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Preserving and Pickling

By O. EVANS

At this time of the year many housewives wish that fruit trees would bear little and often throughout the year rather than a lot in a comparatively short space of time. We preserve fruits to try to spread this short period, and to have them on hand to vary menus when fruit is out of season. A cupboard shelf packed with bottles of colourful, neatly arranged preserved fruits is indeed a satisfying sight.

Bottling is the most popular method, with pickling being done to a smaller extent.

PRESERVING

Choice of Fruit for Preserving.

When preserving fruit, aim to keep the best possible flavour, colour and food value.

Choose fruit in season, firm textured and fully ripe—not under or over ripe. Avoid any marked or bruised fruit. It is not worth while preserving below-standard fruit, although small or marked fruit could be preserved diced, as pulp, or in fruit salad.

Have fruits of uniform size and ripeness to ensure equal heat penetration. Fruits should be freshly picked. If any time has to elapse before preserving, keep them in a cool, dark, well ventilated place—soft fruits well separated—to prevent the characteristics of freshness deteriorating.

Choice and Preparation of Jars.

Choose straight sided, wide-necked jars for easy packing and removal of fruit. Clear glass allows the colour of the fruit to show through best. Avoid the green tinted glass or jars with flaws and cracks. Jars should all be the same size.

If you exhibit in shows it is a good idea to have a set of smaller jars, and pack one of them when preserving each different fruit. At the end of the season you should then have enough to enter in the "Collection of Fruit" section.

As presentation counts when competing, a set of similar jars will gain a few more marks than a collection of jars of different sizes. The smaller jars are also more convenient for carrying than the larger home size jars. Heat the small jar carefully, preferably separately, noting time and temperatures as it will be finished before the larger jars.

Inspect rings and lids. Do not use rusted lids and take no risks with stretched sealing bands—new lids, clips and rings can be bought separately quite cheaply. (The stretched rubber rings are handy for holding the greased paper over the top of a steamed pudding!)

Wash thoroughly, rinse and dry the bottles, lids and rubber rings.
Preparation and Packing of Fruit.

Wash the chosen fruit thoroughly and dry well. Fruits which are peeled should be peeled thinly and neatly from stalk to end. If cut in pieces, keep size uniform. From core fruits remove core with spoon or special coring knife. Do not leave any pieces of fibre or husk at the centre. Drop peeled and cored pieces or halves gently into cold salted water to prevent surface browning while waiting to pack. Rinse before using. To skin peaches, dip in caustic soda solution (one dessertspoon soda to one quart of warm water) for five seconds, rinse in cold water and rub off skin.

When packing into jars have fruit cut side downwards and rounded outside showing, and overlap pieces attractively. Pack to within half an inch of the top of the jar. Pack as tightly as possible as fruits shrink slightly after sterilisation.

Syrup.

The syrup varies according to taste and type of fruit. Generally, small, sweet, soft fruits are preserved in thin syrup (one part sugar to three parts water); large fruits and berries in medium syrup (one part sugar to two parts water); and acid or tart fruits in heavy syrup (one part sugar to one part water). Banana pulp may be preserved in thin syrup; quinces and grapes in heavy syrup. Use an extra heavy syrup (two pounds of sugar to one pint of water) for figs, rhubarb, and passion-fruit pulp. For other fruits a medium syrup is used.

To make syrup, dissolve the sugar in the water over low heat, bring to the boil and boil for three minutes. Strain if necessary.

Add syrup to each jar, a small cupful at a time, and allow air bubbles to come to the surface. Place a spatula or long bladed knife down the side of the jar to help any obstinate air bubbles to rise (avoid bruising the fruit). Fill jar with syrup to within half an inch of the top. (This head-room will allow for expansion when heated.)

Jars should be almost full and packed tightly, as the greater the amount of syrup used the greater the amount of floating and apparent shrinkage.

Preserving Without Sugar.

Fruits can be preserved in a liquid consisting of fruit juice and hot water. If for dietary reasons sugar is not used but a sweet syrup is desired, use an artificial sweetening agent according to the manufacturer's instructions.

