

NABARD GRADE A (AGRICULTURE)

CHAPTER 3 - AGRONOMY

Cheshta Gola
successrbi@anujjindal.in

IMPORTANT POINTS FOR AGRONOMY

Mycorrhiza is a symbiotic association between:	Fungus & roots of higher plants
VAM: Vascular Arbuscular Mycorrhiza is used as:	P solubilizing in plant roots
Cereals are deficient in which amino acid:	Lysine
Amino acid which is deficient in legumes:	Methionine
Power tiller is most suitable for the cultivation of:	Paddy
Ammonium polyphosphate contains:	15% N & 62 % P₂O₅.
Tz (tetrazolium) test is done for:	Viability of seeds.
In wet nursery of rice, level of water is maintained:	5 cm
The optimum depth of puddling in rice is:	5 cm
Ultra violet radiations are absorbed by:	Ozone layer
First Indian director of IARI was:	Dr. B. Vishvanath.
The most critical stage of irrigation in wheat is:	CRI stage (21 days after sowing)
Jhuming is a practice of rice cultivation in:	Eastern part of India.
Basic object of sustainable agriculture is:	To maintain ecological balance
The plants growing in salt water are known as:	Halophytes
Crop canopy temperature is measured by:	Infra-red thermometer.

Reclamation disease is due to deficiency of:	Copper
Hormone related to drought tolerance is:	Abscisic acid
Contribution of livestock in agriculture is	29.7 %
Hormone used as an herbicide:	2, 4-D (>20 PPM)
Element available in both anion and cation is:	Nitrogen (IARI, Ph.D11)
Dormancy breaking hormone is:	Gibberlic acid
Ring worm disease is caused by:	Fungus.
Monsoon is responsible to cause rainfall in Tamil Nadu:	North East monsoon
Stress hardening in plants can be achieved by:	ABA.
Maximum permissible limit of biuret in urea is	1.5%.
Carbon content in organic matter	58%
Bio fertilizer used in wheat is:	Azatobacter.
Bio fertilizer used in sorghum and grasses is	Azospirillum
Vertical mulch is used in which type of soils	Black cotton soils.
Criteria of essentiality were given by:	Arnon & Stout, 1939.
The optimum spacing for wheat is:	22.5 cm(line to line)
The nontraditional area for cultivating is:	Eastern India.

Major P fertilizer commonly used in India is:	DAP
State having minimum BPL population is:	Punjab
Maximum number of BPL people are in:	Bihar
Bio fertilizer more suited for sugarcane is:	Azatobacter
Depth of sowing of soybean seed:	3 cm
First variety of rice introduced in India is:	TN-I (1964-65)
Indian mustard is known as:	Brassica juncea.
Explosive fertilizer is:	Ammonium nitrate.
Most prominent soil group of India:	Alluvial soil.
In SSP sulphur contains:	12 %.
Which micro nutrient deficient in Indian soils:	Zn
Which macro nutrient mostly deficient in Indian soils	Nitrogen
Spike tooth harrow is a type of implement:	Secondary tillage
Most widely used material for correcting soil acidity is:	Lime.
Diara cultivation method is followed in:	Cucurbits.
C: N ratio of organic matter is:	10:1
National Seed Act was passed in:	1966.

National Seed Corporation (NSC) in:	1963.
Root promoting hormones:	IBA
Flower setting hormone:	NAA
Bench terracing is done when slope is more	15%
Mass per unit volume is called:	Bulk density.
Disk plough is used when the soil is:	Tough.
First man made cereal is:	Triticale.
Cheapest N contains fertilizer is:	Urea.
First product of urea hydrolysis:	Ammonium carbamate.
NABARD was set up on the recommendation of:	Siva Raman committee
Free living nitrogen fixing organism is:	Azotobacter
The fruit of mustard is known as:	Siliquea.
Supplemental irrigation is known as:	Life saving irrigation
Major agricultural importing commodity in India is:	Edible oil (65%)
Lunishree is a variety of:	Super rice.
Plants with separate male and female flower on same plant are known as:	Monoecious
National biodiversity board is situated at:	New Delhi.

Beaufort scale is used to measure:	Wind force/speed
One standard atmosphere is equal to	1013.25mb
Die back of shoots occur due to deficiency of:	Copper
Occurrence of grey spots on leaves is due to deficiency of:	Manganese (Mn).
Most destructive disease of sugarcane is:	Red rot of sugarcane.
Potatoes are borne on:	Stolon
Potato tubers are a modified form of:	Stem
Sowing of sugarcane in trench method is helpful to prevent:	Lodging
For seed purpose carrot is grown as:	Biennial
Boron is harmful to plants when concentration is:	More than 3 ppm
Which crop has maximum productivity among the cereals:	Maize
Kaolin is a type of anti-Transpirants:	Reflecting type
Cycocel (CCC) is a:	Growth retardants
Family of sesame:	Pedaliaceae
Family of jute:	Tilliaceae
Exhaustive family of crops is:	Graminae
Origin of maize:	Mexico

