

the conditions of western farming and it was found that the mere contact of a stronger solution was more satisfactory as there was a saving of time and little if any loss of efficiency, or lessening of the vitality of the grain. Wheat has been treated with a one lb. to 3 gallons solution of bluestone without perceptibly injuring it, but that is unnecessarily strong for any but extremely smutty seed which should not be used if it is possible to procure better. Although a bushel of wheat may not absorb a gallon of liquid when sprinkled it is well to allow that amount to insure wetting and to allow for waste. A safe application for general use would be: **1 lb. Bluestone to 6 gallons soft water for 6 bushels of wheat.**

Formalin is equally good for treating wheat, and much better for treating oats and barley and has been safely used as strong as one ounce to the gallon but will be quite satisfactory for general use if the solution is made **1 lb. (16 fluid ounces) Formalin to 32 gallons water.** This solution should be used immediately after the formalin is added as it will rapidly weaken if left exposed. If grain is sprinkled with the solution it may be covered for an hour so as to delay evaporation of the formalin.

In preparing the above solutions do not use alkali water with bluestone and be sure your bluestone, or formalin is pure and of full strength.

If wheat is dipped it will absorb about three quarters of a gallon to the bushel while oats will absorb nearly double that.

It will save trouble to prepare a barrel of the bluestone solution at once and have it ready, using 6½ or 7 lbs. to the barrel. It may be quickly dissolved in hot water or if crushed and suspended in a thin sack in cold water in the evening it will by morning be ready for use.

METHODS OF TREATMENT.

Sprinkling the solution over a heap of grain in a wagon box or on any smooth floor while it is thoroughly stirred with a shovel is a method still adopted by many but there is often insufficient liquid used and too little mixing of the grain. It is essential that every grain be thoroughly wetted.

Pickling machines have been found to greatly facilitate this work by permitting a thorough wetting of the grain with a minimum of liquid and a saving of labor. Care should, however, be exercised that the tap does not become clogged and it will help greatly if a piece of sack is fastened loosely over the top of the tank of the pickler to be used as a strainer. The grain should not be run through too fast not yet too slow and it is claimed that with some picklers it is an advantage to have the machine set so that the grain travels a little up grade passing through so that the liquid does not run away so fast.

Dipping the grain in the solution is an effective method and for oats and barley is to be preferred. The grain need only be left in for 5 or 10 minutes and then set aside over another vessel to drip and should then be spread out to dry and be sown as soon as convenient. There are various contrivances for doing this work, the most common being two oil barrels, with the tops cut off, set side by side, in one of these a partly filled jute sack is immersed and then, by means of a pole arranged on a post as a lever, removed to some slats on the top of the other barrel to drip. Another way that has been recommended is to use a water tight