

INTRODUCTION.

The writer's attention was first directed to the so-called 'sweet cream process of buttermaking' some three or four years ago, when acting as judge at several of the large exhibitions of butter, by the fact that on more than one occasion the first prize went to the St. Hyacinthe Dairy School Creamery, for butter which was said to have been made by this process. Mr. J. D. Leclair, the Superintendent of the School, published a brochure on the subject in 1904, giving some details of the process and a record of the buttermaking at the Dairy school for twelve months. Montreal butter exporters who have handled the butter from creameries which have adopted this process, have spoken very highly of the quality of the butter.

Strictly speaking, it is not a sweet cream process, as the large amount of 'starter' or ferment added to the cream gives it an acidity of about .3 per cent, or sufficient to be sour to the taste.

The theory on which the process is based seems to be sound. There is less danger of injury to the quality of butter from undesirable germs which may have been in the milk, if the cream is churned soon after separating, than if these germs are allowed to multiply during the ripening process. If the cream is pasteurized, the danger is lessened still more. The importance of acidity is recognized in the large amount of ferment added.

In the application of this process to ordinary creamery practice a number of things have to be considered. In the first place, a first-class pasteurizing and cooling outfit, especially the latter, is absolutely essential. Very few creameries are properly equipped in this respect. This implies also an ample supply of cold water and ice.

A practical objection to the process for hot weather is that the churning, working and packing of the butter is not completed until late in the afternoon, while in the ripened cream process the churning can be done in the early morning, and cooler part of the day.

This bulletin is not published with a view of advocating the adoption of the process, but simply for the purpose of giving information to those who may be interested in the subject.

Mr. J. G. Bouchard, who is buttermaker for several years at the St. Hyacinthe Dairy School Creamery, but who is now a member of my staff, was assigned to the duty of carrying out the practical buttermaking part of the investigation described in Part II.

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