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KIEFFER PEARS for HOME USE



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KIEFFER PEARS for HOME USE



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THE KIEFFER PEAR is grown more generally than any other variety throughout the United States, except in Washington, Oregon, California, and western New York. The tree is vigorous, very productive, and more resistant to blight and insect attack than most varieties, which accounts for its popularity in farm and home orchards.

The fruit is large and attractive. However, if the Kieffer pear is not ripened properly after it is picked, the fruit is hard, coarse, and tasteless. As a consequence the fruit is often allowed to go to waste because the necessity for proper storage, in order to soften or ripen the fruit, is not always known by many who grow it for home use. The Kieffer pear never ripens on the tree to the soft texture that is desirable in fresh fruit, although in some localities the skin becomes yellowish. Even when cooked immediately after picking, the fruit generally does not soften to an entirely satisfactory product.

Many of the objectionable characteristics of the fruit can be overcome by proper methods of harvesting, followed by correct methods of storage to promote ripening, and finally by employing suitable methods of preparation for final consumption.

HARVESTING

The fruit may be harvested at any time after it has reached two-thirds to three-fourths full size. The quality after ripening is not greatly affected by the size when picked, although fruit that has reached only two-thirds full size is not so desirable as that picked later. On the other hand, fruit left on the trees until very late in the season is apt to ripen poorly in storage. In areas south of Washington, D. C., the fruit

This leaflet takes the place of material on home use of Kieffer pears formerly included in F. B. 1796 entitled, "Handling and Preparing the Kieffer Pear for Use as Food."

should not be left on the tree until ready to drop; in northern sections, such as Michigan and New York, the pears should be picked as late in the season as possible. In some sections considerable loss will occur as a result of dropping if picking is delayed. The best stage appears to be when the green in immature fruits gradually fades and the fruit becomes lighter or slightly yellow.

Kieffer pear trees tend to grow very tall. In practice, they are generally not pruned, so ladders must be used to harvest the fruit. The fruit should be picked carefully to prevent bruising, as bruised areas become brown during ripening. Also, bruised areas, especially if the skin is broken, provide an entrance for fungi, which cause the fruit to decay. The stem will frequently puncture the skin of another pear if the fruit is carelessly dropped into the picking container. Strong well-made baskets $\frac{1}{2}$ to 1 bushel size are satisfactory for gathering and ripening the fruit.

RIPENING

In order to develop the maximum dessert quality in Kieffer pears, it is necessary to place the fruit under the proper storage conditions for a certain length of time after harvest. This storage period is generally called the ripening period. The fruit should be stored at a temperature of 60° to 65° F. for 2 to 3 weeks to obtain a good product. At this temperature the fruit becomes uniformly soft, its flavor and texture improve, and it becomes quite satisfactory for eating fresh as well as for cooking and preserving. Even pears that have attained only two-thirds to three-fourths normal size become soft and develop a pleasing flavor.

The homeowner can usually ripen the fruit satisfactorily. The Kieffer pear matures in September and October, when the weather is generally such that it is possible to obtain the proper ripening temperature without artificial refrigeration. In almost any home: some room may be found that, with the exercise of judgment as to ventilation, can be converted into a ripening room. The temperature may vary between 55° to 65° F., but the fruit still will ripen satisfactorily. If the temperature of the outside air is too high during the middle of the day, the windows or ventilators should be closed and then opened again at night, when the outside temperature is about 60°. Generally, a clean cellar that can be easily ventilated will be most satisfactory.

Humidity of Ripening and Storage Rooms

Air should be allowed to circulate around the fruit at all times during storage. Ventilating the room is generally not so difficult as maintaining the proper humidity. The air should be sufficiently dry to keep the surface of the fruit dry or free from any condensed moisture. If the air is too dry the fruit will lose water and shrink or shrivel. Heavy losses from decay may occur if moisture condenses on the surface of the fruit. A little attention to the storage conditions will enable one to avoid excessive moisture or dryness in the air.

Odors in Storage and Ripening Rooms

The air of the storage and ripening rooms should be free from foreign odors. When stored in the same room with Kieffer pears, certain vegetables give the pears an objectionable flavor. Potatoes especially give an "earthy" flavor to the fruit. It is probable that meats and many other foods would also impart objectionable flavors.

USES¹

After the fruit has been ripened it has a short storage life and should be used or preserved by processing as soon as possible. Temperatures of 70° F. or above will greatly hasten the breakdown of the fruit, but temperatures of 60° or below will retard the changes. If the fruit must be held for more than a few days it should be stored as near 32° as possible. Even at 32° it cannot be expected to be of best quality for more than 2 or 3 weeks. For use for any extended period it must be preserved in some way.

Kieffer pears may be canned, made into preserves, dried, pickled, or frozen. For any of these methods of preservation, pears that have been properly ripened give best results. The fruit is usually pared and cored before processing. In removing cores, care should be taken to cut out the surrounding tissues that contain objectionable stone cells.

Some general directions for preserving pears by various methods are given below. Detailed instructions can be obtained from State Extension Services or from the following publications of the U. S. Department of Agriculture: Home and Garden Bulletin 8, Home Canning of Fruits and Vegetables; Leaflet 269, Pickle and Relish Recipes; Home and Garden Bulletin 10, Home Freezing of Fruits and Vegetables.

¹ This section was prepared in cooperation with Human Nutrition Research Branch, Agricultural Research Service.

Canning

One of the most important uses of the Kieffer pear is for canning. When the fruit is properly ripened, canned Kieffer pears are agreeable in texture and pleasing in flavor. For canning, the fruit is usually cut in halves, pared, and cored. The pared fruit turns dark rather rapidly when exposed to the air. To retard the darkening action, it is best to submerge the fruit, as soon as it is pared, in a solution containing 2 tablespoons each of salt and vinegar or lemon juice to 1 gallon of water. The prepared fruit is either heated through in a sugar sirup made with 1, 2, or 3 cups water to 1 cup sugar, according to sweetness desired, and packed hot, or packed cold and covered with boiling sirup. For hot-packed pears processing time in a boiling-water-bath canner is 20 minutes for pint or quart glass jars, 25 minutes for No. 2 tin cans, 35 minutes for No. 2½ cans. For cold packs, the time is 25 minutes for pint glass jars or No. 2 tins, 35 minutes for quart jars or No. 2½ tins.

Preserving

The Kieffer pear is a variety commonly used for preserves because it holds its shape and has good flavor, if properly ripened to the full-ripe stage. It is generally best to cut the pared and cored fruit in quarters or eighths, depending on size, as sugar penetrates it somewhat slowly. Usually $\frac{3}{4}$ to 1 pound of sugar is used to each pound of prepared fruit. It is preferable to combine the fruit and sugar in alternate layers and let stand 8 to 10 hours or overnight. The mixture is then boiled rapidly until the sirup is somewhat thick, poured into clean hot jars, and sealed.

Drying

The Kieffer pear may be dried in the same manner as many other fruits. Two methods of drying fruits are used—artificial drying and sun-drying. However, in the sections of the country where the Kieffer is generally grown at present, sun-drying usually is not feasible, since the fruit matures late in the season when the days are relatively short, the temperature low, and showers comparatively frequent. For artificial drying, special equipment is needed. Information on how to build home driers can be obtained from some State Extension Services.

To produce a satisfactory dried product it is necessary to ripen the pears properly and pare and core them. Drying is accomplished more

