one should take while working with Kale? (5m each)

Ensure all machinery is functioning properly/ Wear protective equipment

-When feeding Kale to livestock as winter fodder what must be considered? Refer to the factor that must be considered and give a solution. (5m per point)

Low in fibre- give them silage or hay in conjunction with Kale/Supplements

-Where could you go ,online or in person, if you wanted to get information on the growth of Kale. Refer to a reliable source of information and say why it is reliable. (4m for site & 6m for why)

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Any valid reason why e.g. .gov on url