

The conditions in respect to the poor cleaning which seed grain receives and the numbers of weed seeds which are returned to the land are most unfortunate and must result in enormously reducing the yield and in lowering the quality of the crops. In many cases the equipment which farmers have at their disposal is not efficient for cleaning seed grain. Few fanning-mills are properly equipped with riddles and screens for seed cleaning and often the sieves and other equipment in farmers' barns are badly in need of repair. There is also room for the exercise of greater skill in the use of the cleaning equipment now available.

Crop failure due to the unwitting use of seed of low vitality is comparatively rare. It was quite common ten years ago, especially with ensilage corn in eastern Canada and with oats and barley in the Prairie Provinces and Quebec. Although more precautions are taken than formerly, the vitality was low in a considerable proportion of the sample collected. With oats, barley and corn it is impossible accurately to estimate by appearance the extent to which the vitality may have been injured through frost and other causes. Many poor crops could be prevented by submitting the seed to a germination test.

The control of smut in cereal crops, particularly in wheat, is well understood and widely practised in Prairie Provinces. In the eastern provinces very little seed grain is treated and smut causes serious preventable loss, especially in the oat crop.

The Seed Control Act has prevented misrepresentation in the sale of seed grain. It has not created and can not create a reasonably clean supply suitable for seed. Some good seed is made available by seedsmen, but the great bulk of the grain purchased in commerce and used for seed is of the standard commercial grades, the cleanest of which may contain up to 150 noxious weed seeds per pound. In grading and handling Western grain no provision is made for keeping that which is clean separate from that which is badly contaminated with weed seeds with the result that practically none of the grain which passes through the terminal elevators is fit for seed.

It is impossible effectively to remedy by legislation the conditions shown to exist by this inquiry. Making and enforcing laws respecting the sale of seed and control of weeds may contribute materially toward the desired end, but success by these agencies will be only partial and always dependent upon educational work and the extent to which the means for securing and preparing good seed are available to and made use of by farmers.