

Producing Transplants at Home

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Garden centers, nurseries, and many other outlets such as supermarkets and variety stores have vegetable transplants for sale at reasonable prices. Unless your garden will require large numbers of plants, perhaps the two or three dozen plants needed could be more simply purchased at planting time.

To make the most of plant purchases:

1. Select a moderate size. The "full-grown" tomato plant may set a few early fruits, but in the long run production will be substantially the same as that of smaller, less expensive plants.

2. Choose sturdy plants with good color. Spindly, yellow plants will be slow to establish after transplanting.

3. Consider baskets of 6 to 10 plants. A compact, well-grown plant will resist transplanting shock and will supply large crops nearly as early as larger, more expensive plants.

Why bother with homegrown transplants? The main factor is that of availability of suitable varieties. Also, many gardeners enjoy growing their own transplants.

By carefully following the basic steps outlined in this fact sheet, the gardener can grow plants he will be proud of.

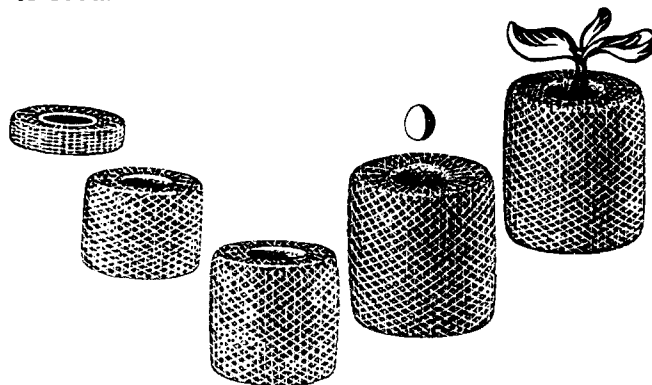
Timing

Tomato, pepper, and egg plants require about 6 to 8 weeks from seeding. May 10 to 20 is a good time for transplanting these crops in western Oregon, so start seeds indoors from March 15 to 20. The cabbage family, lettuce, and others may develop transplants in 4 to 5 weeks. Since these transplants are tolerant to cool temperatures, they can be set into the garden as early as March 15 if soil can be worked.

Growing medium

A satisfactory "homemade" mix may be obtained by blending equal parts of sand, loam, and peat moss. Commercial potting or rooting mediums that are soil-less and sterile may be purchased.

Perhaps the simplest labor-saving unit is the Jiffy 7 pellet. When placed in water, this compressed wafer expands into a fertilized peat "cube" ready to seed.



Pellets expand when soaked, forming individual units for starting seeds or cuttings.

Preparing to seed

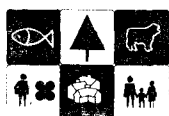
Homemade mixes must be sterilized to prevent seedling damping-off caused by fungus diseases. Moisten the mix to a state suitable for seed germination, place in a shallow pan, and bake at 175° for 30 to 45 minutes. Turn off heat, but wait until oven cools to remove soil.

Fill the desired container with the moistened soil mix. A 4-inch flower pot may be seeded with 18 to 20 seeds. Cover the well-spaced seed with ¼ inch of the medium. Label the pot and place it in a plastic bag.

If you use Jiffy 7 pellets rather than a planting mix, place the pellets in slightly warm water until they swell fully. A foil loafpan makes a good holder for the expanded units. Insert 2 to 3 seeds ¼ inch deep in each unit and press the hole closed. Place the pan in a plastic bag.

Germinating seeds

Tie the plastic bag so moisture does not escape. More water will not be needed until seedlings appear. Hold at room temperature (68°-75°) until seedlings emerge. Observe the germinating seeds daily. As soon as plants emerge, remove the bag,



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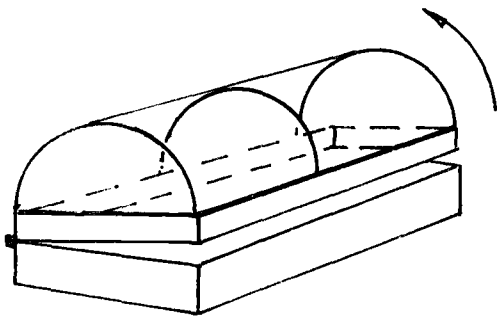
Pot in plastic bag
to germinate seeds

expose the plants to a maximum of light. This is necessary for growth of a husky plant. Cabbages appear rapidly. Tomatoes may take 4 to 6 days and peppers 10 to 14 days.

Seedling development

After initial germination, pots with seedlings should be exposed to lower temperatures (55° at night and 65-70° days) for husky development. Unless the mix was fertilized previously, weekly fertilization with a soluble plant food will be necessary. Thin the plants in the Jiffy 7's to one plant each. Spindly plants will be caused by one or more of these factors: too little light, high temperatures, lack of fertility.

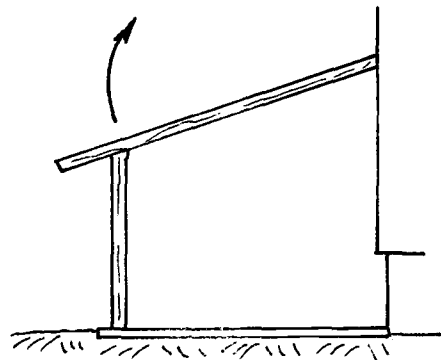
Most homes are too dark for best plant development, so a special place should be provided. A south window may suffice, but success will be questionable usually because nighttime temperatures are too high and daytime light intensity too low.



Portable cold frame—wire hoops covered with plastic

A simple cold frame which will permit maximum light for a longer period of the day is relatively easy to construct. A frame with a heating cable installed is called a hotbed and may be more useful if cold temperatures are expected. A

lean-to or small free-standing unit that will contain several dozen plants will serve very well and should be placed on the south side of the house.



Lean-to cold frame

A plastic or glass sash will permit ventilation during a sunny day, and closing at night. The bed must be deep enough for the upper frame to clear the plants at maximum size.

First transplanting

As seedlings get their first true leaf it is time to separate them for best development. Carefully loosen the soil around the roots with a dull knife blade and place the plants one by one in 3-inch pots or space them in a plastic or pressed paper basket of six or eight plants. The soil in these containers does not have to be sterilized.

Jiffy 7's have fertilizer in their makeup, but watch for pale plants as the plants grow larger. Plants in the bulk medium probably will require a soluble complete fertilizer about once a week.

Continued growth

Uniform watering and fertilizing and at least 12 hours of sunlight will produce the stocky transplant for high production in the garden.

Hardening off

About 10 days before transplanting time, expose plants to cooler temperatures and slightly less water. Protect the plants from freezing and wind, but either remove them from the cold frame during the day or prop the frame cover wide open.

A stocky transplant 6 to 8 inches high with dark green color should be the final product. The day before transplanting, water well with a complete soluble fertilizer. When plants are set in the garden, use plenty of water around the roots to be sure that they are in good contact with the soil.