

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF OKLAHOMA

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Emergency Home Vegetable Garden

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"The man who farms to make money will go broke, but the man who farms to make a living will make money." "The first and chief business of farming is to make a living for the family on the farm. Unless we produce a good living on the farm, in large measure we and our families will go without much that we need and want to eat." The first step toward producing food for the family on the farm is to grow a good garden. The following practical suggestions are offered in the hope that they will help you to grow the best garden this year that you ever grew.

A good garden is always a very important part of a live-at-home program. A good garden is one which will supply:

- (1) A variety of fresh vegetables from early spring until killing frost in the fall.
- (2) A surplus for canning or drying, and
- (3) Certain vegetables for storage when harvested.

The carrying out of the above requirements will constitute a year round garden.

Manuring and Plowing—Apply a good coat of barnyard manure to the garden spot and disk where practical. Break the ground with a breaking plow and leave rough. It is assumed that the above is done a month or more before planting time. Ground left rough will catch and retain more moisture and where exposed to alternate freezing and thawing it will be improved physically and chemically and again, many insects may be destroyed. Ground broken early may enable one to plant sooner. A good fine seed bed should be prepared by disking, harrowing and raking before the seed are planted. As a rule early gardens in Oklahoma give more returns than a late garden

Emergency Vegetables—Among the most practical or emergency vegetables which should be raised are: Beans, beets, cabbage, carrots, cantaloupes, corn, cowpeas, cucumbers, English peas, Irish potatoes, lettuce, mustard, okra, onions, pumpkin, radishes, sweet potatoes, Swiss chard, tomatoes and watermelons. Other vegetables might be added to this list.

Planning the Garden—Plan the garden before you begin to plant. By planning is meant know the kind of vegetables to be planted, where in the garden or field the different vegetables are to be planted and how much of each kind is to be planted.

APPROXIMATE TIME REQUIRED TO RAISE VEGETABLES

Kind of Vegetables	Ready for Table
Beans, bush (tender)-----	40 to 65 days
Beans, pole (tender)-----	60 to 80 days
Beets (semi-hardy)-----	60 to 80 days
Cabbage, early (semi-hardy)-----	90 to 130 days
Carrots (semi-hardy)-----	75 to 110 days
Corn, sweet (semi-hardy)-----	60 to 100 days
Cucumber (tender)-----	60 to 80 days
Cowpeas (tender)-----	60 to 75 days
Lettuce (semi-hardy)-----	60 to 90 days
Melon, musk (tender) (Cantaloupe)-----	120 to 150 days
Melon, water (tender)-----	100 to 120 days
Mustard (semi-hardy)-----	60 to 90 days
Okra or Gumbo (tender)-----	90 to 140 days
Onion, from seed (semi-hardy)-----	130 to 150 days
Onion, from sets (semi-hardy)-----	40 to 120 days
Peas (semi-hardy)-----	40 to 80 days
Potato, Irish (semi-hardy)-----	90 to 100 days
Potato, sweet (tender)-----	100 to 150 days
Pumpkin (tender)-----	100 to 140 days
Radish (semi-hardy)-----	20 to 40 days
Swiss chard (semi-hardy)-----	50 to 60 days
Tomato (tender)-----	100 to 140 days

From the above it will be noted the approximate time required from seed planting time until the different kinds of vegetables will be ready for the table. Semi-hardy after a vegetable indicate that the seed may be planted at the first spring planting, usually February 22, to March 10. Tender after a vegetable indicates that it should not be planted until danger of frost is past, April 10 to May 1.

Proper Selection and Arrangement of Vegetables—You will find it very helpful if you will make a sketch of your garden and the arrangement before starting and then refer to this plan throughout the season. The proper selection and arrangement of vegetables in the garden is very important. The selection of vegetables to be planted in the home garden will depend largely upon the taste of the different members of the family. It is important to include vegetables that will stand adverse weather conditions such as cold, heat and drouth. Arrange the long-lived vegetables on one side of the garden and the short-lived vegetables on the other side. When the short-lived vegetables are harvested other vegetables may be planted or the ground kept clean until late summer and then plantings may be made.

