Grow garden transplants first

LITITZ - Starting your own transplants from seed can be both fun and good economics. But there's a knack to doing it successfully. Here are some pointers which should help grow sturdy transplants for the garden.

Here's what's needed: suitable containers, a warm place to germinate the seeds, a clean medium to grow them in, and enough light for them to grow well after germination

Containers for starting seeds are as varied as the gardeners who grow them. Some people like to use individual containers. These can range from plastic or paper cups or plastic egg cartons to the commercial peat pots or "jiffy-7's" you buy at a garden center.

Aluminum trays, pie tins, plastic tubs such as margarine or dessert whip can all be used to start several seeds together. Or buy some of the small plastic flats designed for that purpose.

The medium used for starting your seeds is important. It must hold moisture, but drain well. Above all, it must be free of disease-causing organisms Peatlite mixes (a combination of sphagnum peat moss and perlite) are widely used by professional growers for starting seeds. These are available at most places that sell garden supplies. Another advantage of these mixes is that they usually contain enough fertilizer to get the seedlings of? to a good start.

It's best to wet the medium some time before sowing seeds, as some of these mixes are slow to absorb moisture Saturate it well. If the container doesn't have a drain hole, either make one or water carefully so that excess water doesn't stand in it

Now, it's time to sow the seeds Small seeds like petunia and snapdragons aren't covered at all but scattered over the surface of your growing medium. Cover larger ones to a depth once or twice their diameter

If individual containers are used, put 2 to 3 seeds in each one Later remove all but the most vigorous seedling. If a tray is used, sow the seeds thinly so plants won't be overcrowded once they sprout. While waiting for the seeds to germinate, it helps to put containers inside a plastic bag. This should keep the growing medium from drying out.

Now, find a nice warm spot to germinate the seeds The top of your refrigerator, the back of the stove, on top of a radiator - any place where they'll be reasonably warm A temperature of 70-80 degrees is ideal.

As soon as the seeds germinate remove the plastic bag and put containers where they'll get good light. A sunny window will do nicely If you don't have one, grow seedlings under a fluorescent light A shoplight will give excellent results, provided seedlings are placed within about six inches of it.

Common vegetables like tomatoes, peppers and eggplants as well as flowers like marigolds, petunias and alyssum should be started 4-6 weeks before they're to be set outdoors. In this area, this means sowing them anytime from mid-March to early April.

Plants sown in trays need to be moved to individual pots as soon as they're large enough to handle Use the same medium the seeds were started in

Seedlings will need to be fertilized to keep them growing well Soluble liquid fertilizers are best Follow directions on the label as to how much and how often to feed Rates and frequency will vary with the product.

Acclimate seedlings to outdoor conditions by placing them in a protected spot outside a couple of days before planting them in the garden

With proper care, these homegrown seedlings should cost less and give greater variety than commercially grown transplants.

