

In oats quality especially should be considered. During the last few years we have been looking for oats that yield well and weigh well per bushel. As a consequence we have many varieties which have poor feeding and milling qualities, simply because we have introduced varieties that look good to the eye but are very thick and heavy in the hull. When we feed our horses three quarts of oats we are simply giving them two quarts of food, the other quart being made up of hull that is practically iron clad and indigestible. An oat should have a thin hull and a comparatively large kernel.

This year many are wondering if their oats are fit for seed and if it is possible to tell frozen oats. The way to distinguish frozen oats is quite simple. Take a single grain and split it in two. If it is frozen you will notice a dark streak running through the meat. This is evidence that the oats are unfit for meal or seed, and that they will not germinate satisfactorily, the germ having been killed. A seed may have all the qualities mentioned above and yet may not grow simply because the germ is injured or killed. If we wish to make sure that our seed is of any value we must find out what percentage will grow. This can be done by taking a box with about two inches of soil in it and sowing in it one hundred grains. Keep the soil moist and warm. The number of plants that grow will give you the percentage of germination, deciding for you whether the seed is fit for use or not. After the frost of last year this is very necessary, as samples of oats that weigh forty pounds per measured bushel are in some instances germinating only two per cent.

Smut in Wheat.

The fact that so much smutted wheat is going on the market this year means that the men who sow the seed do not take as much care as they should to prevent this great loss. It also means that there are yet some men who do not understand thoroughly the best treatment of the seed for the prevention of this disease. The first essential is to have plump, uninjured and clean seed—seed that has no smut balls in it to break in the drill and thus contaminate the treated grain. We next should know that the bluestone is pure or that the formalin is guaranteed to be a forty per cent. solution of formaldehyde. Then we should be careful to weigh which of these we prefer to use and measure the water accurately. The solutions most generally and successfully used are one pound (sixteen ounces) of formalin to thirty-two gallons of water, and one pound of bluestone to six gallons of water. There are some advantages in using the formalin. First—it is a liquid that does not require time to dissolve. Second—the operator does not need to be so particular as to whether the water is hard or soft, and lastly—it leaves the grain in a better condition to germinate quickly.

In treating seed for smut one thing to remember is that thoroughness counts. See that every grain comes in contact with the solution whether you immerse or sprinkle.

Formalin is the only treatment for smut in oats that gives complete satisfaction. To those who are interested in the history of smut, I would refer them to Bulletin No. 2 issued by the agricultural department at Regina.