SEED TREATMENT

Wheat, Oats, Barley, Rye, Corn, and Sorghum

In many cases seedsmen treat seed before it is put on the market; but when this is not done, the grower should treat the seed himself. An ounce of fungicide may be worth hundreds of pounds of grain.

SEED TREATMENT destroys seed-borne fungi that cause plant disease, checks soil-infecting fungi that rot the seed or kill the seedling, helps control weeds by establishing better stands of grain, and increases the value of the harvest by helping eliminate diseases which mar the appearance of the grain.

If not already treated by the seedsmen, all grains used for seed should be chemically treated before planting, regardless of whether or not the seed is known to carry surface-borne disease organisms. Make treatment at least 24 hours before sowing so that the chemical fumes can penetrate throughout the lot of seed. Treatment may be made 1 or 2 months in advance of planting. Clean the seed to remove weed seed, light grain, and debris. The cleaning should be done before treating the seed with fungicides. Treatment of seed with the proper fungicide will largely prevent smut of wheat; the loose and covered smuts of oats; the seed-borne stripe disease, and the covered and black loose smuts of barley. It will also help reduce the amount of scat on wheat and barley, but will not control loose smut of wheat and brown loose smut of barley. Seed treatment protects corn and sorghum from seed-borne and soil-infecting fungi. Fungicides protect the seed until conditions are favorable for germination.

Chemical treatment, if properly made, does not reduce the germination of the seed. It can be done quickly, but requires some kind of mixing machine. Plans for constructing the Minnesota seed grain treater or the revolving barrel treater, may be obtained from your county agent. Cement mixers, churns, and commercial treaters may also be used.

THE CHEMICAL TO USE AND AMOUNT PER BUSHEL OF SEED

1. For Wheat, Oats, Barley and Rye use ½ ounce Ceresan M or New Improved Ceresan per bushel.
2. For Corn use Arasan, Semesan Jr., Spergon or Barbac C, applied at 1½ ounces per bushel.
3. For Sorghum use Arasan or Spergon at 1½ ounces to 2 ounces per bushel.

New Improved Ceresan may be used on Sorghum seed at ½ ounce per bushel when it is treated only a few days before planting and kept in a dry place.

PROCEDURE: 1. If the Minnesota seed treater is used, add the proper fungicide, at the rate recommended above, to each bushel of seed, dump the grain into the treater, and catch the treated seed in a bag as it comes out.
2. If a revolving mixer is used, add the seed and chemical to the mixer in the proper proportion and turn berrle or mixer slowly for about 40 revolutions. Remove and bag the treated seed.

PRECAUTION: When large quantities of seed are to be treated, do the work out of doors, or wear dust masks. Seed treated with a fungicide is poisonous and should be kept out of reach of animals. Destroy any surplus seed not needed for planting either by burning or by burying.

COOPERATIVE EXTENSION WORK IN AGRICULTURE & HOME ECONOMICS, STATE OF VA., VA. POLY. INST. & U.S.D.A. COOPERATING, EXTENSION SERVICE.