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Design for Everyday Living

growing onions in the home garden

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The onion is probably grown in more home gardens than any other vegetable. It is one of the earliest vegetables that we can get from our garden in the spring. One of the distinct advantages of the onion is that it can be grown on nearly all types of soil from sandy loams to heavy clays. With the heavy clay soils, which are the predominate soils in West Virginia, some modification may be necessary. The addition of organic matter such as manure or other composted or decayed material will lighten the soil and increase the water holding capacity.

Varieties - Sweet Spanish: Sweet Spanish refers to a type of onion of which there are several varieties. This type of onion is large, usually 4 to 6 inches across, globe shaped, exceptionally mild, fine grained, and sweet. They are excellent cooked or raw. The sweet Spanish type can be used either as a green onion or as a mature onion.

Usually these onions are grown from seed or purchased plants.

The mature onions are poor winter keepers and are quite subject to soft rot while they are still in the ground.

Ebenezer: A flattened globe shaped onion when mature about 2 1/2 to 3 inches in diameter. Yellowish-brown skin, yellowish-white flesh and mild flavor. Used as both a green onion and for mature onions. The Ebenezer is an excellent winter keeper.

Mostly grown from sets; the predominant variety offered as sets in most stores.

Yellow Globe Type: Globe shaped flavor ranges from mild to rather strong depending on variety. Usually very good winter keepers. Size ranges from 2 1/2 to 3 inches in diameter. Used as both green and mature onions.

Bermuda Type: Very mild, flattened, do not store well for winter use. Grown primarily from seed or purchased plants.

Lime Requirement: A soil pH of 6.0 to 6.5 is considered ideal for onions.

Manure: If manure is used to supply organic matter, it is best to apply it to preceding crop. Apply about one pound of manure per square foot and work it into the soil. Other organic material can be used but additional nitrogen may be needed to decompose it quickly.

Fertilizer: Fertilize according to the soil test but generally an application of 2 1/2 to 3 pounds of 10-10-10 per 100 square feet would be sufficient.

Planting: Onion sets are usually spaced 2 inches apart in the row and later thinned to a 4 inch spacing by pulling and using the excess as green onions. Avoid the large sets. Sets should range between 1/2 inch and 7/8 inch in diameter. Sets larger than 7/8 inch in diameter do not produce as well as the smaller ones. Sets should be planted 1 to 2 inches deep.

Weed Control: In the home garden the only practical weed control is frequent and shallow hoeing and cultivating.

Insect & Disease Control: The two major insects that attack onions are Onion Thrips and Onion Maggot.

Onion Thrips are small, yellowish, sucking insects which attack the leaves giving them a bauched appearance. The center leaves become curled and deformed and the outer leaves turn brown at the tips.

Onion Maggots are the larva of a small fly. The fly lays eggs on the plant near the base or in cracks in the soil. The small maggots, about 1/3 inch long, kill the young plants and later burrow into the bulbs. Their tunnel makes it easy for decay organisms to enter the bulbs and cause them to rot.

Diseases of Onions: There are many diseases that can attack onions but the major ones are Onion Blast, a disease of the foliage, Onion Neck Rot and Bacterial Soft Rot. The latter two diseases occur on the bulbs and are important in mature onions for storage.

Onion Blast is a fungus that occurs rapidly, devastating the foliage, hence the name "blast."

Onion Neck Rot is a softening of the scales which usually begins at the neck but occasionally at a wound.

There is a definite margin between the healthy and diseased tissue. If the neck is soft and spongy, then in all probability the bulb is infected with Neck Rot.

Handling of the onions is the most important control. Follow the directions on harvesting and curing discussed later in the bulletin. It is important that the neck tissue be dried out very promptly which will check the growth of the fungus permanently.

Bacterial Soft Rot: Bacterial Soft Rot usually starts at the neck of the bulb but, unlike Neck Rot, progresses down one or more scales. An offensive sulfurous odor is given off by the rotting bulb.

Care of handling helps prevent the rot from occuring. The organism causing Bacterial Soft Rot enters through a wound and moist conditions encourage its growth. The Onion Maggot, both adult and larva, is an important factor in causing wounds for the infection to enter the bulb. The insect also carries the bacteria from plant to plant.

Harvesting: Onions for use in the green stage are harvested as soon as they reach edible size. Home gardeners usually plant enough for use as green onions and for storage. The normal procedure is to plant about 2 inches apart, then remove every other onion and use as a green onion.

Onions that are to be stored should be harvested when most of the tops have broken over. In the heavy clay soils of West Virginia, usually a shovel or fork will be necessary to lift the onions. The lifting must be done very carefully because any wound to the bulbs gives ready access to ever present decay organisms.

The onions should be placed on the ground in windrows with the tops covering the bulbs to prevent sunscald. The onions are left in windrows until the tops become dry. The length of time required for the tops to dry depends on the weather and may be anywhere from 3 to 10 days.

After the tops are fairly well dried down, they are cut off. Leave about 1 inch of top attached to the bulb. If the top is cut close, decay organisms have easy access to the bulb. As the bulbs are topped, discard any onions that show any signs of decay, have mechanical wounds or have thick necks.

Curing: Onions that are to be stored for winter use must be thoroughly cured. Curing does take considerable time, 3 to 4 weeks. The curing means that the onions should be held in a place that is well ventilated such as a corn crib. The onions can be spread out on the floor where the air can circulate around them. Another method that works well for the home gardener is to place the onions in mesh bags (onion sacks) and tie the sack to the rafters of a building that has free movement of air. A carport-type of building would be very good.

Storage: The onions should be stored in a room that protects them from freezing. Temperatures down to 32° F will not hurt the onions. Again the storage area should be well ventilated. Possibly an unheated attic could serve very well for a storage area.

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