

This Free E-Book is brought to you by Natural-Aging.com.

100% Effective Natural Hormone Treatment
Menopause, Andropause And Other Hormone Imbalances
Impair Healthy Healing In People Over The Age Of 30!

Starting Vegetable Garden Seeds & Plants Indoors

By David Selman, Tracker-Outdoors.com

Starting Vegetable Garden Seeds & Plants Indoors by David Selman,

Tracker-Outdoors.com

Starting Plants Indoors Seeds can be germinated and seedlings started in a box, pan or flowerpot of soil in a window. In addition to having at least 6 hours of direct sunlight each day, the room must be kept reasonably warm at all times.

Washed fine sand and shredded sphagnum moss are excellent media in which to start seeds. Place a layer of easily drained soil in the bottom of a flat and cover this soil with a layer – about three-fourths inch thick – of either fine sand or sphagnum moss. Press the sand or moss to form a smooth, firm seedbed.

Then, using a jig, make furrows in the seedbed one-half inch deep. Water the sand or moss thoroughly and allow it to drain.

Sow seeds thinly in the rows and cover the seeds lightly with a second layer of sand or moss. Sprinkle the flat, preferably with a fine mist, and cover the flat with a sheet of clear plastic film. The plastic film diffuses and subdues the light and holds moisture in the soil and air surrounding the seeds. Plastic films offer advantages over glass coverings in that they are light in weight and are nonshattering. Place the seeded and covered flat in a location that is reasonably warm at all times and has 6 hours of direct sunlight each day. The flat will require no further attention until after the seedlings have developed their first true leaves. They are then ready to transplant to other containers.

It is seldom possible to keep the transplanted plants in house windows without their becoming spindling and weak. For healthy growth, place them in a hotbed, coldframe, or other place where they will receive an abundance of sunshine, ample ventilation, and a suitable temperature.

Strong, vigorous seedlings can be started under 40-watt fluorescent tubes. These tubes should be 6 to 8 inches above the seedlings. Temperatures should be about 60F at night and 70F during the day. Best results are obtained if the fluorescent fixture is next to a window to increase the amount of light

Starting Vegetable Garden Seeds & Plants Indoors

reaching the young plants.

Soil pellets are the simplest and easiest method for starting plants and are readily available from garden supply stores and other sources. Soil pellets are a well-balanced synthetic soil mixture and are free of soilborne diseases and weeds.

Special Devices for Starting Plants

In determining the type of equipment for starting early plants, the gardener must consider the temperature and other climatic conditions in his locality, as well as the nature of the plants to be started. Hardy plants, such as cabbage, need only simple inexpensive facilities, but such heat-loving, tender seedlings as peppers and eggplant must have more elaborate facilities for successful production. In the warmer parts of the United States, and in the well-protected locations elsewhere, a coldframe or a sash-covered pit on the sunny side of a building usually suffices. In colder sections, or in exposed areas elsewhere, some form of artificial heat is essential. Where only a little protection

against cold damage is needed, a coldframe in which a temporary bank of lamps can be placed may be sufficient. The hotbed, lean-to, or sash greenhouse heated by manure, pipes, flues, or electricity are all widely used, the choice depending on conditions. A comparatively small plant-growing structure will provide enough plants for several gardens, and joint efforts by a number of gardeners will usually reduce the labor of producing plants.

The plant-growing structure should always be on well-drained land free from danger of flooding. A sunny, southern exposure on a moderate slope, with trees, a hedge, a board fence, or other form of windbreak on the north and west, makes a desirable site. Plenty of sunshine is necessary.

Hotbeds and other plant-growing devices require close attention. They must be ventilated at frequent intervals, and the plants may require watering more than once daily. Convenience in handling the work is important. Sudden storms may necessitate closing the structure within a matter of minutes. Plant growing at home should not be undertaken by persons obliged to be away for extended periods, leaving the plant structure unattended.

A tight well-glazed structure is necessary where the climate is severe; less expensive facilities are satisfactory elsewhere.

Covers for hotbeds and coldframes may be glass sash, fiber glass, plastic film, muslin, or light canvas. In the moderate and cooler sections of the country, standard 3- by 6-foot hotbed sash is most satisfactory. Even this requires supplementary covering with canvas, blankets, mats, or similar material during freezing weather. The amount of covering is determined by the degree of heat supplied the structure, the severity of the weather, and the kind of plants and their stage of development. Farther South, where less protection is necessary, a muslin cover may be all that is needed and for only a part of the time.

