SEED DILUTION WITH RICE HULLS*

For a number of years we have used rice hulls for seed dilution to facilitate the drilling of range and pasture seedings.

The use of rice hulls will:

1. Largely eliminate the time-consuming drill callibration process.

2. Keep mixtures of grasses and legumes in constant proportion by preventing abnormal separation in the drilling process.

3. Give uniform distribution of small seeds at low rates of seeding..

4. Prevent "bridging over" of light, fluffy seeds.

These are the steps to follow:

1. Thoroughly mix the seed and hulls, together with the necessary fungicide and inoculant, at the rate of two bushels (about 16#) of rice hulls, with the proper amount of seed of the grasses and/or legumes for one acre.

2. Fill the drill box with the mixture.

3. Set the drill at the setting for 160 pounds of barley per acre.

4. Run the drill over a canvas or firm surface.

5. Count the number of seeds per row foot, of any one of the species in the mixture. Base your count on the average of at least 3 five-foot sections of drill row.

6. Compare the average number of seeds drilled with the number the desired seeding rate provides. This information can be found in Plant Materials Technical Note #5, Standard Seeding Rates.

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*This Technical Note restates information that has been issued in other documents.

7. Make the necessary adjustments in the drill setting and repeat the operation until the average number of seeds sown equals the number required to give the desired rate.

8. Set the acreage computer on the drill at 0 and make a final check after about 3 acres have been sown.

9. Make any necessary minor final adjustments so there will always be a layer of the mixture 1/2 to 3/4 of an inch deep left on the bottom of the drill box for each 3 acres sown.

Rice hulls are superior to cracked grain, sand or sawdust. The cup shape of rice hulls is largely responsible for their ability to hold seeds in a uniform suspension. Even large seeds, such as LANA vetch and BLANDO brome feed evenly when thoroughly mixed with rice hulls.

Rice hulls are inexpensive, light in weight, and have a constant size and volume. They can be purchased at most feed stores for about $1.00 per 6-bushel sack. Each sack contains sufficient diluent for three acres.

Assuming a rice hull bushel weight of 8#, the standard amount to use per acre is 16 pounds. Minor changes in the amount of rice hulls needed are dictated by extremes in the size and nature of the seed to be planted. Small seeded species are held in the cups and do not increase the volume when mixed with rice hulls. Large seeded species increase the volume of the mixture by about one-half their volume alone. Thus it is necessary to reduce the volume of rice hulls by that amount when using such large seeded species as LANA vetch, BLANDO brome, etc.

The alternate row seeding technique is enhanced by using rice hulls. The steps in the dilution process are the same except that each species to be sown is mixed separately and drill box dividers are needed.

Rice hulls should <u>not</u> be used as a diluent in seed production plantings because of the liklihood of introducing weeds which are always present in the hulls. These summer-active water-loving weeds are of little consequence in range and pasture seedings.

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