

SUBJECT: AGRICULTURAL SCIENCE

TOPIC: CULTURAL PRACTICES

WEEK: 9 AND 10

CLASS: JSS2

INTRODUCTION

These are operations carried out while planting is done. The aim of farmers is to get maximum yield from his farm operations for this reason, he adopts a number of measures to get the best out of the soil.

PRE-PLANTING OPERATIONS

This includes all operations carried out in the farm before planting is done e.g. selection of site, bush layout, ploughing, harrowing, ridging.

1. Selection of site: it is necessary to choose a good site. a flat well drained sandy-loamy soil should be chosen. This is ideal for most food crops.
2. Bush clearing: this is the removal of bushes through mechanical means or chemical means or manual cutting of bushes with crude implements examples hoes and cutlasses or through the use of herbicides(chemicals used to kill weeds) e.g. prararquat.
3. Stumping: the removal of perennial roots and trees stumps present in the soil .it is energy consuming operation.
4. Ploughing: the primary purpose of ploughing is to turn over the upper layers of the soil, bringing fresh nutrients to the surface, while burying weeds, the remains of previous crops and both crop and weed seeds, allowing them to break down.
5. Harrowing: this is the breaking up and smoothing out the surface of the soil .this is a method for shallow cultivation of soil .the purpose of this harrowing is generally to break up clods (lumps by soil) and to provide a finer finish, a good tilth or soil structure that is suitable for seedbed use.
6. Ridging: this involves making ridges for planting. This is a strip of ground thrown up by a plow or left between furrows where seeds can be planted.
7. Seed bed preparation: this involves making of ridges or nursery beds .a nursery is a place where plants are propagated and grown to usable size. Transplanting is the transfer or movement of bed, seedling trays or pots to the main field.

PLANTING OPERATIONS

Spacing: this refers to the distance between two plants. the distance between one plant and another along the same ridge or row is called intra or within the row spacing while the distance between one plant and another on different row is called inter or between row spacing.

Seed rate: this refers to the quantity of seeds or planting materials required to cover the planting of an area of land. to determine the seed rate of a piece of land, the area of the land, the actual spacing and the number of seeds per hole must be known.

Seed selection: the quality of seeds affects the early life of the plants and has a direct effect on the types of crops produced. the following points must be considered when selecting seeds;

- I. Large seeds should be selected in a group
- II. Seeds should be well filled and not wrinkled
- III. The seeds should be free from holes
- IV. Avoid using seeds that have been stored for a long time.

Planting: planting is the act of sowing the desired seeds on a prepared field. There is different fabricated machinery that could be used to achieve this; depending on the type of crops (planter). sowing is the process of planting seeds.

POST PLANTING OPERATIONS

Post planting operation in agriculture refers to all the other processes that takes place after planting. this includes watering, weeding, applying, fertilizers, pruning, etc.

1. Thinning: thinning is a term used in agricultural science to mean the removal of some plants or parts of plants, to make room for the growth of others.
2. Supplying: this is replanting of seeds in vacant positions due to poor germination
3. Weeding: this is the systematic removal of weeds. a weed considered undesirable in a particular situation.
4. Fertilizer application: these are ways of adding or supplying of nutrients to the soil
5. Pruning: the process of cutting excess branches from trees
6. Pest and diseases control: this can be controlled by use of resistant varieties of crops, good management practices and spraying of pesticides.
7. Harvesting
8. Processing
9. storage

ASSIGNMENT

1. Differentiate between site selection and seed selection
2. Mention the principles of crop rotation

