

then place the nose near the bung and inhale the air from the barrel. If the slightest vinegary, mouldy, or other foreign odour is perceived, pour a solution of hot water and soda (1lb. to the gallon) into the barrel, bung it down, and roll the barrel about for ten minutes, then rinse with clean water. Now prepare a 10 per cent. solution of bisulphite of lime and water, pour it into the barrel, and roll the latter again for 15 minutes. Rinse again, and fill the barrel with clean water, and let it remain therein for a day or two. This treatment will be found efficacious in eradicating slight acetic or mouldy taints. Barrels or vats having even a very slight acetic taint before treatment should not be used for storing cider.

### Main Points

The following are the main points to be observed in the making of cider:—

- (1) Harvest the apples carefully.
- (2) Avoid letting the apples come in

contact with the earth for any length of time.

(3) If the apples are dirty, run through a trough of running water to wash.

(4) Allow the apples to remain stored till fully ripe.

(5) Carefully test fruit for sugar, and blend sugars accordingly.

(6) Mill or crush with properly cleaned machinery.

(7) Keep the juice out of contact with air as much as possible—that is, do not aerate to any extent.

(8) Allow fresh juice to settle as much as possible, and rack off clear before fermentation sets in.

(9) Add required amount of sugar well dissolved before fermentation.

(10) Check fermentation, when necessary, by filtration or racking.

—B. W. LINDEMAN, *Vine and Wine Instructor, Auckland.*

(To be continued.)

### Pear Tree Slugs

“PEAR” (NORTH AUCKLAND):—

I had trouble with some of my pear trees last summer. Something ate all the solid green matter off the leaves, leaving them like skeleton lace work. Would you please tell me what is the trouble and cure.

HORTICULTURE DIVISION:—

The black slug-like larvae which strip off the upper surface of pear leaves in summer, leaving the skeleton of veins and lower surface to wither up, are commonly known as pear slugs. The eggs from which they hatch out are laid by small, glossy black, four-winged flies, *Caliroa limacina*, which begin laying in early summer.

If a solution of arsenate of lead powder is applied as soon as the attack begins it is most effective, and it will also prevent the codlin moth caterpillar from damaging the fruit. Repeat the application at fortnightly intervals as required; 1½lb. arsenate of lead powder to 100 gallons water is the right strength—1oz. to 4 gallons.

## Cool Storage Notes

### Stacking Fruit in Cool Storage

THE importance of stacking fruit in cool storage to a plan that provides uniform air distribution throughout the stacked cases must be emphasised, as the method of stacking the cases is an important factor in securing a successful out-turn of fruit from cool storage. It is also essential that the method should be influenced by the system of air circulation which is operating in the cool chambers.

When pears, in particular, are being stacked in cool storage chambers, plenty of air spaces are necessary around the cases so that the air circulating in the chamber can quickly remove the heat from the stacked fruit. This is all the more necessary when the pears are wrapped and “all-round” pads are used, as is usually the case. The delay caused by wrapping and packing pears, and any subsequent delays which may occur before they are placed in cool storage, makes it all the more necessary that the flesh-temperature of the fruit should be quickly reduced to 30deg. F. after it has been stacked in the cool chamber. The crossing of alternate tiers of cases is inadvisable, as

this method interferes with the air spaces which are provided by the bulge in each case.

The method of dealing with pears which provides for their cooling as soon as they are harvested loose in orchard boxes is recommended. By this method the pears can be placed quickly into cool storage at the correct state of maturity, which will enhance their keeping qualities until they are required for marketing. Handled under this system, pears can be marketed in sound condition throughout the season, and repacking losses caused from over-maturity and subsequent deterioration are avoided.

At this time of the year it is necessary to take a stock of all lines of fruit held in cool storage. Large-sized fruit of all varieties should be carefully examined, as deterioration will develop rapidly from now on. The detection in time of deterioration in stored fruit will enable it to be placed on the market without the necessity of repacking and consequent extra costs.

—A. POWELL, *Cool Storage Officer, Wellington.*

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