Preheat the fruit in a small amount of water over low heat, then pack quickly into warm jars. Have fruit juice hot and if not enough make up to the necessary amount with hot water. Process as for syrup-preserving.

Sterilising.

There are several methods of heating and sterilising the bottles. In some the jars are sealed before heating, in others the jars are loosely lidded for heating and sealed while hot when sterilisation is complete. In some methods the fruit is cooked by steaming, in others the water comes only a few inches up the side of the jars, or the jars are completely covered with the boiling water.

If a thermometer is not built in on your container, use a sugar boiling thermometer when sterilising to ensure that the correct temperature is maintained. A “home steriliser” can be made by standing a platform about an inch up from the bottom of a copper or large preserving pan. (A wire cake cooler covered with a thick cloth would serve the purpose). The thermometer should stand on the platform.

Temperatures and times vary for different fruits—follow the manufacturer's instructions for your bottling outfit or type of jars. Bring slowly to the required temperature, taking one to one and a half hours. See that the bottles are not touching each other nor the sides of the pan or container, and that they are standing on the platform with the right amount of water according to instructions.

Oven Sterilising.

The screw lid type of jar may be used for oven sterilising. This method is only suitable for gas or electric ovens fitted with a reliable thermostat, as it is difficult to obtain an exact temperature with wood fuel stoves.

Preheat the oven at 200° for 20 minutes. Pack the heated fruit in warm jars and fill with hot syrup. Place seal and screw lid loosely. Stand jars on thick cloth in a baking dish, with hot water coming one inch up the outside of the jars. Process 30-45 minutes. Screw lids tightly.
With this method there is a loss of colour and flavour, the danger of incomplete sterilisation, and of jars exploding.

Cooling and Storing.

Bottles must be cooled carefully; do not stand on a cold or hard surface nor place in a draught. Stand jars on a dry cloth or board or linoleum. Do not open jars to "top-up" liquid—loss of liquid does not affect keeping qualities and reopening will allow the entry of organisms which will cause later spoiling. When cold check seals. (If clips are used do not remove till cold.)

Store in a cool dark cupboard. Sometimes fruits float to the top of the jar. This is caused by using over-ripe fruit, processing too long or at too high a temperature, using too heavy a syrup for the type of fruit, or packing fruit too loosely and using too much syrup. If the syrup becomes clouded you have probably used under or over ripe fruit and too long a processing time at too high a temperature.

The Pressure Cooker.

The pressure cooker can be used for sterilising smaller jars containing vegetables or fruit, particularly when doing very small quantities as in passion-fruit pulp or for competing in shows. Improvise a rack or platform to stand on the bottom of the cooker and follow the directions and times given in the instruction booklet for your type of cooker.

PICKLING

This is a method of preservation in which spices and condiments are used. The fruits or vegetables are generally brined first, then preserved either sweet or sour in a spiced vinegar. Pickles should only be used occasionally as a relish, because condiments are irritating to the digestive tract.

Choice of Foods and Utensils.

The fruits and vegetables to be pickled should be fresh, firm, medium sized and just ripe—not over-ripe. Suitable foods are beetroot, cabbage, cauliflower, small cucumbers, onions, marrows and beans, walnuts, pears, plums, figs and grapes. Choose enamel or earthenware utensils. Never use copper, iron, brass or aluminium as dissolving of some metal and discolouring of food would take place. The jars should be glass or earthen, wide necked, free of cracks, and sterilised, with tight-fitting lids. If using corks, sterilise by boiling before use, and make seal completely air-tight with melted wax.

Brining and Osmosis.

