Program- B.Sc.(Agriculture)

Semester- Ist Session- 2020-21

Course- PRINCIPLES OF AGRONOMY

Course code- BSCAG-111

D+1

Topic- Definition and scope of Agronomy.

Faculty Name- Rajeev Kumar Department of Agriculture

Agronomy

Agronomy: This is the application of scientific principles to the art of crop production. Agronomy is the branch of agriculture that's deals with of the principles and practices of crop production and field management

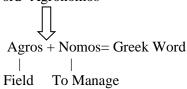
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It is a specialized branch of agriculture, dealing with crop production and soil management "Study of the management of land and scientific cultivation of crops is called as Agronomy"

According to C.R.Ball, 'Agronomy is an art and science of field crop culture'

In more scientific way Ball enlarges the definition of Agronomy more specially as the art and underlying science of a handling the crop plants and the soil substrate as to produce the highest possible quantity of the desired crop produce from each unit of land, soil and light with a minimum immediate future expense in soil fertility.

Agronomy consists of two Greek word- Agronomos



Peter Decresenzi collected many literature belong to Agronomy in his book "**Opus Ruralium Kamo Daram**" for the first time. So he is called **Father of Agronomy**. After that **Jethrotull** wrote a book "**Horse Hoeing Husbandry**" on which basis seed drill and horse drawn cultivator were developed. The words 'weed' and 'zero tillage' were also used firstly by him.

Scope and Contribution of Agronomy:

Agronomy is a dynamic discipline with the advancement of knowledge and better understanding of planet & environment.

- Food Security and Stability.
- Availability of Clothes.
- Availability of Goods for Daily Use.
- Source of Employment.
- Increase in Soil Fertility.
- Availability of Fodder.
- Raw Materials for Industries.
- Increase in Income of Farmer.
- Effect on Social Status.
- Improved in the Quality of Soil.
- Increase National Income.
- Increase in International Prestige

Practices and modified of new practices developed for high productively as follows:

- Proper methods of filling the lands.
- Suitable period for its cultivation.

- Keeping farm implements in good shape and managing field crops in a efficient manner as experienced farmer.
- Management of crops, live stock & their feedings.
 Care and disposal of farm & animal products like milk & eggs.
- Proper maintenance of accounts of all transactions concerning farm industry.
- Availability of chemical fertilizers has necessitated the generation of knowledge on the method.
- Availability of herbicides for control of weeds has led to development for a vast knowledge about selectivity, time & method of its application.
- Water management practices.
- Intensive cropping.

Agronomist

Agronomist is a specialized scientist in agronomy, which deals with the science of utilizing plants for food, fuel, feed & fiber. Agronomist are involved with many issues including food, feed & fuel production without impact on environmental.

Agronomist should be specializing in areas such as crop rotation, irrigation & drainage, planet breeding, soil science, weed control & disease & pest control.

An Ideal Agronomist:

- Identifies market needs.
- Manage the crop to maximum profits.
- Looks at time as a valuable resource.
- Invest money and puts together recourse to produce or provide service.

Aims of Agronomist: The main aims of an agronomist are given blow.

- To study existing resources- land, labour, capital and management and the production pattern on the farm.
- To perform strategic task of finding out the deviation of resources from their optimum utilization.
- Avoid excessive risk.
- Make a good farm plan and provides for efficient use of farm resources.
- Balanced combination of enterprises.