#### TRANSPLANTS vs SEEDLINGS

Most plants perform better if they are started from seed indoors rather than planted directly into the garden soil. If time or space inhibit this practice then purchase the desired plants from a local garden center. Before transferring plants to the garden, make sure the soil has been properly tilled, limed, and fertilized as described previously. To prevent wilting, try to transplant on a cloudy or overcast day. Early evening will do because the plants suffer less water loss than on a hot, sunny day. Be sure to handle the plants carefully to avoid disturbing the roots and bruising the stems. Also, it is essential to protect young transplants against heat, cold, and damaging winds during the first 2-4 days after planting.

For direct planting of seeds into the garden, the soil should contain enough moisture to promote germination. If it does not, water the soil thoroughly and allow it to dry enough to be workable before seeding. Remember that in springtime when the soil is cooler, poor germination is likely to occur if the vegetable seeds are planted too deeply. As a general rule, plant the seeds no deeper than 3-4 times their greatest diameter. Small seeds are difficult to distribute thinly and evenly. They are easier to space if thoroughly mixed with dry sand or pulverized soil before planting. Start thinning seedlings after the plants have 1 or 2 pairs of true leaves; normally that will be about 3 inches tall. It may seem disheartening to thin the seedlings, but it is essential for proper plant growth. Thinning reduces competition among the seedlings for soil nutrients and water, and it provides spacing in order to produce higher yields. Thinning is a must for leaf lettuce, beets, radishes, carrots, spinach, and turnips.

## **INSECT, PEST, and WEED CONTROL**

For more information on insect and pest control, consult the Guilford County Horticulturist and the Master Gardener Volunteer Help Desk at (336) 375-5876. Also, the following publications acan be obtained from the Extnsion Service: Insect Control for Vegetable Gardeners, AG-19; Insect and Related Pests of Vegetables, AG-295; Insect Pests of Vegetables, AG-404.

### WATERING, MULCHING & WEED CONTROL

All vegetable gardens need at least 1 inch of water each week either from natural rainfall or by irrigation. Generally, if the soil is dry when scratched to a depth of 1-2 inches, watering is necessary. Avoid watering the soil often for short periods of time. Shallow watering promotes the development of roots in the top root area. Deeper watering helps the roots to grow deeper and to a larger area, thus promoting a plant that is healthier and able to withstand summertime heat and drought.

Gardens infested with weeds produce fewer vegetables because the weeds compete for the available soil nutrients, water, air, and sunlight. Weeds also provide a home for insects and diseases. The garden hoe, when used properly, will remove a lot of weeds in the garden. However, weeds at the base of a plant must be hand pulled.

One can decrease the amount of hoeing needed by using a mulch. Mulches help retain soil moisture and reduce weed growth. They fall into two categories—organic types that decompose naturally in the soil, and inorganic (inert) that do not decompose and therefore must be removed after serving their purpose. For examples of mulch, please visit the Demonstration Garden Mulch section.

### **HARVESTING**

The nutritional content, freshness, and flavor that home-grown vegetables possess depends on the stage of maturity and the time

of day at which they are harvested. Very mature vegetables will be stringy and coarse. When possible, harvest vegetables during the cool part of the morning and process them as soon as possible. If for some reason processing must be delayed, cool the vegetables in cool, iced water,



drain, and store them in the refrigerator to preserve flavor and quality. Enjoy the "fruits of you labor". There is nothing better than fresh vegetables grown in your very own garden!

Prepared by the Guilford County Master Gardener Volunteers Sources: <u>Home Vegetable Garden</u>, No. AG-06, Prepared by Larry Bass, NC Cooperative Extension Service, NC State University 05/25/99.

North Carolina A&T State University and North Carolina State University commit themselves to positive action to secure equal opportunity regardless of race, color, creed, national origin, religion, sex, age, or disability. In addition, the two Universities welcome all persons without regard to sexual orientation. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.



