

*Chemical Solutions.* In treatment by using solutions of chemical compounds, there is always a risk of injuring the germinating power of the grain.

But this method has been long followed with much success, usually more in the case of wheat smut (bunt) than that upon oats (loose smut).

In both cases the *hot water* remedy ranks the most successful. There are many solutions that have been tried, but we shall refer to only two. It is generally believed that a strong solution used for a short time is better than a weak one for a longer period, especially where the seed is to be sown by a seed-drill. When grain is allowed to soak for a long time, it does not readily pass out of the drill, and hence using a stronger solution for a shorter time is preferred.

The following are among the best solutions that have been tried :

1. One lb. *Copper Sulphate* (blue vitriol) dissolved in 3 gals. water. Wet the grain thoroughly with this solution and then dry it gradually or sprinkle slaked lime upon it.
2. Three lb. of *Copper Sulphate* dissolved in 5 gals. water. Wet the grain thoroughly and dry by sprinkling plaster or slaked lime upon it and mix well. This quantity will be about sufficient for 15 bushels of grain.
3. One lb. *Copper Sulphate* dissolved in 20 gals. water. Allow the seed to remain in this 12 to 15 hours and put it in lime water for ten minutes and then dry.
4. One lb. *Potassium Sulphide* (liver of sulphur) dissolved in 10 gals. water. Allow the grain to steep in this 12 hours, stirring it from time to time so as to thoroughly mix ; then spread the grain so as to dry.
5. One lb. *Potassium Sulphide* dissolved in 20 gals. water. Steep the grain in this 24 hours.