

and usually is more serious in limited areas.

Why Black Rot was More Serious in 1943

Reasons for increase in black rot infection probably were: (1) Weather conditions early in the season were especially conducive to fungus growth and arsenical and frost injury. (2) The percentage of fruits injured by insects was high because of the light crop.

Control Measures

There was a general tendency for black rot to be more prevalent in orchards sprayed with a nicotine schedule. Growers experiencing rather serious outbreaks may find it necessary to continue the lead schedule through at least the fourth cover spray in order that Bordeaux may be applied during this period. By using sulfur through the first cover and bordeaux in the second, third and fourth cover sprays, black rot will be substantially controlled. Unless such preventive measures are used, it is likely to develop into another serious disease of the apple.

THE FRUIT FOOD SUPPLY DEPENDS ON THE COMMERCIAL ORCHARDIST

(From *Missouri Horticultural News*, September)

The general farmer no longer is a factor in producing fruit. Insects, blights, and orchard pests have driven the farmer out of fruit growing. The commercial orchard today produces 5/6 of all fruit grown. The trend toward the fruit farm and away from the farm orchard is shown in the following recently released census figures.

Farmers Abandon 1,041,225 Acres in Fruit.—In the last 10 years more than a million acres in fruit were abandoned by farmers as unprofitable or interfering with other farm work. Here are the census figures:

Acres in fruit in 1930.....	6,086,176
Acres in fruit in 1940.....	5,044,951
Loss	1,041,225

Commercial Fruit Farms Replace Lost Acreage.—Millions of farms gave up growing fruit, yet in the last 10 years fruit production has increased steadily. The following production per tree of the farm orchard

as compared with commercial fruit farms tells why:

Production per tree on farms less than 100 trees (Farms)	1.8 bu.
Production per tree on farms of 1,000 trees and over (Fruit Farms)	3.6 bu.
Bearing apple trees in 1930: 88,848,970 yielding	126,433,057 bu.
Bearing apple trees in 1940: 58,152,108 yielding	150,236,768 bu.

An analysis of Fruit Farm income by the Census Bureau reveals that less than 2% of income is received from other source than fruit. 1940 Fruit Farm Income follows:

From Fruit	\$300,975,952
From Livestock	5,311,450
From Dairy	4,946,357
From Poultry	5,018,372
From Vegetables	6,249,077

HINTS AND OBSERVATIONS

By W. W. MAGILL
Field Agent in Horticulture

Systematic Starvation!

Last March the fruit growers of the Paducah District held a field meeting at the Frederick Beyer Orchard. He had sealed the inside of a large old chicken house with phosphate paper bags at a cost of 20 cents worth of tacks, a rainy day's labor, and a 50-cent padlock. In this house he had stored 1,000 field crates. To satisfy the curiosity of a few growers, he unlocked the door, selected a crate at random, and, with the help of some visiting growers, tore the crate apart. We found 67 active over-winter codling moth larvae hibernating in the cracks and crevices. If that was an average crate, there were 67,000 of those little worms sealed in that shed, doomed to certain starvation!

High-Powered Advertising

The fruit and berry growers of the United States received a "million dollars" worth of advertising from the Military Foods Program. If it is necessary for a man in uniform to have some kind of fruit products in his diet, it is equally necessary for the 100 million back home to eat fruit in some form.