Many substitutes for glass as coverings for hotbeds and coldframes are on the market. The most widely used substitutes are various kinds of clear plastic film. Some of these have a lifespan of only one season, and others a lifespan of 3 to 5 years.

Clear plastic film transmits as much light as glass in the visible range, and more than glass in the ultraviolet and infrared ranges.

The film comes as flat sheets (on rolls) and in tubular form. Flat-sheet film is used for tacking onto wooden frames; the tubular form is used for enclosing metal tubular frames with a tight double layer of

Starting Vegetable Garden Seeds & Plants Indoors

film.

Large plant hoods made from semicircular aluminum or galvanized steel pipe and fitted with a sleeve of tubular plastic film make excellent coldframes or seasonal row covers. When used in this way, a double layer of plastic film provides an air space that insulates against 4 degrees to 7 degrees of frost temperature change.

Electrically heated plant beds are ideal for the home gardener, provided electric rates are not too high. The beds may be built any size. Because they are equipped with thermostatic control, they require a minimum of attention. It is not possible to buy frames – completely equipped with heating cables, switches, and thermostats – ready to assemble and set in position. Fill the frames with soil or plant boxes and connect to a source of current. Small frames may be removed at the end of the season and stored; larger frames are usually treated as a permanent installation. For more detailed information, see USDA Leaflet 445, Electric Heating of Hotbeds.

Hardening Plants

Plants should be gradually hardened, or toughened, for 2 weeks before planting in the open garden. This is done by slowing down their rate of growth to prepare them to withstand such conditions as chilling, drying winds, shortage of water, or high temperatures. Cabbage, lettuce, onion, and many other plants can be hardened to withstand frost; others, such as tomatoes and peppers cannot.

Withholding water and lowering the temperature are the best ways to harden a plant. This may be done in a glass or plastic coldframe.

About 10 days before being planted in the open ground, the young plants in beds or flats are blocked out with a large knife. Blocking, or cutting the roots, causes new roots to form quickly near the plants, making recovery from transplanting in the open easier. Blocking also makes it easier to remove the plants from the bed or flat with minimum injury.

Southern-Grown Plants Vegetable plants grown outdoors in the South are shipped to all parts of the country. They are grown cheaply and usually withstand shipment and resetting very well. They may not always be as good as home-grown plants, but they save the trouble of starting them in the house or in a hot-bed. Plants of beets, brussels sprouts, cabbage, cauliflower, lettuce, onions, peppers, and tomatoes are extensively grown and shipped; tomato, cabbage, and onion plants make up the bulk of the shipments. The plants are usually wrapped in bundles of 50 each and shipped by either mail or express. Tomato and pepper plants are packed with a little damp moss around the roots, but onion and cabbage plants are usually packed with bare roots. Shipments involving large numbers of bundles are packed in ventilated hampers or slatted crates and usually are sent by motor-truck or rail express. Shipments by air mail and air express are increasing.

The disadvantages of using southern-grown plants are the occasional delays in obtaining them and the possibility of transmitting such diseases as the wilt disease of the tomato, black rot of cabbage, and disorders caused by nematodes. State-certified plants that have been carefully inspected and found as free of these troubles as can be reasonably determined are available. Southern-grown plants are now offered for sale by most northern seedsmen, by mail-order houses, and often by local hardware and supply houses.

Transplanting

The term "transplanting" means shifting of a plant from one soil or culture medium to another. It may refer to the shifting of small seedlings from the seedbed to other containers where the plants will have

Starting Vegetable Garden Seeds & Plants Indoors

more space for growth, or it may mean the setting of plants in the garden row where they are to develop for the crop period. Contrary to general belief, transplanting does not in itself stimulate the plant or make it grow better; actually growth is temporarily checked, but the plant is usually given more space in which to grow. Every effort should be made during transplanting to interrupt the growth of the plant as little as possible.

