11/65 2M 490

Vegetable Storage



Cooperative Extension Service Oregon State University • Corvallis

Cooperative Extension work in Agriculture and Home Economics, Gene M. Lear, associate director. Oregon State University and the United States Department of Agriculture cooperating. Printed and distributed in furtherance of Acts of Congress of May 8 and June 30, 1914.

Extension Circular 592 • Reprinted November 1965

Vegetable Storage

STORED PROPERLY, many vegetable crops can be kept fresh for several weeks or throughout the entire winter. Vegetables placed in storage should be sound and free from cuts, cracks, or injury. A diseased or injured specimen in storage could damage the entire supply.

Places and Conditions of Storage

Vegetables can be stored in cellars, basements, outdoor pits, banks of soil, and in many types of special buildings. Any place containing a furnace is usually too warm and dry for most vegetable storage. Often a room can be partitioned off for cool storage. Screened inlets for fresh, cool air will provide ventilation and temperature regulation.

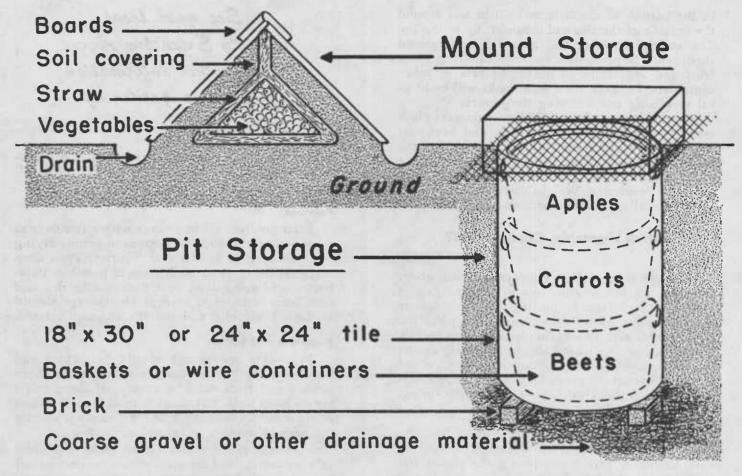
A room where canned vegetables and fruit keep satisfactorily is useful for storage of pumpkins, squash, tomatoes, onions, and potatoes. Bins are good for potatoes and onion storage if they are off the floor to allow free circulation of air. This should also prevent rats and mice from nesting in the stored food. If onions, potatoes, and squash are raised commercially, special sheds are often built for this purpose.

Where the winters are dry or drainage is good, outdoor cellars, pits, or mounds of various kinds can be used for storage.

Desirable Storage Conditions for Crops

Beans and peas should be fumigated to kill weevil as soon as the dry seed is threshed. Small lots of seed can be fumigated in a half gallon jar with a tablespoonful of carbon bisulfide poured over them. Close jar tightly for 48 hours and store in a room above 60 degrees Fahrenheit. Larger lots are treated in a tight container or sealed room at the rate of 5 to 8 pounds per 100 bushels of seed. Peas and beans for table use should be aired well after fumigation.

Beets, carrots, parsnips, rutabagas, salsify, and turnips can be stored where they are grown if drainage is good. The tops should be cut off fairly close, and soil from between the rows can be thrown over the roots. Parsnips and salsify are especially adapted to this treatment; they are hardier than the other crops. In mild climates they



are dug directly from the growing area as needed. Root crops of this type will shrivel if dug and stored in bins like potatoes.

Where winters are severe and drainage is good, these crops can be stored satisfactorily in pits of various kinds. Two of those commonly used are shown in the accompanying drawing.

Mound Storage

Mound storage can be a round or a long pile, according to the amount to be stored. A finished pile should be 3 to 4 feet high.

The covering should be light at first and be increased as needed to prevent freezing. A shallow trench around the base will carry off the excess water. If rainfall is heavy, cover the mound with boards.

A narrow piece of hardware cloth placed vertically around the mound will keep rodents out.

