

## AGRICULTURE

# Plant Inspection Change

➤ MILLIONS of highly destructive pests were prevented from entering the United States last year, at the rate of one every 12 minutes.

Standing guard between vigorous plants and hungry foreign insects is a night-and-day vigilante that many farmers never see—the Plant Quarantine Division of the Department of Agriculture.

Every plant legally brought across the border is separated from its surrounding soil, closely inspected, fumigated and then released to the owner after dangers of its harboring an insect, virus or disease have been eliminated.

A new proposal is to grow plants scientifically overseas, then allow them to enter this country without removing them from their growing media.

Under existing quarantine regulations, countless pests have been prevented from getting their feet on U.S. soil—the spring bollworm, maize stalk borer, cereal leaf-miner, garden chafer, pine sawfly, vine moth, apple virus as well as other predators upon vital produce such as cabbage, broccoli, celery, soybeans, sugarcane, rice and melons.

This quarantine is so effective, says Dr. Byron T. Shaw of the Agricultural Research Service in Washington, D. C., that "to our knowledge, no important foreign pest has become established here as a result of nursery stock importations since 1949," when restrictions became effective.

The proposed change in the law would allow foreign countries to set up growing areas that would be inspected by U.S. scientists, and to ship the plants and their containers into this country. U.S. officials would reside for about two years in the countries, at the foreign government's expense, and maintain strict inspection of all plants destined for importation in the United States.

The plants would have to be grown in approved media such as buckwheat hulls, Bermuda coral sands, excelsior, ground cork or peat, sawdust and shavings. They would have to be enclosed in glass houses, on concrete or tile benches, and tended with clean nutrient materials and pure water.

All outside matter would be barred from the area to keep the plants free from all pests dangerous to U.S. agriculture and economy.

"This proposal is not a relaxation of the quarantine rules, nor will it reduce any restriction on the introduction of pests," stated Dr. Shaw.

Strong opposition to the proposal has come from agriculturists, nursery men and scientists who condemn the whole idea as impractical and a dangerous means of letting in destructive pests.

"It is almost impossible to import virus-free, disease-free or insect-free plants that are still growing in their media," stated Dr. Frank L. Howard, head of plant pathology-entomology at the University of Rhode Island.

"Many viruses, nematodes, parasites, fungi

are not readily visible and would escape detection if hidden in the roots," he stated. Dr. Howard also believes the proposed rules would apply only to northern European countries, and would be nearly impossible for certain countries to follow.

In tropical countries, he pointed out, plants are not grown under glass. They would have to be screened in, and this would raise problems of supply and maintenance as well as of air-borne viruses. Water and fertilizers and nutrients are not as "sterile" as they should be for this type of system, and water molds and root rot would easily enter the growing media.

• Science News Letter, 83:349 June 1, 1963

## HORTICULTURE

## New Blueberries Resist Powdery Mildew

➤ AN IMPROVED BREED of the favorite highbush blueberries now withstands attacks of powdery mildew disease.

This mildew robs plants of vitality needed to develop high quality fruit and to withstand attacks of more serious diseases that could follow. It also causes the leaves to drop off, thereby weakening the plants.

Farmers could use chemicals to control the disease, but they usually do not, because of high costs and indefinite effect on the crop yield. Another difficulty is that symptoms do not appear on the berries until after harvest.

Breeding a new mildew resistant plant seems to be the best solution found by horticulturists of the U.S. Department of Agriculture's Agricultural Research Service and the Agricultural Experiment Station of Rutgers University, New Brunswick, N. J.

• Science News Letter, 83:349 June 1, 1963

## ENTOMOLOGY

## Nature Is Effective In Controlling Insects

➤ MORE THAN 90% of the insects with which we live cause no damage because they are kept under control by natural agents.

The most effective natural control are the diseases that attack insects. The pea aphid can be destroyed by a fungus, the cabbage looper can be stopped by a virus, and the pesty Japanese beetle larvae succumb to a milky disease, Dr. F. L. McEwen, entomologist at the New York State Agricultural Experiment Station, Geneva, N. Y., said at a conference.

Climate is another natural means of controlling insect activity. For instance, corn that matures in late August or early September is free from worms. But if the corn is planted earlier, the European corn borer gets to it—or if the corn is harvested much after Labor Day, it can be infested by fall armyworm or corn earworm.

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