

# OAT SMUT CONTROL

---

**New Improved Ceresan  
Formaldehyde Sprinkle Treatment  
Formaldehyde Spray Treatment**

---

**MICHIGAN STATE COLLEGE  
EXTENSION DIVISION**

---

**R. J. Baldwin, Director**

---

**EAST LANSING**

# OAT SMUT CONTROL

Each year the farmers of Michigan lose several thousands of dollars because of oat smut.

Every smutted oat plant is not only a total loss because it produces no grain, but it is also a source of infection for the healthy plants around it. In threshing, smut spores are scattered upon otherwise clean oat kernels. With favorable soil moisture

and temperature the contaminated kernels give rise to smutty plants.

Oat smut is readily killed because the spores are carried on the surface of the seed. Treating the seed with a suitable fungicide before planting will kill the smut spores. Oat seed treatment is a cheap effective insurance against smut and should be practised each year.

## SEED TREATMENTS

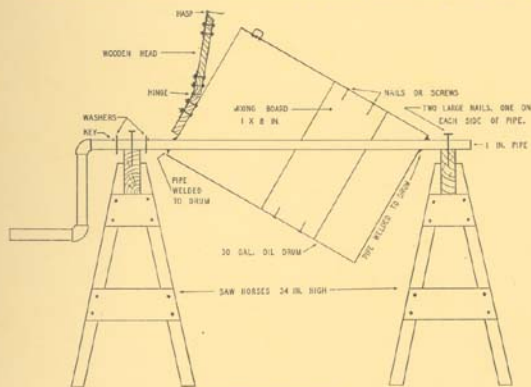
### (1) NEW IMPROVED CERESAN

Use new Improved Ceresan at the rate of  $\frac{1}{2}$  ounce per bushel of oats. If a heavier dose is applied the seed may be injured. The dust is best applied with a home made rotary or gravity type treatment machine or cement mixer. Plans for making a gravity type treator may be obtained from Michigan State College. The dust may be mixed with the oats by shoveling, but this method is not so satisfactory as when it is applied with a treating machine.

After treating, the grain may be stored several weeks without injury. Allow treated oats to remain in bags or uncovered pile 24 hours before planting. New Improved Ceresan has a form of mercury as its active ingredient and is poisonous. Keep it away from children and animals. Do not breathe the dust. Use a handkerchief over nose and mouth or a respirator while treating. Wash hands and face thoroughly after applying the dust. Dusted oats cannot be used for feed.

### (2) FORMALDEHYDE SPRINKLE TREATMENT

Mix 1 pint of formaldehyde with 5 or 10 gallons of water and use to treat 50 bushels of oats. Apply the solution to the oats with a sprinkling can and mix thoroughly by shoveling. Cover the pile of treated oats with blankets or tarpaulin for 2 to 8 hours before planting.



Oil Drum Dust Treater.

### (3) FORMALDEHYDE SPRAY TREATMENT

Mix 1 pint of formaldehyde with 1 pint of water. Apply this quantity (1 quart) of solution with a small hand sprayer to 50 bushels of oats. The oats are shoveled from one pile to another and each shovelful is given a light spray. Three or four strokes of the sprayer is enough for a shovelful. After the entire quantity of oats has been sprayed, shovel the pile over into another pile, which should be covered for 4 hours or overnight with blankets or a tarpaulin. For best results sow after holding 4 hours or overnight. If the oats must be stored longer, spread out in a thin pile and air thoroughly before sacking.

MICHIGAN STATE COLLEGE

EAST LANSING, MICHIGAN

R. J. BALDWIN, DIRECTOR OF EXTENSION WORK

**FREE**

CO-OPERATIVE AGRICULTURAL EXTENSION WORK

ACTS OF MAY 8 AND JUNE 30, 1914

PENALTY FOR PRIVATE USE TO AVOID

PAYMENT OF POSTAGE

\$300