

# One-Sheet Answers...

UNIVERSITY OF CALIFORNIA Farm Advisor • Home Advisor 4-H Work

## HOMEMADE OLIVE OIL

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No thoroughly satisfactory way is known for making olive oil on a small scale without expensive machinery. The methods described below are the best we have been able to find or devise for small scale use, but the yields of oil are low when compared with the commercial factory. Necessary utensils can be found on any farm.

### Extraction of Oil Without Pressure.

A pound or two of ordinary lye, such as Rex, Babbit's Red Seal, or Greenbank's lye, will be needed. Make a solution of one-half pound lye per gallon of water, using an agateware or iron pot. Do not use aluminum; it will dissolve in the lye. A small basket of wire screen such as is used for making French fried potatoes, will be needed, or a piece of cheesecloth can be used. Heat the lye solution to a boiling point and while still boiling dip the olives in it for about 20 seconds. The time needed will vary with the toughness of the skins. Leave the olives in the lye until the skins are softened, that is, practically dissolved. Then plunge them in cold water for a few seconds to check the action of the lye. Place the lye-treated olives in a piece of fly-screen tacked to a frame over a large dishpan. Rub them on the screen until the flesh has separated from the pits and dropped through the screen into the pan. A heavy pair of rubber gloves is useful in this process to prevent the hands becoming badly stained and roughened by the lye and olive juice.

Place the pulp, which should now be of a pasty or mushy consistency, into a pot, with about two or three times its own volume of water. Heat to a simmering point,

stirring constantly, for about one-half hour. Set aside for several days to permit the oil to rise to the surface. Usually a fair yield, of oil can be obtained by skimming it from the surface of the pulp. The pulp may then be heated, to boiling a few minutes with more water and allowed to stand again. The process should be repeated several times. By this method, about two-thirds the yield of oil may be obtained as that from a commercial press. The secret of success lies in rubbing the olive flesh to a fine-grained pulp.

Oil obtained, by this method, must be washed and should be filtered as described later. It has been found that the yield of oil is sometimes increased by adding one-fourth pound of salt per gallon of water with the pulp. Always use a large excess of water as this facilitates the separation of oil.

Homemade Olive Press. A simple press may be made from materials usually found around any farmstead. Needed are: a heavy wagon or automobile jack; 2 large flat pieces of pine plank 2 x 12 x 12 inches; a shallow water-tight tray at least 16 x 16 inches fitted with a juice spout and resting on a base made of 2- or 3-inch lumber; a framework (preferably hardwood) of 2 x 6-inch lumber (see illustration).

One of the greatest difficulties will be crushing the fruit. This may be done as described above. If this method is used return the pits to the olives before pressing. The olives may also be crushed by placing them in a strong sack and hammering the sack with the broadside of an axe or a heavy mallet in the same way that ice is crushed in a sack. The fruit must be

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thoroughly broken up. It will crush better if it is boiled a short time to soften it. Place the crushed fruit and pits in a piece of heavy burlap and fold the edges of the burlap to give a press cake about 10 x 10 inches and about 4 inches thick.

Make two of these and place between the two pieces of pine plank and apply pressure with the jack. Press slowly until no more juice can be obtained. Save all juice and oil. The pressed pulp should now be boiled with an equal volume of water and pressed again. Usually a third and a fourth pressing will pay. Combine all of this pressed liquid and allow it to stand in a tub or barrel overnight. The oil can then be skimmed off.

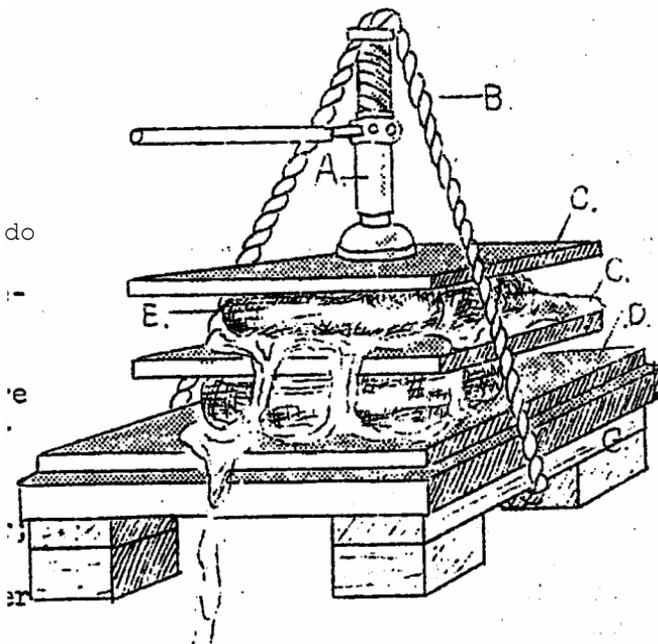
**Washing the Oil.** Oil obtained by either of the above methods will be bitter and cloudy. It must be washed with water to remove the bitterness and rough flavor. To do this, first prepare a bucket or five-gallon can with a hole and faucet or cork near the bottom. Place the oil in this container and add an equal quantity or more of warm water. Mix oil and water by stirring for several minutes. Allow water to settle several hours. Draw off the water and replace it with fresh warm water. Stir, settle and draw off after several hours. Repeat until the oil no longer has a bitter taste. Usually two days' washing will be sufficient.

**Filtering the Oil.** The oil will be cloudy and mixed with a little water. It can be cleared by filtration. A tin funnel about 7 inches in diameter is a convenient size for filtering. Filter paper can be bought from the drug store. Ask the druggist to fold the paper for you and tell you how to place it in the funnel.

Put the funnel in a wide-mouth bottle, or place a 1 x 3 inch piece of wood over a bucket and bore a hole in the wood large enough to take the stem of the funnel easily. Pour the oil into the filter paperlined funnel and allow to filter. Oil filters slowly. Do not become discouraged if it requires several days to run through the filter.

New olive oil is not of good flavor. It should be kept for several months in well cleaned bottle away from bright light. Too much light will cause it to lose color and flavor. A warm room will speed the aging process. Also, it will aid more rapidly if the bottles are only 3/4 full and if a small piece of cotton is used to close the bottles.

Homemade Press



- A - heavy wagon or automobile jack;
- B - light steel cable or 1-inch rope;
- C - two pieces of 2 x 12 x 12-inch pine plank;
- D - bin-lined sheet metal pan at least 16 x 16 inches with juice spout as shown (or wooden trough of same dimensions);
- E - heavy cloth to hold fruit;
- F - base of 2- or preferably 3-inch material;
- G - frame of 2 x 6-inch lumber, preferable hardwood.

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In order that information may be more easily understood trade names are used at times. No endorsement of named products is intended nor is criticism implied of similar products which are not mentioned.