

Agriculture Chapter 3, Section 1 (First paper) [College Notes]

Seed is a medium of growing plants. **[What is a seed?]**

Two types of seeds:

1. **Agronomical seed** is termed any part of the plant capable of producing plants i.e leaves, stem, roots etc. They are not true seeds. Example: Sweet Potato, Potato, Sugarcane.
2. **Botanical seed** is the matured and fertilised ovum of a flower capable of reproducing. They are called true seeds. Example: Rice, Wheat, Maize

Steps of seed production: **[Important for Creative C and D part]**

1. **Site Selection**: Must choose highland as low land holds stagnant water, soil should be loamy (ideal) or Sandy Loam Soil can be used if not available. Ph level should be at 6-7 and the soil should be fertile.
2. **Isolated Distance**: The distance between each seed bed should be calculated so that cross pollination does not occur. This is really crucial to get pure seed which means no genetic mixing of different seeds.
3. **Land Preparation**: Ploughing, Laddering (5-6) times, fertiliser application.
Small note that fertilizer depending on origin has to be applied using different measures. Natural fertiliser like cow-dung can be applied as much as you want in quantity during ploughing. While, non-natural fertiliser has to be applied according to preset measurements. Except Urea, others have to be applied during ploughing.
4. **Seed Selection**: This step ensures good and quality seeds are selected. Healthy, fresh, disease free seeds with at least 80% germination and purity rate are to be selected.
5. **Seed Treatment**: Treat using Vitavax-200, Provax, Homai, Captan, Peneojeb, etc.
6. **Time of seed sowing**: Sown in line and exact depth.
7. **Caring**
 - **Irrigation**:

- **Roughing:** It refers to the removal of unwanted plants like weed, grass or shrubs around the main plant. It is done to limit strain on food supply from soil to main plant or crops. Roughing is done three times, (before flowering, after flowering and after maturity) Its main objective is to produce pure and high yielding seed.
- **Diseases:**
Onion → Purple blotch disease, stem rot.
Potato → Early and late blight of potato.
Solution for both is dithane - 45

8. Collecting

Prepared by Asmit HSC-2027