

Growing Vegetables As A 4-H Club Project

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REASONS FOR A GARDEN PROJECT

1. A garden properly tended will provide a wider variety of food and cut down the cost of living for the family.
2. The boy or girl will become acquainted with the different kinds of vegetables, the different habits of growth of each vegetable, soil and fertilizer requirements, and kinds of insects and diseases attacking them and their control.
3. A well-tended garden is a good training ground for a future farm occupation of growing vegetables for sale.
4. A vegetable garden teaches the boy or girl the importance of vegetables in the human diet and its relation to health.

A GARDEN PLAN

A carefully planned garden looks better and is more easily worked and cared for. See that the garden is protected from livestock. An ideal location is a fenced area convenient to the house. It is advisable to select a plot of ground which has been planted to vegetables for only a short time. Old garden areas often contain an accumulation of soil-borne diseases.

QUANTITY OF SEED

The total quantity of seed and plants of each kind of vegetable necessary in carrying out the 30 by 50 foot garden area is as follows:

Seed—Snap beans, $\frac{3}{4}$ pound; lima beans, $\frac{1}{2}$ pound; beets, $\frac{1}{2}$ ounce; $\frac{1}{4}$ ounce each of carrots, mustard, spinach, Swiss chard, tendergreen, or Severtop turnip; sweet corn, 2 pounds (1 pound for early planting); Irish potatoes, $\frac{1}{2}$ peck.

Plants—Tomato plants, 75 (early and late plantings); cabbage, 50 plants (early and late plantings); collards, 25 plants; sweet potatoes, 60 plants. If home grown plants are desired, one packet each of tomato, cabbage, and collards, and 5 pounds of sweet potatoes will give a sufficient number of plants for the garden plot.

PREPARING THE SOIL

The garden plot should be covered in the fall or early winter with an inch of well-rotted stable manure or about one-half inch of chicken manure. About 25 pounds of 16% superphosphate should be broadcast over the 30x50 foot garden area at the time the manure is put on. The garden area should be plowed several months in advance of seeding, preferably in the fall, and kept in a rough condition through the winter as alternate freezing and thawing help to pulverize the soil. A week or more before planting time plow or spade the ground again and work it to a fine mellow condition as deep as it was plowed.

FERTILIZING THE GARDEN

A regular fertilizer for growing the vegetables is a 5-7-5 commercial mixture. Apply this in the furrow of the plant row a week or ten days before planting. It is necessary to mix the fertilizer thoroughly with the soil and distribute it evenly throughout the furrow.

Vegetables such as lettuce, mustard, Swiss chard, spinach and other greens, sweet corn, cabbage, and tomatoes are benefited by a side dressing of nitrate of soda. The applications should be made several weeks after the plants have come up.

The following table gives the amount of 5-7-5 fertilizer and nitrate of soda to use for a 50-foot row according to the distance between the rows. Do not use stable or poultry manure in growing sweet potatoes. Use a 3-8-8 grade of fertilizer.

*Kind of Fertilizer	Approximate Amount of Fertilizer per 50-foot row for Different Widths	
	Rows 2 ft. apart	Rows 3 ft. apart
5-7-5 Fertilizer	2 pounds	3½ pounds
Side Dressing with Nitrate of soda	¾ pound	1½ pounds

*One pound of 5-7-5 fertilizer or one and three-fourth pounds of nitrate of soda will measure out approximately one pint.

INSECT AND DISEASE CONTROL

Insects—Many of the leaf-eating insects such as the Mexican bean beetle, cabbage worm, striped cucumber beetle and Harlequin cabbage bug, as well as aphids or plant lice can be controlled by rotenone mixtures, either by dusting or spraying. A commercially prepared dust mixture containing 0.75% or 1% rotenone is a very satisfactory dust for most purposes. In preparing sprays, a 4% rotenone dust is mixed with water at the rate of 2½ ounces (15 level tablespoonfuls) in 3 gallons of water.

Diseases—1. Purchase good seed from reliable dealers who offer for sale treated seed. Some diseases are carried over in the seed, and treatment with hot water or chemicals destroys the disease organisms. 2. Some of the leaf and fruit diseases can be controlled with Bordeaux mixture sprays or copper-lime dusts. Commercial preparations of these materials can be purchased and used according to the recommendations of the manufacturer. 3. Purchase wilt resistant varieties of tomatoes such as Marglobe, Rutgers or Pritchard.

COMPLETION OF PROJECT

The garden project is completed when the 4-H Club member, as far as possible, has planted the vegetables according to the garden plan, followed the recommendations as to the preparation of the soil, fertilization and control of garden pests, and when the record book has been filled out and turned in either to the farm or home demonstration agent.

Related publications of the N. C. Agricultural Extension Service, State College Station, Raleigh, N. C.

N. C. Circular, Club Series No. 16—A Garden Manual for 4-H Club Members.

Extension Circular No. 122—Home Garden Manual.

PLAN FOR 4-H GARDEN PROJECT **Size of Garden—Approximately 30x50 Feet**

Rows	Distance Between Rows	50 feet	
		Kind of Vegetables and Length of Row	
1.	3 feet	Onion sets and carrots, 25 ft. each, followed by late tomatoes, 50 ft.	30 feet
2.	3 feet	Beets and turnips, 25 ft. each, followed by snap beans, 50 ft.	
3.	2 feet	Mustard, 25 feet, Tendergreen or Severtop turnips, 25 ft., followed by Lima beans, 50 ft.	
4.	2 feet	Cabbage, 25 ft., followed by summer spinach; Swiss chard, 25 ft.	
5.	2 feet	Snap beans, 50 ft., interplanted with okra in same row	
6.	3 feet	Early tomatoes, 50 ft., followed by snap beans	
7.	3 feet	Irish potatoes, 25 ft.; *Early sweet corn 25 ft., followed by turnips in the corn row	
8.	3 feet	Irish potatoes, 25 ft.; *Early sweet corn 25 ft., followed by turnips in the corn row	
9.	3 feet	Irish potatoes, 25 ft.; *Early sweet corn 25 ft., followed by turnips in the corn row	
10.	3 feet	Sweet potatoes, 50 ft.	

Between rows of Irish potatoes before digging, plant late corn.

*Between rows of early corn, plant one 25 ft. row of cabbage, one 25 ft. row of collards, and one 25 ft. row of late tomatoes.

Sweet corn planted in short rows adjacent to each other will provide for better pollinization and give better filled ears. Pole beans may be planted with the corn.

Set tomato plants 2 feet apart in row and tie vines to stakes.

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