

of molasses increases palatability and digestibility. In the case of musty hay, a thorough soaking with molasses and water prevents the dust from having undesirable effects.

From 1 lb. to 3 lb. per day may be used as a ration for dairy stock supplementing hay or chaff, either with or without roots. Besides its actual value as a foodstuff and as an appetiser, molasses is of benefit to any stock on dry feed as a laxative, this being particularly necessary in the case of sheep which have to be wintered on chaff or hay only.

For Pigs

Because of its high energy value, molasses has been found very suitable in the wintering of store pigs, when it may be fed diluted in the proportion of 3 lb. per gallon of water as a supplement to skim-milk, grain, roots, or meat-meal. It is a common practice, also to add molasses to skim-milk, whey or buttermilk which is pumped out through pipes to pig troughs. This has the valuable func-

tion of keeping the pipes in a clean and sweet condition. An alternative method is to follow the process of pumping milk through the pipes by pumping through a few gallons of molasses mixed with water.

High Quality Silage

A noteworthy development since the outbreak of war has been the increasing use of silage in Britain to replace much of the feeding supplies which were formerly imported. Investigations have been carried out into the best method of preservation of grass silage, and it has been demonstrated that the addition of molasses has several beneficial effects. The molasses is mixed with about three times its volume of water and sprinkled over the green fodder as it is being stacked or spread in the silo; approximately 30 lb. of molasses per ton of green fodder is necessary.

In the production of silage preservation is effected by the development of lactic acid from the sugars contained in the fodder, the higher the percentage of sugar the more rapid and even is the production of lactic acid. For this reason, green material rich in sugar, such as green maize, makes better silage than material rich in protein, such as young grass and clover. When using the latter type

of green material for silage, the addition of molasses results in a much more satisfactory fermentation and gives a silage which has a sweeter smell and a higher palatability.

Up to the present, this system has not developed to any extent in New Zealand, but no doubt, with further experience, the use of molasses will become more general by farmers who make silage.

Solid Molasses

An interesting recent development has been the importation of molasses in the form of a solid block weighing approximately 56 lb. Molasses is produced in this form by evaporating the liquid molasses under low pressure and running the material while still hot into tins. It is probable that the scarcity of steel drums in countries where molasses is produced may necessitate the preparation of larger quantities of it in the form of solid blocks.

Molasses in the solid form is somewhat less convenient to use for feeding, as it is necessary to mix the molasses with water, and the blocks can be diluted only by the use of boiling water. They may, however, be placed out in the paddocks in the same way as blocks of stock lick.

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