

covered with a light layer of soil. Seed boxes and seedbed should be sprayed where possible with soil acting pesticides to help control cutworms, mole - cricket and other soil borne pests.

**NB:** smaller seeds need shallower planting. Larger seeds need deeper planting. After planting seed box or seedbed, should not be exposed to hot sun or heavy rain. Some form of covering should be placed over seed boxes or beds. The idea is to keep the soil permanently damp, but not wet by watering, by watering with very fine sprays.

When germination begins, the young seedlings can be given full light of the sun, provided the covers can be removed. Shaded during the hottest hours.

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# Plants Raised From Seeds



### **Do you know how plants can be raised from seed?**

Most flower and vegetable seeds must be planted in a seed - bed and transplanted after they have grown into small seedlings for our conditions the soil is alive with natural enemies and with few exceptions the best results will be obtained by raising seedlings in trays or boxes as these afford some protection to seedlings.

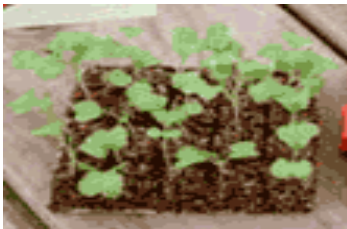
If the seedbed is made in the open ground, it is not uncommon for the seeds sown to be destroyed before they have time to germinate. Ants, in particular are liable to be very destructive and some species will remove seeds from the soil as soon as they have been planted.

There is also the risk of damage from rain; seeds may be washed out if there are heavy down pours of rain shortly after sowing. Even if the seed is successfully germinated in beds, it must still survive the risk of attack from rodent's insect pests and fungi, etc. However, there are far exceptions to this rule. Where seeds are as large or larger than pea, they can be planted in their permanent position, where they will not be transplanted.

Seed boxes in addition to seedbeds, are used for germinating small seeds or where seedlings are tender in the early stages cannot withstand the vigorous conditions in the fields. Seed boxes can be made from old packing cases (chicken boxes) or petrol tins, etc.

Convenient suitable sizes dimensions for seed boxes are 24" x 12" x 6". These can easily be moved to the field at planting time, if the boxes are not to be moved, it is essential that the boxes should be no wider than 2ft - 4ft to allow easy access to the seedlings.

The bottom of the seed box should have holes about 1/2 " in diameter and be about 4" - 6" apart or the bottom boards may be spaced 1/2" apart to facilitate drainage.



### **Filling the Boxes:**

The whole bottom should be covered with bits of stone to prevent blockage and a thick layer of dead dry grass coconut fiber, etc, to act as filter. If green leaves are used heat detrimental to the seedlings growth will be produced.

If a slotted bottom box is used stones may be left out, fertile topsoil crumbly in texture and free from stones and woody substances such as undecomposed roots, pieces of stick or grass stems is also required.

### **The Potting Mixture**

About 2 parts of soil to 2 parts of well-rotted pen manure or compost to 1 part of sand should be mixed thoroughly with all lumps and gravel's removed. The end product should be loose so as to allow free drainage but also it should have the ability to retain moisture.

The seed box should be filled to about 1/4" from the top and should be tapped or shaken to cover the soil then watered lightly.

### **Seed - Beds**

These are sometimes used to host seedling temporarily i.e., until they are ready for transplanting or for the duration of the crop life as in the case of back yard gardening. The size of the bed will depend on the number of seedlings to be produced. Beds can be of any desired lengths but they should not exceed width of between 3ft - 4ft.

### **Sowing Seed**

Seedbeds or boxes should be given a through watering before the seed is planted:

Tiny seeds such as Cabbage, Mustard, Pachoi, Tobacco should be mixed with sand for even distribution. Sometimes water may be used instead of sand. Where larger seeds are used drills should be made on the beds or in boxes and seeds should be placed about 1/2" deep and lightly covered with sand.

Medium size seeds - (tomatoes) should be sown in rows or drills about 2" between rows and 1" apart between seeds