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Method of Fertilizer Application

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INTRODUCTION

Fertilization Methods

The choice of fertilization method and time depends on the form and cost of the fertilizer, its suitability for the farmer, the efficiency and safety of fertilizer application.

1. Solid form

1. **Broadcasting** – before planting, spread manure and manure evenly over the field and absorb it through tiles or paving.
2. **Drilling and Placement** - Place the fertilizer into the trench to the desired depth. It can be placed below.

(i) **Plough sole placement** - In this method stool is used or placed in the pit with lines adjacent to it open and should be covered by the plough.
(ii) **Deep placement** - Apply manure or manure to a depth of 10-12 cm at the base of the topsoil, especially in pond soil.
(iii) **Subsoil application** - Use the fertilizer deeper than 15 cm in the soil, especially in lake soil. Crops and crops. III. Spot application – Fertilizers are placed in the root zone or the spot near the roots from which roots can absorb easily.

(i) **Contact of drill placement** – Fertilizers or manures are placed at the time of drilling for placing the seeds. Fertilizers or manures will have good contact with the seeds or seedlings.
(ii) **Band placement** – This is the placement of manures or fertilizers or both in bands on the side or both sides of the row at about 5 cm away from the seed or plant in any direction. Such band placement is of three types.

(a) **Hill placement** – In widely spaced crops, like cotton, castor, cucurbits fertilizers or manures are applied on both sides of plants only but not continuously along the row.

(b) **Row placement** – In widely spaced crops between rows (Example–Sugarcane, maize, tobacco, and potato) manures or fertilizers are placed on one or both sides of the row in continuous bands.

(c) **Circular placement** – Application of manures and fertilizers around the hill or the trunk of fruit tree crops in the active root zone.

(iii) **Pocket placement** – Application of fertilizers deep in soil to increase its efficiency especially for the sugarcane pocket placement is done. Fertilizers are put in 2 to 3 pockets opened around every hill by means of a sharp stick.

(iv) **Side dressing** – It refers to hill and ring placement of manures or fertilizers. It consists of spreading the fertilizer between the rows or around the plants.

(v) **Pellet application** – Nitrogen fertilizers are pelleted like mud ball or urea super granules (USG) and placed deep (10 cm) into the saturated soils (reduced zone) of wet land rice to avoid nitrogen loss from applied fertilizers.

Generally placement of fertilizer is done for three reasons.

- Efficient use of plant nutrients from plant emergence to maturity.
- To avoid the fixation of phosphate in acid soils.
- Convenience to the grower.

2. Liquid form

✓ Foliar fertilization: Refers to spraying fertilizer onto the leaves of plants to quickly correct plant deficiencies (N or S).

- Fertilization: Fertilizer is dissolved in irrigation water and used outdoors. or shut down the system. Lined or unlined open trenches and sprinkler or drip systems.

✓ Starting medicine: low preparation, soaking the seeds, soaking the roots, spraying the seeds, etc. They are fertilizers used for many purposes.

✓ Direct application to the ground: Use a special sprayer to apply liquid fertilizers such as anhydrous ammonia directly to the ground. Liquids such as urine, sewage and domestic water are discharged directly into the fields.