PREVENT VEGETABLE DISEASES*

THREE WAYS TO AVOID TROUBLE IN THE VICTORY GARDEN

I. Buy Seeds of Disease-Resistant Varieties

Many vegetable varieties developed during recent years are resistant to one or more diseases. Nost seed catalogs indicate the resistance of a variety after the name. Example: "Marglobe (wilt resistant)." If that is not done, the resistance is usually mentioned in the description of the variety. Below are a few examples of resistant varieties:

Beans

Snap beans
Resistant to common bean mosaic, and powdery mildew
Refugee U. S. No. 5
Idaho Refugee
Sensation Refugee

Pole Beans
Resistant to rust
Kentucky Wonder,
white seeded and brown
seeded rust-resistant
strains
Resistant to root knot
Alabama No. 1

Cabbage

Resistant to yellows

First early
Resistant Golden Acre
(Resistant Detroit)
Jersey Queen
Racine Market

Second early
All Head Select
Marion Market

Midseason Globe

Late

Wisconsin All-Seasons Wisconsin Hollander Bugner Wisconsin Ballhead Red Hollander

Cucumber

Resistant to mosaic and downy mildew
Chinese Long (China)
Shamrock

Lettuce

Resistant to tip-burn Cosberg Great Lakes

Sweet Corn

Resistant to bacterial wilt
Spancross
Marcross
Golden Cross Bantam, and others

Squash

Resistant to curly-top

Marblehead

Vegetable Marrow varieties

Tomato

Resistant to fusarium wilt
Marglobe
Rutgers
Pan America
Pritchard, and others

Watermelon

Resistant to wilt

Hawkesbury

Klondyke R 7

Stone Mountain No. 5

Kleckley Sweet No. 6

Leesburg, and others

^{*} Prepared by R. J. Haskell, Senior Extension Plant Pathologist, Extension Service, War Food Administration, U. S. Department of Agriculture.

II. Buy Disease-Free Seed - Buy Certified Seed if Available

Bacteria and fungi that cause many diseases of vegetable crops are often carried on, in, or with the seed. Seed grown in regions where these diseases do not occurr will be disease-free.

Before the war, much seed of cabbage, cauliflower, and related crops came from Europe, where black rot and black leg are common. Now this seed is grown in the Pacific Northwest where these diseases do not occur, and so it is free from them.

Beans are often a failure because of seed-borne anthracnose and bacterial blights. Seed grown west of the Rocky Mountains is usually free from anthracnose, and seed grown in California is usually also free from the bacterial blights.

Peas, cucumbers, squash, and melons are other crops that suffer from seedborne diseases that may be avoided by using seed grown in localities where the diseases do not occur or are strictly controlled.

Some States are making inspections of vegetable-seed fields and are certifying seed from those that are free from serious seed-borne diseases. Companies carrying such certified seed usually indicate it in their catalogs. Example: "Marglobe (certified)." Certified seed is usually well worth the slightly higher price charged. It pays to use certified seed.

. III. Treat Vegetable Seeds

Seeds may often be rid of disease germs by certain chemical treatments worked out by plant pathologists. They may also be protected from decay and the developing seedlings saved from a certain amount of rot and damping off by seed treatments. Most seed companies do not give their seed these disinfection and protection treatments before selling it. Therefore, to obtain the benefit of treatment most Victory gardeners will have to perform this service themselves. There follow below what seem to be the most practical Victory Garden seed treatments. They are all dry dust treatments. The amount of dust that can be held on the flat end, of a toothpick is usually sufficient to treat a 10-cent packet of small seed. Dust is put into the packet with the seed; the packet is closed by folding the end and it is then shaken for about 1 minute so that each seed is thoroughly coated with the dust. Any excess dust is screened off. Larger quantities of seed may be treated in a glass jar, can, or even a paper bag. The instructions of the manufacturers should be followed carefully.

Arasan. Applicable to all garden seeds except carrot, lettuce, and endive.

It can be obtained in 1-ounce packets.

Semesan. Applicable to cabbage, cucumber, melons, and most vegetable seeds

except lima beans. Obtainable in 1/3-ounce envelopes, 2-ounce packages,
1-pound cans, and larger sizes. Can also be used in water as a wet
treatment.

Spergon. Applicable to lima beans and peas. Sometimes beans are benefited.

Cuprocide. Applicable to beets, spinach, peas, lettuce, cucumber, melons, squash, and several other vegetables. Not safe on seed of the cabbage and onion families. Obtainable in 4-ounce and 1-pound sizes.