## VEGETABLE GARDENING

The Extension
Demonstration Garden
Information Booklet





3309 Burlington Rd Greensboro, NC 27405

Office: 336-375-5876 Fax: - 336-375-2295

Website: http://guilford.ces.ncsu.edu

# Vegetable Gardening



Gardening means different things to different people. Thousands view gardening as a hobby, a relaxing escape from the pressures of an urban environment. For these people, the food produced may be almost secondary to the pure enjoyment and satisfaction reaped from gardening. A vegetable garden may reduce the family's food budget and it can be a source of hard-to-find vegetables such as kohlrabi, arugula, horse-radish, and salsify. One of the primary reasons that people garden is that vegetables from the supermarket cannot compare in taste, quality, or freshness with vegetables that are grown in the home garden.

The vegetable garden has traditionally been located in an area separate from other parts of the landscape because it was considered unsightly. With proper planning however, the garden can be both functional and attractive. Landscape designers today often incorporate edible plants into many areas of the home landscape and ornamental plants such as flowering annuals into the vegetable garden. This garden philosophy, coupled with our favorable climate, can offer gardening opportunities nearly all year long.

## **SELECTION of a GARDEN SITE**

An area that is 25 feet square is adequate for a vegetable garden for an average family. Regardless of size there are five factors to consider in selecing a garden site:

- 1. **Sunlight**—The garden should receive 6 hours of direct sunlight daily; 8-10 hours is ideal.
- 2. **Nearness to the Home**—The closer and more accessible the garden is, the more likely that you will take care of the garden and therefore harvest the crops at the peak of their ripeness.
- 3. **Soil**—The soil should be fertile and easy to till with a loose, well-drained loam. Heavy clay and sandy soils can be improved by adding organic matter.
- 4. Water—The garden needs at least 1 inch of natural or irrigated water per week. Therefore, locate the garden near a water source.
- 5. Good Air Circulation—Avoid low-lying areas as frost and cold air occur there first in the fall and latest in the spring. Gardens located on high ground are more likely to escape light freezes, permitting an earlier start in the spring and an extended harvest in the fall.

## **SOIL and FERTILIZATION**

A good loamy soil that is fertile, deep, easily crumbled, well-drained, and high in organic matter is needed to grow quality vegetables. If properly prepared however, soils



containing sand or heavy clay can be used. Soil preparation and the use of a mulch are the two most desirable investments in the success of a garden.

The fastest way to make heavy clay or light, sandy soil more loamy is by adding organic matter. This can be remedied by adding 2-3 inches of well-rotted leaves, compost, or aged horse manure and tilling it into the soil.

It is a good idea every 3-4 years to determine the pH (acidity) of the garden's soil. On a scale of 1 to 14, a pH of 7.0 is neutral. Any value below 7.0 is considered acid, and any value above that level is alkaline. The ideal pH values for most vegetables are 6.0 to 6.5-just slightly acid. For more information on taking and submitting a soil sample, see the Extension publication AG-372, Careful Soil Sampling. The soil test report will tell you how much lime and fertilizer your garden soil will need per thousand square feet of growing area. When lime is needed, try to apply it several months before planting. Fall applications of lime are the best chance for correcting soil acidity problems before spring planting.

Fertilizer should generally be applies before or at planting time. The fertilizer can be broadcast or applied in the plating row. To broadcast, spread the fertilizer over the top of the soil with a cyclone or drop spreader. Till the fertilizer into the soil to a depth of 3-4 inches. Generally 1/2 to 2/3 of the recommended fertilizer is broadcast over the entire garden. The remaining fertilizer is applied in furrows 3 inches to the sides of the row. This method is called banding. To keep garden vegetables growing rapidly and continuously, extra fertilizer should be applied to the soil in the form of side dressing. Side dressing fertilizers can be applied on both sides of the vegetable row about 4-6 inches from the plant.