

Defects in Cream Flavour Caused by Addition of Water

DAIRY factories receive from suppliers too much cream which is below finest grade and one of the main causes of flavours described as "flat and insipid" originates from extraneous water. This can be remedied to a large degree by the farmer if he takes reasonable precautions at the dairy.

SURPLUS water may reach the cream in the following ways:—

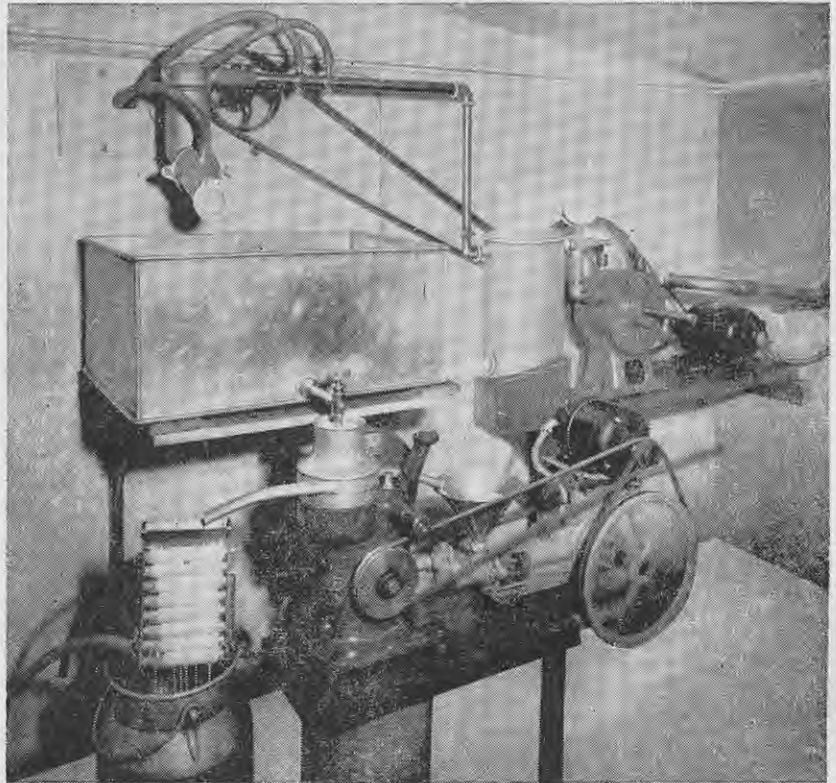
1. Flushing the machines before separation is completed.
2. Adding hot water directly to the vat to warm the milk before separation.
3. Using water to flush cream from the separator when all the milk has been separated.

The suggested remedy is:—

1. Water used for flushing the machine must not be run directly into the vat until separation is finished. If it is necessary to flush the milking machine before completion of separation, the water should be by-passed on to the floor or into a clean bucket.

2. Hot water must not be added directly to the cold milk for the purpose of warming it. If it is found necessary to warm the milk, hot water should be placed in a clean, thin-walled metal container such as a billy or similar receptacle stood in the vat while the milk is stirred.

3. Flush the separator with skimmed milk according to the size of the separator. Use about 2 gallons for a 100-gallon separator and run it through the separator from the vat. **Do not overload the separator by pouring the skimmed milk directly into the top cover or float chamber.** If water is used for flushing the separator, it must not be allowed to flow into the cream can.



[Green and Hahn]

Cream Tests

The best test, both from the farmer's and the factory's point of view, is from 40 to 44 per cent. This gives a cream of good consistency which transports with the minimum of agitation. Cream which is below 40 per cent. is frequently churned during transport to

the dairy factory, owing to its greater fluidity, and in such condition may be de-graded because of "flat" or "characterless" flavour.

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Domestic Beekeeping

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comb with bees and queen adhering is placed in a new hive alongside the old one. Next the old hive, now queenless, is removed to a new location and the new hive placed in the old position. In this hive are placed some of the combs of honey and empty combs, if any, from the old hive, the remaining space being filled with frames of foundation. This operation should be carried out during the daytime while a large number of bees are flying.

There will now be on the old stand a new hive containing one comb of brood with the queen and a few bees. To this will return all the flying bees and those away foraging for nectar or pollen at the time of the change-over. During the next couple of days all the older foraging bees from the old hive will also return to the new hive on the old stand, thus swelling the num-

bers of bees in the new hive to above that of a good swarm.

In the old hive at the new location, now queenless, there will be queen cells on several combs. These will have to be removed with the exception of one from which in a few days will hatch a virgin queen. This queen will mate and begin to lay eggs in about 8 to 10 days from hatching. The colony will still have quite a number of cells with brood from the old queen to hatch, so no great setback will be noticed in the old hive.

The old queen in the new hive will, of course, have carried on producing eggs, and as soon as 7 or 8 combs are filled with brood and there are enough bees to fill the first box, add another; at the same time lift a comb containing emerging brood up into this second box. This will encourage bees and queen to work in the new box.

With this system, which could be named "swarm control", and the add-

ing of further supers as required by the bees for honey, swarming will be kept down to a minimum.

Production of Honey

The beekeeper wishing to produce honey without making an increase can work on exactly the same lines as described in the foregoing, but when the division is made the old hive should be kept close to the new one and when the young queen is laying, the old queen in the new hive can be found and killed. The two hives are then united by the newspaper method.

In 2 or 3 weeks this hive, which is now headed by the young queen, should be gone through and all brood and queen placed in the bottom two boxes and below an excluder if used. Other frames may be put in the super above ready for the honey flow. With the addition of extra room in the way of honey supers as required by the bees this hive will show little inclination to swarm this season.