

Agricultural College, Michigan, April 8, 1907.

Dear Editor:

The topics covered by the bulletins to be sent you will be of great and immediate importance to your readers. Will you kindly give them space in your columns?

THE DIRECTOR.

---

MICHIGAN EXPERIMENT STATION.

Press Bulletin No. 16.

SOME NOTES ON OATS.

At the Michigan Agricultural College equal areas of oats of different varieties were sown April 21, 1906. The varieties tested were the American Banner, Garton Tartan's King, an imported variety, and the Swedish Select. The soil was not absolutely uniform but varied from one square rod to another as all the land on the college farm does. The area sown to each variety was slightly over one-half acre. The yields were as follows: American Banner, 58 bu. 4 lbs. per acre; the Garton Tartan's King, 44 bu. 12 lbs., and the Swedish Select, 41 bu. to the acre.

The soil was a very light sandy loam, not well adapted to oats but resembling a great many acres of farm land in Michigan.

The treatment of oats for smut proved very effective. The formalin treatment was the one adopted. One pound of formalin was mixed with 40 gal. of water and the oats, placed in a gunny-sack, were dipped in the solution, thoroughly shaken in the sack while in the solution to see that all sides of every kernel were thoroughly wet. The wet oats were then spread out on a clean floor to dry and were sown the next day or allowed to thoroughly dry before sowing. Another method found elsewhere equally effective and tried at the station in previous years, is to mix 1 lb. of formalin in 40 gal. of water as before. The oats are spread out four or five inches thick on the granary floor and a sprinkling can or spraying pump distributes the liquid on the oats which are shoveled over well while the solution is being applied, to insure each kernel a thorough wetting. In this case the oats are piled up and covered with sacks to prevent the too rapid escape of the formalin and are left covered over night. The oats are then dried off quickly by shoveling over or by raking.

Naturally the formalin should not be mixed with the water long before using as it is volatile, and, naturally too, the drill is set to sow a larger quantity of oats per acre than would be required for dry oats, since the treating of the seed causes the oats to swell.