sary to point them out further in this short paper. The writer would like to point out one goal worth striving for and which perhaps has not been mentioned in any of the Russian papers thus far. One is tempted to imagine the possibility of securing from the wheat-**Agropyron** cross a variety of winter wheat hardier than any now existing. Such a variety might prove to be more valuable than any of our spring wheats. Such a creation might not be possible but certainly it is a project worth undertaking. It might not be more difficult than was the production of Hope wheat over 20 years ago when McFadden crossed Marquis wheat and an emmer. Hope wheat may have resulted from a chance but happy exchange of parts of chromosomes. It might be far less easy on a second trial to produce another Hope wheat from a similar cross but at least it is potentially possible. And so perhaps a new winter wheat lies undiscovered in some wheat-**Agropyron** combination.

SPRAYS For Killing Potato Plants

Spraying and dusting experiments with chemicals used for killing the potato plants were conducted in Traill County in 1944. Dust applications of chemicals did not effect satisfactory kills. A spray made up of two gallons of Sinox and ten pounds of an activator, applied at the rate of about 173 gallons per acre was applied on August 18, 1944 with the result that about 99% of the plants were killed. In this trial the vines were crushed by rolling an implement over the rows before the spray was applied. A plot sprayed without rolling was killed to the extent of 95%. The experiments were in charge of W. E. Brentzel, Plant Pathologist. They will be continued another year for there is much interest in developing a satisfactory method of killing vines to check possible spread of late blight, to control the digging and marketing period, and to avoid the weather hazards of late harvest.

TREATING Spinach Seed

Cooperative tests were conducted by W. E. Brentzel, Plant Pathologist, and at other State Experiment Stations in 1944 on the value of three different seed treatments, namely, Arasan, Fermate, and zinc oxide as a seed treatment for Virginia Savoy spinach. The emergence in all rows was low, ranging from 36 to 52 percent. The highest emergence was obtained from seed treated with Fermate, there was some improvement in emergence due to treating with Arasan but zinc oxide appeared to cause some reduction in stand. Seedling blight was not apparent in any of the rows.