During the winter of 1950-51 these testing experiments were continued and expanded, and included about 200 samples of Mida wheat from different counties in the state. The samples were grown in the greenhouse to the heading stage and were sown in the field the spring of 1951 for a field reading of smut. Greenhouse tests indicate both the amount of loose smut in individual samples and the sections of the state in which most smut was found (Fig. 1).

Figure 1 indicates that the damage from loose smut may run somewhat lower in 1951 than in 1950 and that the greatest concentration of infested seed is in the eastern part of the state. Mida wheat is not grown very extensively in the western part of the state but the samples which were obtained from the western counties carried relatively small amounts of loose smut.

Wheat growers who have had losses are eager to find smut free seed and much of the Mida wheat which was produced in the western part of the state will be sown in the Red River Valley this year.

SUMMARY

- 1. Loose smut has caused considerable damage in susceptible varieties of wheat in North Dakota during the past several years.
- 2. The practice of sowing smut-free seed is the best method for dealing with this problem.
- 3. Comparative tests of seed lots in the greenhouse and in the field show that the greenhouse tests, under the conditions used, are a reasonably accurate index to what may be expected from the seed under field conditions.
- 4. The greatest concentration of loose smut in the 1950 crop of Mida wheat appears to be in those lots originating from the eastern part of the state.
- 5. While we have not made extensive use of embryo examinations with the microscope it is believed that this method would be much less satisfactory than the method we have used in these tests.
- 6. Predicting loose smut in wheat can be a valuable service to wheat growers in regions where loose smut has become a problem.

RICE VS. YAMS

Japan's rice-eating population is learning that sweet potatoes are a nourishing food that some day may make it possible for their island empire to produce as much food as it consumes.

For many years Japan has not produced more than 85 per cent of her food, and she may not improve much on that figure for a long time, but Dr. Raymond E. Culbertson, occupation horticulturist, is enthusiastic about the sweet potato as a Japanese crop.

Dr. Culbertson explains that it supplies more calories per unit area than any other crop; it attracts no serious pests; it can survive typhoons, and it grows unusually well in Japanese soil.

And while Japan is learning about it, it might be well to remind ourselves that we in the United States could eat more sweet potatoes than we do, without suffering in any way.

And while on the subject of potatoes, did you know that the familiar old spud, or Irish potato, can be prepared and served in more than 250 ways? (JB)