This arrangement of vegetables refers to the ones planted within the garden fence. Melons, sweet potatoes, Irish potatoes, corn and other vegetables are frequently planted in patches in the field.

Long-Lived Vegetables—Pole beans, carrot, cucumbers, cantaloupe, okra, pumpkin, Swiss chard, tomato, sweet potato, watermelon.

Semi-Long-Lived Vegetables—Bush beans, beets, cabbage, corn, cowpeas, onions, Irish potatoes.

Short-Lived Vegetables—Radishes, lettuce, mustard, peas.

Cultivation—Frequent shallow cultivation to keep down the grass and weeds and at the same time conserve moisture is very necessary in order to grow a good garden. No part of the garden should be permitted to grow up to weeds and grass during the summer but it should be kept clean in preparation for late vegetables.

Three foot rows are a very convenient width for the garden as it facilitates cultivation especially where cultivation is done by means of a horse. The rows for vegetables listed should be three feet apart except where noted to the contrary.

Cucumbers, cantaloupes, pumpkin and tomatoes should be planted in rows six feet apart and watermelons should be planted in rows 12 feet apart.

A HOME GARDEN SEED LIST FOR FARMERS SECURING HOME GARDEN SEED LOANS

This is the recommended home garden seed list for those securing garden seed loans and is based on:

\$3.00 for garden seed
 \$4.00 for Irish potatoe seed
 \$1.00 for sweet potato seed

Total - - - \$8.00

No. Rows	Kind of Vegetable	Amount of Seed	Estimated Cost
4	Beans (Bush snap)		
	2 plantings—10 days apart	2 pounds	\$.60
1	Beans (pole)	½ pound	.15
1	Beets	1 ounce	.10
1	Cabbage	½ ounce	.10
1	Carrot	½ ounce	.10
1	Cucumber (Rows 6 feet apart)	½ ounce	.05
1	Cantaloupe (Rows 6 feet apart)	½ ounce	.10
2	Corn (2 plantings)	2 pounds	.20
4	Cowpeas	2 pounds	.20
½	Lettuce	½ ounce	.05
½	Radishes	1 ounce	.10
1	Mustard	1 ounce	.10
1	Okra	1 ounce	.05
2	Onions	1 ounce	.15
2	Peas, (1 early, 1 medium)	2 pounds	.50
1	Pumpkin (rows 6 feet apart)	1 ounce	.10
1	Swiss chard (for greens and green feed for chickens during hot, dry summer)	1 ounce	.10
3	Tomatoes (rows 6 feet apart)	½ ounce	.15
2	Watermelon (rows 12 feet apart)	2 ounces	.10
24	Irish Potatoes	2 bushels	4.00
24	Sweet Potatoes	½ bushel	1.00
Grand total - -			\$8.00

The above seed list indicates the number of rows, length of rows, kind of vegetables, amount of seed required to plant same with an estimated cost. The prices are based on average retail prices as submitted by several seed men. The above seed is sufficient to plant 91 rows, 100 feet long and 3 feet apart, except where otherwise indicated, making a total of three-fifth of an acre.

Bush Snap Beans—Beans will not stand frost and will not grow well until the soil is fairly warm. In many parts of Oklahoma the bean does poorly on account of the hot dry winds that are liable to come during the blossoming period, therefore, as early a planting that can be made and escape the danger of frost is advisable. Plant in row three feet apart and the seed may be planted three to four to a hill, hills about 12 inches apart or the seed may be drilled along in the row about 3 or 4 inches apart and about 1½ inches deep. The seed should be planted from April 10 to May 1.

Varieties: Green Pod Stringless is a good variety.

Pole Snap Beans—All varieties of pole beans are more tender than bush beans and for this reason should be planted about two weeks later. It is preferable to distribute the seed of pole beans along in the drill rather than planting in hills in three foot rows. Quite frequently in the eastern portion of the state pole beans are planted among the corn or along the fences. Post and wire trellises are sometimes used as a substitute for a fence or the planting in the corn patch.

Varieties: Kentucky Wonder is undoubtedly the most popular variety of pole snap beans.

