

# Ontario Department of Agriculture

## ONTARIO AGRICULTURAL COLLEGE

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### Home Canning

OF

### Fruits and Vegetables

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#### INTRODUCTION.

It is only of comparatively recent years that the process of canning fruits and vegetables has been placed on a scientific basis. Preservation of foods of all kinds has been practised for many centuries, although the modern methods were not introduced until early in the nineteenth century, and even at that time the reasons for certain manipulations could not be satisfactorily explained.

As early as the seventeenth century it had been observed that there were plants and animals so minute that they could not be observed without the aid of a powerful microscope. As the years passed, our knowledge of these minute plant organisms increased, and about the middle of the nineteenth century it was shown that some caused disease, others fermentation, and others putrefaction; in fact, that these organisms were of immense importance in nature.

The organisms concerned in the process of canning, or food preservation, are those which produce fermentation or putrefaction in the materials after they have been put away in the jar. Such organisms may be divided into three groups—moulds, yeasts and bacteria.

#### MOULDS.

A white, green or black furry growth, commonly found on spoiled foods, especially on bread kept in damp places, cheese and canned fruits.

Some of these moulds may cause distinct alcoholic fermentation in canned fruit, and at the same time impart a "mouldy" flavour to the material.

The moulds reproduce themselves by spores. These are very small light bodies which are easily carried in the air. When they settle on favourable materials they germinate and produce the typical mould plant. Mould spores are found very commonly on ripe fruit.

#### YEASTS.

Yeasts are common in every household, being used in breadmaking, and are usually the cause of fermenting canned fruits.

They are very minute plants which are quite invisible to the naked eye. If they gain entrance to substances containing sugar and enough moisture they imme-