

Commentary

Soil preparation and the sowing techniques

Daniel Pritham *

Department of Agriculture and Food Sciences, University of Reggio Calabria, Reggio Calabria, Italy.

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ABOUT THE STUDY

Stirring and loosening the soil will permit for extensive root penetration. Loosening the soil encourages the growth of several soil organisms, such as earthworms and bacteria, which add humus as well as other essential nutrients to the soil. It promotes deep soil absorption by plant roots. Moreover, loose soil enables the roots to inhale more freely and improves their aeration, which assists in the plant's development. By levelling the land, the surface becomes plain. It improves the soil's potential for holding it on moisture, enhancing productivity. The object used to level the earth is a big wooden or iron board known as a leveller. By levelling the field, irrigation water may be evenly distributed (Gloria, et al., 2021). Manure should be added to the soil to enhance its richness even before you commence to sow seedlings. To ensure optimum soil integration, we often add the fertilisers before tilling the ground.

The act of sowing involves burying seeds in the soil. Proper steps must be taken throughout this farming process, including maintaining the proper depth and distance and ensuring the soil is clean, healthy, and free of disease and other pathogens like fungus (Leubner, 2007). For seeds to germinate the procedure by which seeds grow into plants these measures are necessary.

In farming, sowing is important. The strongest, disease-free, and absolute quality seeds are selected and sown into the soil after the soil has indeed been loosened and ploughed. On the prepared land, elevated seeds are planted after being chosen. The following methods are usually used to sow the seeds that produce high yields (Rahmann, et al., 2017). The seeds are sown using a variety of techniques.

Traditional method

The seeds are typically sown with a funnel-shaped instrument. Seeds are poured into the funnels, where they are forced through a couple of pipes with pointed tips. The seeds are inserted into the soil at ends.

Broadcasting

In this technique, the seeds are mostly mechanically or manually dispersed on the annual crops. When seeds are sown using

the broadcasting technique, they are evenly distributed and covered by wooden planks. When there are a number of seeds, mechanical transmitters are used to complete the work. In this technique (Sramkovaa, et al., 2009), the seed yield is exceptionally high.

Dibbling

The seedbeds are created with holes, which are then loaded with seeds. After that, the seedbeds are covered. The holes are drilled to a particular depth. To dibble, it only utilizes a dibbler. A conical tool is used to drill accurate holes in the breeding ground. Vegetable seeds are typically sown utilising this technique (Šumberová, et al., 2017).

Drilling

The soil is then coated after the seeds have indeed been continuously dropped into the furrow lines. Sometimes a machine or a person performs this method (Tóth, et al., 2022). The appropriate amounts of seeds are sown in the appropriate places and at the right elevations.

Transplanting

The seedlings are planted in nurseries during this initial procedure, and subsequently they are planted in the prepared fields. Vegetables and flowers are usually cultivated in this manner. To perform this a trans planter is utilized (Walsh, et al., 2021). Therefore it requires time to complete this procedure.

Hill dropping

In this type of sowing, the selected seeds are placed at pre-determined locations, but not regularly.

Check row planting

Furrows that are parallel and straight serve the purpose of plant the seeds. For the technique, a check row planter is deployed. Both the distance between rows and between plants is the same.

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*Corresponding author: Daniel Pritham, Email: danieiprithi@yahoo.com

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