Pit Storage With Tiles

Pit storages made of tile are economical, easy to build, and quite permanent. Tile storages will hold some vegetables in very good condition for 6 months or more.

The tile storage is built in units of one or more tile according to the amounts of space needed. An 18 x 30-inch tile will hold three bushel baskets. A 24 x 24-inch tile is best suited to bulk storage. If more than one pit is needed, space the tiles 2 feet apart.

The tile should be located on well-drained soil, shaded from the sun, and convenient to the kitchen.

Dig the hole 6 inches deeper than the length of the tile and just large enough to let the tile fit snugly. Place three standard bricks on end, equally spaced around the bottom of the hole. Rest the tile on these bricks. Place 2 inches of coarse gravel

in the bottom of the hole and fill in soil around the outside of the tile and mound it up to the lip. The storage chamber and material to be stored should now be precooled. For easy handling, place fruit and vegetables in bushel baskets or other containers. Long-handled wire hooks will be helpful in raising and lowering the baskets.

Place a square of one-half inch hardware cloth over the tile to provide aeration and keep out rodents. Spread a bushel of dry leaves over the hardware cloth for insulation. Cover this with a waterproof lid, giving at least 4 inches of room above the insulation. Weight down the lid. An old tub or a shallow box is useful as a lid.

Which Vegetables Can Be Stored?

Cabbage

Cabbage keeps well at temperatures just above freezing. As the weather reaches freezing, give temporary protection by placing heavy leaves over the heads. For winter storage, pull and place the entire plants side by side, heads down, in a trench. Sometimes two are placed side by side with one on top of the first two. A light covering of straw and then soil enough to protect the heads from freezing will keep this crop for use until early spring.

Celery

Celery will freeze at 28 to 29 degrees. You can keep it in the field for a few weeks by banking up with boards or soil. You can dig the plants and heel them in moist sand or soil. In a cool cellar or building and kept growing slightly, celery may be kept for many weeks.

Onions

Onions keep best at temperatures ranging from 36 to 45 degrees. Humidity should be around 60 percent. If the onions should be subjected to a temperature of 30 degrees or below, do not touch them until they thaw.

Cure onions thoroughly before storing. Place in bins 12 to 18 inches deep, built one above the other with room for good air circulation between them. There should be a circulation of cool air wherever onions are stored.

As soon as onions are ready, top them and store them in mesh bags.

Peppers

Peppers of both the green and red types can be stored for a few weeks at a temperature of 50

See your local County Extension Agent for further information on home gardening

degrees or lower. Covering with burlap will protect the fruits in the field for an extended fall harvest period.

Potatoes

Start potatoes off in storage with a few days at a temperature of 60 to 65 degrees to permit drying and callusing of mechanical injuries. Then drop temperature to 34 to 38 degrees if possible. Potatoes stored for a long period should be dry and free from mechanical injury. The storage should be dark, fairly high in humidity, and well aerated.

Pumpkins and Squash

Pumpkins and squash should be mature and free from mechanical damage when stored. Skin bruises and frost must be avoided if these fruits are to keep well. Cut them with at least 2 inches of stem and leave in the field for 2 weeks to mature the crop if weather is favorable.

Place the fruits separately on racks or shelves in a well ventilated dry storage at a temperature of between 50 and 60 degrees. A higher temperature is often used for a few days to dry off excess moisture in the rinds. A well-ventilated attic makes a good storage for pumpkins and squash.

Tomatoes

Tomato fruits that are full grown and green or showing a slight amount of color when picked will ripen normally when stored at 55 to 70 degrees. At 70 to 80 degrees, some color is sacrificed in the ripened fruit. At 50 to 55 degrees, the rate of ripening is slower but there is still no breakdown or decay. Fruits chilled at 36 to 40 degrees may break down rather rapidly when placed in a higher temperature. Tomatoes for storage should be sound and without bruises. Handle them carefully.