Vegetable	Seed per 100 fees	Plants per 100 feet ⁴	Space between rows feet ^d	between plants in row inches	of plant ing inches	Approximate field planting dates ^e	Time to maturity davs
Asparagus ^b	½ oz	50 75	4	18 24	68	April	2 3 vr
Beans dwarf snap	8 oz		1 1/2 3	3.4	1 1 1/2	May Aug	50 65
Beans pole snap	4 oz		4	48	1 1 1/2	May 15 June 1	50 75
Beans green shell	8 vz		23	24	1 11/2	May 15 July 1	90 100
Beans dry shell	8 oz		23	2-4	114	May 15 June 1	90-100
Beans dwarf hma Beans pole hma	1 16		11/3	48	11%	May 20 June 10	75 80
Beans pole lima Beeis	8 oz		4	68	1 11/2	May 20 June 1	80 100
Broccoli early ^h	1 oz	40	111/2	13	1/2 1	April I July 10	50 70
Broccoli late	14 OZ	60 60	3	12 24	plants	April 1 15	75 100
Brussels sprouts ^h	1/4 OZ 1/4 OZ	60	3	18 24	plants	June 15 July 10	90 100
Cabbage carly ^h	14 OZ	70	23	18 24	plants	May 15 June 15	90 130
Cabbage late	14 OZ 14 OZ	60	23	9 18 9 24	plants	April 15 May 20	60 90
Cabbage Chinese	14 OZ	00	11/2 3	10 18	52 52	June 15 July 1	90 120
Carrots	1/2 OZ		12	13	1/4 1/2	July 15 Appl. 1. July 10	75 100 55 90
Cauhflower early ^b	1/4 OZ	60	23	12 18	plants	April 1 July 10	75 100
Cauliflower late	'4 OZ	60	23	12 18	1/2	April 1 15 June 15 July 10	90 120
Celery early ^h	V4 OZ	200	23	46	plants	April 20-May 15	75 100
Celery late	1/4 OZ	200	23	6	5 Marines	July 1 15	100 120
Celenach	1/4 OZ	200	2	4	14	July 1 15	90 115
Chicory	1/2 OZ		11/2 2	4 10	44	June 15	120 130
Chives		100	2-7	111/2	plants	April	120 150
Corn sweet (early)	1/4 lb		21/2 3	8 10	11/	May 1 July 1	70 80
Corn sweet (late)	14 ІЬ		21/2 3	10 12	1 1/2	May July	85 100
Cress (upland)	14 OZ		1 1 1/2	24	1/4 1/2	May June 15	60 80
Cucumber	v oz		36	12	1 11/2	Max 10 June 15	60 80
Dandelion	1/2 OZ	150	12	36	1/4 1/2	April Sept	175 200
Eggplant ^b	1/4 oz	60	34	18 24	plants	May 20-June 1	90-100
Endive	1/4 OZ		11/2 2	8 12	1/4 1/2	May 1 July 15	60-90
Horseradish		100	3.4	12-15	6	April 1 15	180
Kale ⁿ	4 OZ		11/2 2	12 24	Ъ	July 15 Aug 1	50-200
Kohlrabi ^h	1/4 OZ		1 1/2 2	4 6	1/2	April 1 Aug 1	60 75
Leek	¼_ oz		1 1/2 2	34	1/2	April 115	130 180
Lettuce ^h	¹ /4 OZ		1.2	9 15	1 1,2	April Aug 1	45 75
Musk melon'	54 OZ		56	12 24	1 1 14	May 15	85 100
Onion (plants) ^h	1/2 OZ	600	1 1/2 2	34	plants	April 1 15	110
Onion sets	2 lb		12	13	<i>٧</i>	April 1 15	100 120
Onion (for sets)	2 oz		114	crowded	14.17	April 1 15	40 100
Parslev ^h	V oz		11%	4 1 2	1/4 1/	April Aug 1	60 90
Parsnip	1/2 OZ		11/2 2	3.4	44	April 15/30	95 110
PLAN	1 16		23	2 3	1 11/2	April	50-80
Pepper ^h	14 OZ	80	1 1/2 3	12 24	prants	May 20 June 1	70 90
Potato sweet	l pk	80	3 31/2	12 18	plants	May 20	115 125
Pumpkin (vine)	1. 02		6 10	36 60	1	May 20 June 1	90-110
Radish Rhubarb ^h	1 oz	26	1	1	1/2	April Aug	25 35
Rutabaga	3 02	25	34	23	plants	April	2 yr
Salsify	14 UZ		11/2 2	58	1/2	July i	90 120
Spinach	l oz		1 11/2	24	1/2	April 1.15	140 150
Spinach New Zealand	l oz		1 11/2	24	1/2	April and August	40 60
Squash winter	1 02		34	24 36	1	April 15	60 80
Squash summer	l oz		6 10	36 60	1	May 15 June 1	90 110
Swiss chard	l oz l oz		35	36 60	1	May 15 June 1	50 80
Tomato ^h	1 OZ	40	11/2 3	6 12	1/2 1	April 15	50 60
Tomato staked ^b	4 OZ	75	35 34	36 60	plants	May 20 June 1	75 100
Turnip	¹ /2 OZ		1 2	15 24	plants	May 20 June 1	75 100
Watermelon	1 02 1/2 02		6 10	2 6 24 36	14 14 1	April July 25 May 20 June 3	50 80 70-95

Space

Depth

* Exact amounts will vary according to planting distances

^b Crops that can be started indoors and transplanted to the field

* Crops that require special treatment for transplanting

^d For wheel hoe cultivation, distance between rows may depend upon type of cultivator to be used

5 Dates for Central Pennsylvania