Most fruits and vegetables have a high proportion of water. This can be reduced by soaking in brine so that the vegetable water does not dilute the pickling solution. To make brine, dissolve one pound of salt in one gallon of water. The best type of salt is dairy or pickling salt or salt to which no anti-caking substance has been added. Avoid using table salt as this would cause discoloration of food. Brining works by the process of osmosis, which is simply this: when two liquids of different strengths are separated by a semipermeable membrane, they tend to equalise their strength by flowing one towards the other, and the flow of the weaker to the stronger is greater than the flow in the opposite direction. In brining, the vegetable water or juice (a weak solution) is separated by the vegetable skin (a semipermeable membrane) from the brine (a stronger solution) so that the vegetable water is drawn from the vegetables which are flavoured a little from the salt from the brine. If vegetables are brined too long they lose too much water and shrivel; if not long enough (or the brine is too weak) they become soft and watery.

Most vegetables are brined overnight. Beetroot is boiled in salted water and does not need brining. For pickled onions, brine in skins for 12 hours, peel, then place in fresh brine for 24 hours. Make fresh brine for each lot of vegetables.

Pickling Solution.

Vinegar is the basis of the pickling solution, which is flavoured and spiced according to taste and the food to be pickled. It can be sweet or sour. Use a good quality vinegar—brown malt vinegar is best.

Here is a basic pickling solution recipe which can be varied as necessary. For a sweet solution add two or more ounces of sugar to taste.
Pickling Vinegar.

1 quart of brown malt vinegar.

i oz. cinnamon bark.

i oz. mace (or \frac{1}{4} oz. grated nutmeg).

i oz. allspice.

i oz. cloves.

Pinch cayenne or powdered chilli.

6 peppercorns.

Method.—Bring to boil in a covered enamel saucepan. Stand on side of stove with lid on for two hours. Strain just before using.

The pickling solution also must be the right strength—if too weak it will cause the food to become soft and watery, and if too strong the foods will become shrivelled and tough—the process of osmosis at work again as in brining.

If the vegetables have not been brined long enough and their water content is too high, that water will flow into the stronger pickling solution, causing tough wrinkled pickles, and there is a possibility of them being inadequately preserved owing to the dilution of the solution by the vegetable water.

Method of Pickling.

Prepare fruits and vegetables, brine. Rinse and drain and heat quickly in the strained spiced vinegar—do not boil. Pack into the heated jars, cover with the pickling solution and seal at once. Keep at least a month before using. Store in a cool dark place.

Of Things to Come.

Many of you have been making jams and preserves. Save those hessian sugar bags. Useful and attractive ways of making use of these will be given from time to time.

HELEN M. GLOSTER.

LAND GRADING IN IRRIGATION AREAS, 1959/60

The Minister for Agriculture (Mr. C. D. Nalder), has announced that during the year a total of 1,730 acres of land was graded in the irrigation areas. This is an increase of 90 acres on the 1958/59 season. Of this area Government controlled machines handled 918½ acres on 107 farms and private graders 811½ acres on 67 farms.

The average time taken to grade one acre of land by Government machines was 1.87 hours at a cost of £7 19s. 7d. per acre.

As in previous years the bulk of the land graded goes immediately into production as shown in the following table:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acres</th>
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<tbody>
<tr>
<td>Permanent pastures</td>
<td>648</td>
</tr>
<tr>
<td>Annual pastures</td>
<td>209</td>
</tr>
<tr>
<td>Fodder crops</td>
<td>683</td>
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<tr>
<td>Fallow</td>
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<tr>
<td>Potatoes</td>
<td>51</td>
</tr>
<tr>
<td>Vegetables</td>
<td>73</td>
</tr>
<tr>
<td>Orchards</td>
<td>10</td>
</tr>
</tbody>
</table>

Total 1,730

Over the past 11 years a total of 9,873 acres have been graded by Government controlled graders and 6,695 acres by contractors and farmers, making a total of 16,568 acres. This figure includes land that has been graded more than once.

During the season approximately 18 miles of drains were excavated by Government machines. Over the past 11 years a total of 260 miles of drains have been excavated by Government machines alone.

Dealing with the future prospects for grading there seems to be no tendency for the demand to slacken off.

Our thanks are due to the co-operation of the various officers of the Public Works Department in the above operations.