Plants started in seed flats, flowerpots, and other containers in the house, the hotbed, the greenhouse, or elsewhere should be shifted as soon as they can be handled to boxes, flowerpots, plant bands, or other containers where they will have more room to develop. If shifted to flats or similar containers, the plants should be spaced 2 or more inches apart. This provides room for growth until the plants can be moved to their permanent place in the garden. Most gardeners prefer to place seedlings singly in flowerpots, paper cups with the bottoms pierced for drainage, plant bands, berry boxes, or other containers. When the plants are set in the garden, the containers are carefully removed. Soil for transplanting should be fertile, usually a mixture of rich topsoil and garden compost, with a very light addition of a commercial garden fertilizer.

Moistening the seedbed before removing the seedlings and care in lifting and separating the delicate plants make it possible to shift them with little damage to the root system and with only minor checks to their growth. Plants grown singly in separate containers can be moved to the garden with almost no disturbance to the root system, especially those that are hardened for a week or two before being set outdoors. Plants being hardened should be watered sparingly, but just before they are set out, they should be given a thorough soaking.

Plants grown in the hotbed or greenhouse without being shifted from the seedbed to provide more

room and those shipped from the South usually have very little soil adhering to the roots when they are set in the garden. Such plants may require special care if transplanting conditions are not ideal; otherwise, they will die or at least suffer a severe shock that will greatly retard their development. The roots of these plants should be kept covered and not allowed to dry out. Dipping the roots in a mixture of clay and water helps greatly in bridging the critical transplanting period. Planting when the soil is moist also helps. Pouring a half pint to a pint of water, or less for small plants, into the hole around the plant before it is completely filled is usually necessary. A starter solution made by mixing 1/2 pound of a 4-12-4 or 5-10-5 commercial fertilizer in 4 gallons of water may be used instead of plain water. It is usually beneficial. Finally, the freshly set plants should be shaded for a day or two with newspapers.

Plants differ greatly in the way they recover from the loss of roots and from exposure to new conditions. Small plants of tomatoes, lettuce, beets, cabbage, and related vegetables are easy to transplant. They withstand the treatment better than peppers, eggplant, and the vine crops. When started indoors and moved to the field, the vine crops should be seeded directly in berry baskets or containers of the same size that can be transferred to the garden and removed without disturbing the root systems. Beans and sweet corn can be handled in the same manner, thereby often gaining a week or two in earliness.

Article by:

Tracker Outdoors

www.tracker-outdoors.com

None

Planting A Vegetable Garden

By Jena Luthovski

Planting a vegetable garden at home can be fun, economical, and educational, but it can also be quite frustrating if you don't do some planning and preparation. Here are some ideas to get you started, check with your local Cooperative Extension for more tips.

First you should plan out your garden. One thing you will want to consider for a home vegetable garden is sunlight. Vegetable crops need a lot of sun, about six hours of full sunlight a day. For convenience, placing your garden near your water source, and near your house are good ideas as well, if possible. Draw a chart of your garden and plan out what crops will go where. If this is your first try at vegetable gardening, it is a good idea to start small so you can see how much time and work it will require. Plant crops that your family really likes in quantities that will be manageable to grow and use.

If you want good crops, you need good soil. Preparing your garden bed is the next step to a successful garden. Some preparation in the fall, like tilling, or loosening up the soil, will make it easier to get ready in the spring and will allow you to start some plants out earlier. For optimal results, have your soil tested to see if it is acidic, what nutrients it has, etc. This will help you decide how and how much to fertilize your garden. If you don't want to have your soil tested, ask the local gardening or seed store about local conditions. They should be able to give you a good idea of what is typical in your area. When you fertilize, pay close attention to recommended amounts and ratios of fertilizer to soil or size of your garden bed. Too much fertilizer will burn and kill your plants.

Now you can lay out your garden. Use stakes and string to create straight rows so you will know where your seeds are before they come up. Put up wire hoops or trellises for tomatoes, beans, and other plants that climb. Make soil mounds for tender vine crops like cucumbers and pumpkins. Whether you are planting seeds or plants that you have purchased or started indoors, make sure that you leave enough space between plants so they can get adequate sunlight, and not be competing with their neighbors for water and soil nutrients.

With a little forethought, you can end up with an enjoyable hobby that feeds your family, too!

Jena Luthovski writes about

,

and



This Free E-Book has been brought to you by Natural-Aging.com.

[100% Effective Natural Hormone Treatment](#)
Menopause, Andropause And Other Hormone Imbalances
Impair Healthy Healing In People Over The Age Of 30!