Beets—The beet is one of the best vegetables for both early and late gardens in Oklahoma. They will stand a fairly heavy frost with but little injury as well as being rather drouth resistant. The seed should be planted the last of February or the first of March. Begin to thin when the plants are about three or four inches tall and the first thinnings may be used for greens. The seed germinates rather slowly and frequently seed are soaked in water over night in order to hasten germination. Plant in three foot rows drilling the seed along in the row about one inch deep.

Varieties: Early Blood Turnip and Detroit Dark Red are good varieties.

Cabbage—Cabbage is a cool-natured plant and requires a certain amount of moisture for its best development. It is preferable to set out cabbage plants along the last of February or the first part of March, but where plants are not available seed should be planted in early February then planted to their permanent places the last of the month. Set the plants deeply in order to avoid frost injury. Only early varieties should be grown. Use three foot rows and set plants about 18 to 24 inches apart in the row.

Varieties: Jersey Wakefield and Charleston Wakefield are popular varieties.

Carrots—Carrots are getting to be a much more popular vegetable than it was in former years. This is undoubtedly due to the fact that it furnishes a fresh vegetable throughout the entire growing season, then again, it is used in so many different dishes for the table. The seed should be planted the last of February or early March about one-half inch deep, drilled rather thickly in the row and thinned as the carrots grow. Carrots will remain over in the ground during the winter but it is preferable to harvest them and store them in soil banks similar to that of turnips.

Varieties: The Improved Red Cored Chantenay of Chantenay or good varieties.

Cucumbers—Cucumbers will not stand frost but naturally should be grown early to be a success. It is not advisable to attempt to transplant cucumber

plants under average conditions. The seed may be drilled thinly along in the row, the rows six feet apart preferable, then finally the plants may be thinned to two feet apart in the row. Plant the seed about three-fourths inches deep from the middle of April to the first part of May.

Varieties: White Spine and Long Green are good varieties.

Cantaloupes—Where there is a choice between soils, it is preferable to plant cantaloupes on a light sandy soil. Seed may be planted similar to that of cucumbers, namely—drill along in the row thinly about three-fourths inches deep, rows six feet apart then finally the melons thinned to two or three feet apart in the drill. Seed should not be planted until danger of frost is past which is as a rule from about April 10 to May 4.

Varieties: Rocky Ford and Pollock 10-25 are popular varieties.

Sweet Corn—A limited planting of sweet corn is very desirable, however, quite frequently ordinary field corn is used as roasting ears as a substitute for sweet corn. The early plantings of sweet corn as a rule are the most successful ones. Seed may be drilled along in the row about one and one-half to two inches deep from about the middle to the latter part of March. Two or three plantings may be made at intervals of 10 days or an early planting made and later varieties planted thus affording roasting ears over a period of time.

Varieties: Golden Bantum, Stowell's Evergreen and Country Gentlemen are good varieties.

Cowpeas—Cowpeas ordinarily are considered field crops, but the average Oklahoma farm family appreciates them as a vegetable in that the tender green pods may be used as a substitute for snap beans then the partially ripe peas as well as the dry peas for winter use. Cowpeas may be planted following Irish potatoes or some early growing crop. A maximum yield of peas will be obtained where planted in rows rather than broadcast. Do not plant until the soil is thoroughly warm say in May or June.

Varieties: The Black-Eyed Crowder or Whippoorwill are good varieties.

Lettuce—Lettuce is a vegetable that is found growing in practically every farm garden and justly deserves a place in same. This is one of the quick maturing vegetables and will give early spring results. The seed should be planted thickly in rows and may be thinned from time to time. Plant about one-fourth to three-eighths inches deep along the last of February or early March. Successive plantings may be made in order to continue the season.

Varieties: Big Boston is a popular variety. Grand Rapids is one of the most popular leaf varieties of lettuce.

Mustard—For use in early summer plant thickly in row three feet apart and cover about three-fourths inches deep. The seed should be planted the last of February or early March gradually thinning the plants until they are eight or ten inches apart in the row.

Varieties: Southern Giant Curled is the most popular variety of mustard.

