

altho. the "leaky" types of decay were absent, the common dry rots have developed, often originating from cuts and bruises. Rough handling should always be avoided as much as possible.

Further precautions in the handling of potatoes in a manner to prevent development of storage decays are necessary. Some growers are ventilating the bins. Many are closing the ventilators in the day time and keeping them open at night. In all cases it is wise to prevent sweating. This, of course, occurs when cool potatoes are subjected to warm air. A uniform temperature should be maintained.

In the first month or six weeks this need not be below 60°F. but in the later storage period it should be held as near 35°F. as possible. Most of the decay and shrinkage occurs in the early part of the storage period. It appears to be good practice to provide some sort of temporary storage for the first month or six weeks, which would permit sorting and discarding decayed and partially decayed tubers before the winter storage period begins. The practice of sorting and regrading after a pre-storage period is not always necessary but with conditions such as prevailed over wide areas this year this practice will often be required.

ERGOT on Spring Rye

Ergot continues to be a disease of grains and grasses for which control measures are being sought. W. E. Brentzel, Plant Pathologist, reports that the seed treatments used so far have had little effect upon the vitality of the sclerotia (ergotized kernels or bodies). In studies conducted with spring rye in 1944 Mr. Brentzel found that spring rye plots became naturally infected from grass plots about 20 rods away. An artificial inoculation by spraying a portion of the field with a suspension of spores nearly doubled the number of heads affected by the ergot disease. Ergot infection seems to reduce yields. Infected heads set fewer seeds than non-infected heads, exclusive of sclerotia, and the mean weight per seed was slightly less.

FLAXSEED Treatments

In a series of experiments conducted cooperatively by this Station, other stations, the U. S. Department of Agriculture, and Experimental Stations in Canada, tests have been carried out on four seed disinfectants, two containing organic mercury, namely New Improved Ceresan and Semesan Jr., and two containing no organic mercury; namely, Arasan and Spergon. Two lots of Royal flax were used in the trials, one which had been subjected to serious threshing injury and one not so handled. In all rows of flax counted, whether treated or untreated, significantly fewer plants emerged from the injured seed than from the uninjured seed. Chemical treatment did not appear to injure either lot of seed and in some cases there was considerable improvement. The experiments at this Station were conducted by W. E. Brentzel, Plant Pathologist.