Origin of soybean:	China
Origin of tobacco:	Mexico
State having highest area under summer maize is:	Bihar
Indian Journal of Agriculture Sciences is published by:	ICAR
Atmospheric pressure always decreases with:	Altitude.
Horizontal heat transfers from warmer area to cooler area, the effect is known as:	Cloth line effect
In which effect vertical heat transfers from warmer to cooler crop area:	Oasis effect
The enzyme of nitrogen reduction is:	Nitrogenase
The element of nitrate reduction is the:	Molybdenum.
Most of field crops require the pH range for optimum growth is:	6.5-7.0
Hence; cultivated mostly crops are:	Acidic in nature (IFFCO Exam-09)
Depth of water required by a crop is known as:	Delta
Area irrigated by one cusec discharge of water is:	Duty
Period in days for which irrigation is supplied to a crop is:	Base period
Rancidity in sunflower oil is due to:	Oxidation.
Varieties of black gram are:	T-9, Pant U-19
Famous variety of moth bean is:	RMO-40, RMO-257

Elite varieties of moong bean are:	Pusa baisakhi, SMIR 668
0.1% solution in 500 liters of water is:	500 ml (RPSC, AO- 09/SRF-09)
Bioclimatic low was proposed by:	Hopkins
Chemical safeners are also known as herbicide antidote e.g.	NA (it used first in maize)
Crop which has highest K^+ up take:	Potato
The low pressure area near the equator called:	Doldrums/ITCZ
Triacontanol is a growth stimulant obtains from:	Leaves of Lucerne

- **Tillage increases** water holding capacity and infiltration of soil but it reduces bulk density.
- **Wet land Plough** is smallest among the wooden ploughs it is used to puddle soil and efficiency of 0.1 ha for 8 hours
- Blade harrow is known as Bakhar used for weed control before sowing.
- The sprinkler system of irrigation provides protection from cold by the release of latent heat of fusion.
- Splitting of a pod or fruit in characteristic manner at maturity is known as **Dehiscent** e.g. pods of pulse.
- Continuous consumption of Lathyrus causes a disease known as **lathyrism** as its grains contains BOAA (Benzo-oxalin acetic acid), a neurotoxin.
- Fertilizer which is preferred to grow succeeding crop in green manured soil: Phosphatic

- The cattle consuming grasses of low magnesium content suffer from **hypomagnesaemia**, commonly called as '**Grass Tatany**'
- The practice of grazing of animals on public lands is called as **Ranching**
- **Weather** is a state or condition of atmosphere at a given place at a given instant of time.
- Recently scientists separated germs in maize corn for manufacturing: **Contraceptives**
- The tobacco contributes the maximum **excise revenue** among agricultural commodities in India.
- India is the only country to have developed and grown **hybrid cotton** commercially.
- **Karnataka** is the largest producer of **coffee** in the country.
- **China** is the largest producing and consuming country of tobacco in the world whereas, India has third position in production of tobacco.
- **Phenyl mercuric acetate (PMA)** is a chemical used in agriculture crops in order to:
Reduce transpiration
- Jowar is known as: **Camel crop Kings of coarse grains**
- India is the **second country** after **China** to have commercialized the hybrid rice technology.
- **HD 2329 variety of wheat** contributed maximum production during green revolution in India.
- Plant rectangularity is: **Plant to plant distance/row to row distance.**
- In water erosion 3 m deep and more than 18 m wide gully is known as: **Small gully (G₂)**
- 3-9 m deep and width of 18 m or more with side slope 8-15 % is known as: Medium gully (G₃)

- The direction from which the winds are coming called as: **Wind ward side.**
- Agronomic measures are used to reduce erosion where slope is: **Less than 2%.**
- **Bench terracing** is usually a practiced on slopes ranging from: 16-33 %.
- The highest award presented to an agricultural scientist in the Country : **Rafi Ahmad Kidwai Award**
- Over the years the contribution of agriculture to GDP of Indian economy has been:
Decreasing
- In which five year plan 'Agro climatic regional planning in India was initiating: **7th five year plan (1988)**
- Nitrogen fixation in rice field is carried out by blue green algae with: fern **Azolla.**
- The pattern of planting which has maximum plant population: **Cubodial pattern**
- Cultivations of such crops which have different natural habit and competition is as:
Parallel cropping
- The variety of which is resistant to all the three rusts is: **Choti lerma**
- How many times a **ratoon** crop of sugarcane is advisable : **One time**
- Cultivation of two or more than crops of different heights simultaneously on a certain piece of land in a certain period is called: **Multistoried cropping**
- Nursery area required for seedling of one hectare rice field is: **0.10 ha**
- **Tip burn** of paddy is due to reduced O₂ and N₂ : **under submerged condition.**
- **Red and purple** color of maize leaves is due to the deficiency of: **Phosphorus**
- The size of **Thomson seedless** grape is increased by the application of hormone: GA₃

✚ Center of Origin:

- Vavilon gave **8 center of origin and 3 sub center.**
- Major crops and their origin place:

Crop	Origin	Crop	Origin
Rice	S. E. Asia (Burma)	Tea	China
Sugarcane	New Guinea	Soybean	China
Wheat	S. W. Asia (Turkey)	Mustard	China
Gram	S. W. Asia	Cow pea	Africa
Maize	C. America (Mexico)	Cotton	India
Tobacco	C. America	Brinjal	India
Groundnut	Brazil	Arhar	Africa
Moong	India	Jowar	Africa
Potato	S America (Peru)	Bajra	Africa