Okra or Gumbo—Because of the ability of Okra to make a steady growth during the hot and dry summer this vegetable deserves a place in every Oklahoma garden. Plant seed about six inches apart in three foot rows about one inch deep from the middle to the latter part of April. After the plants begin to reach an average height pinch out the top which will cause branching and the production of a large number of tender pods which are desirable for eating purposes. If the pods are kept gathered as they are produced the plants will fruit heavily until frost.

Varieties: Dwarf Prolific and White Velvet are two of the most popular varieties.

Onions—Onions are raised in three ways in Oklahoma at the present time, namely—from onion sets, onion seedlings and onion seed. Onion sets and seedlings give the early onions, however, are more expensive than where seed are planted, that is, so far as the initial expense is concerned. Regardless of whether seed, sets or seedlings are used they should be planted in the early spring from the last of February to about March 10. Where seed is used drill them rather thickly in the row about one-half inch deep. When the seedlings become well established they may be thinned and the thinnings transplanted. Where onion sets are used they are usually set about two inches apart in the drill and so the top is well below the surface of the soil. In case of onion seedlings it is well to open up the drill so they may be set down in the ground and the soil firmed well against the seedlings. The top should project above the surface of the soil and the roots should be as a rule two or three inches down in the soil. Where they are set deeply injury from the cold is not so apt to occur.

Varieties: The white and yellow Bermuda are very popular, however, the Valencia or Sweet Spanish is growing in popularity in the state and keeps better than the Bermuda onions.

Peas—English peas is a cool natured plant and it should be planted early and varieties used that will mature before hot dry weather sets in. From the central to the western part of the state only the early dwarf varieties are grown, however, in the eastern part of the state the climbing varieties are frequently grown to advantage from a home garden standpoint. The seed should be drilled in three foot rows and about two inches deep in the drill. The seed should be planted about the last of February or the first part of March.

Varieties: Alaska, First and Best and Bliss Everbearing are good dwarf varieties.

Irish Potatoes—One of the most important farm vegetables that should be raised on every Oklahoma farm is the Irish potato. Select a good sandy loam soil rich in organic matter and rich in fertilization. Prepare a good seed bed and plant at the rate of two bushels of seed to one-sixth of an acre and where good cultural practices are followed a supply of Irish potatoes for the average Oklahoma farm family should be raised. Use good seed cut in largely sized seed pieces with at least two good eyes. Large size seed pieces are advantageous where drouth or wet weather follow and again where the early plants are cut back by frost because the plants draw upon the reserve food supply in the seed pieces to start again where killed back by a freeze. Open up the furrow four inches deep distribute the seed ten or twelve inches apart in the furrow then cover by applying a furrow to each side. As the plants begin to come up harrow the ridges off level, thus a soil mulch will be established and new growth of grass and weeds will be destroyed.

Early cultivation should be comparatively deep and as the plants grow cultivation should be shallow in order to avoid disturbing the root system of the plants. As the plants grow gradually work the soil to them in order to afford a good medium in which the potatoes can expand. Sometimes the Irish potato patch is mulched with a heavy layer of straw but it is preferable to get the plants up and cultivate them once or twice before applying a three or four inch straw mulch.

After the plants begin to mature as indicated by turning yellow here and there in the patch, harvest the entire patch without exposing the potatoes to the sun then store in a cool dry place where the sun will not strike them and there should be no difficulty in keeping the spring crop of potatoes. Irish potatoes should be planted along the last of February and not later than the middle of March depending upon the section of the state.

Varieties: The Triumph is the earliest variety and is red in color. The Ohio and Irish Cobbler are good varieties, however, are not as early but are better keepers.

Sweet Potatoes—Sweet potatoes can be grown in practically all sections of the state. The soil preferred is that of a light sandy one. In soils inclined to be heavy ridges may be formed before setting the plants, but they should be harrowed down practically level thus affording a clean moist soil in which to set plants or sets when danger of frost is past which is as a rule the last of April on up to early June.

Sweet potatoes should be bedded from the middle to the latter part of March for production of early slips. A hotbed will give the earliest plants but where a hotbed is not used a piece of ground may be plowed in a land in order to afford a good drainage then the potatoes bedded and covered about three inches deep with sandy or sandy loam soil. Where potatoes are bedded along the last of February or early March slips should be available in four or five weeks for setting in the open ground. It is desirable not to let the potatoes touch one another where bedded then again if there are any diseased potatoes they should be discarded and not put in. Sweet potato slips should be set about 12 to 18 inches apart in the row and the rows about three feet apart. Cultivation should be kept up during the early growing season and as the season advances the soil should be plowed forming a ridge especially in case of soil inclined to be a little heavy.

Sweet potatoes are usually harvested just before killing frost in the fall.

Varieties: Porto Rican and Nancy Hall are the most popular varieties grown in the state.

Pumpkin—Pumpkins grow quite well in Oklahoma. Their culture is about the same as melons and cucumbers. Seed may be drilled along in rows, rows six feet apart. Plants may be thinned to two or three feet apart in the rows. Quite frequently pumpkins are raised in the corn field. They should not be planted until danger of frost is past which is the latter part of April and through May.

Varieties: Large Cheese and Small Sugar are two popular varieties.

Swiss Chard—Swiss Chard is a vegetable which should be planted in every Oklahoma garden as it is one of the most drouth resistant vegetables that we have. It is used in its young stage as greens and the large stems of the leaves may be separated out and used as a substitute for asparagus. The surplus leaves may be pulled off from time to time which will insure a supply of green feed for the chickens during the hot dry summer months. It will be available in the garden from early spring until freezing weather in the late fall or winter. It has been known to live over the winter during a mild winter season. Plant the seed in three foot rows in drills the last of February or early March, finally thinning the plants to 8 or 10 inches in the rows.

Varieties: Lucullus is a good variety.

Tomatoes—Tomatoes is one of the most popular vegetables grown in Oklahoma, however, in many sections of the state, especially during the hot dry summer the plants frequently shed a large portion of their blossoms and do not set fruit. Other than this difficulty tomatoes are comparatively easily grown.

The principal factors favoring the production of tomatoes are: (1) The raising or securing of large stocky cold frame plants to set out in the open ground when the danger of frost is past; (2) Setting the plants in a semi-protected place from the southwest winds; (3) Setting the plants deeply and properly spaced in a fertile soil; (4) Proper staking or trellising and pruning; (5) Cultivation.

For production of good plants it will be well to plant tomato seed in a box or seed flat along the last of February. Plant the seed about one-fourth inch deep in rows three to four inches apart, cover seed and water carefully in order to avoid washing seed out of the ground. This box would be placed in a rather warm place in the house and the soil kept moist. Be sure the box is protected from the mice. Glass or wire screen over the box may be used advantageously. As a rule the plants will be ready to transplant to another box or cold frame in about three or four weeks. It will be preferable to transplant the plants at least two inches apart each way and after all danger of frost is past stocky cold frame plants will be available to set in the open ground instead of planting seed in the open ground as is quite frequently the case in Oklahoma.

It is very important especially from the western two-thirds of the state to set tomato plants in at least a semi-protected place. Where plants can be set to the north or northeast of a building, hill or forest the hot summer winds will be broken and the plants will come nearer setting fruit than where set in the open. In setting plants in such protected place avoid excessive shade by not placing too close to the buildings or hills or trees. A thick planting of corn to the south or southwest will serve as a late windbreak.

Contrary to general supposition tomato plants will set more fruit in a rich soil than on a poor one. Tomato plants should not be set in the open ground until all danger of frost is past which is as a rule from about the middle of April to the first part of May.

Varieties: Where wilt is present only wilt resistant tomatoes should be used such as the Marglobe. Two early varieties of tomatoes are June Pink and Bonnie Best.

Watermelons—Watermelons prefer a sandy soil containing an abundant supply of organic matter which enables them to stand dry weather better. New soil is preferable for the growing of watermelons in the commercial section of the state. Rotted manure well worked into the hills or drill is very desirable. Watermelons are very sensitive to cold and should not be planted until all danger of frost is past.

Watermelons should be planted four or five feet apart in the drill and the drills as much as twelve feet apart. Where melon vines are thinned to one to the hill then all defective and surplus melons removed down to two or three to the vine melons will be larger and more uniform in size and shape.

Varieties: Tom Watson and Irish Gray are two of the most popular varieties. The Keckler Sweet and Halbert Honey are two melons of high quality.