

bers 1 and 3, there being an equal number of grains in each tube. In view of the facts here presented, we feel that in a year such as

this very little reliance can be placed on the factor of bushel weight when considering the question of seed grain. Rather, we should base our estimate of its value for seeding purposes on the size of the grain, consistent with soundness, and unless, as previously stated, the individual grains are at least three quarters of the normal size and weight, the securing of new stock must be considered.

Where seed that is somewhat below the standard size and weight must be used, it would be well not to plant too deeply. It should be borne in mind that the depth at which the root system of the wheat plant develops is not dependent upon the depth of planting. Deep planting of seed low in vitality may cause a loss in stand, should untoward weather conditions prevail, and will, at least, tend to retard the development of the plants, which in itself is a point to be carefully guarded against, particularly in years when rust is prevalent.

#### Seed Grain Should Be Tested.

At a time like this, when the crop has in many cases been subject to damage from bad weather conditions after harvest, in addition to that resulting from rust, it is doubly advisable to sow no grain that has not been sampled and tested for germination. The shrivelled

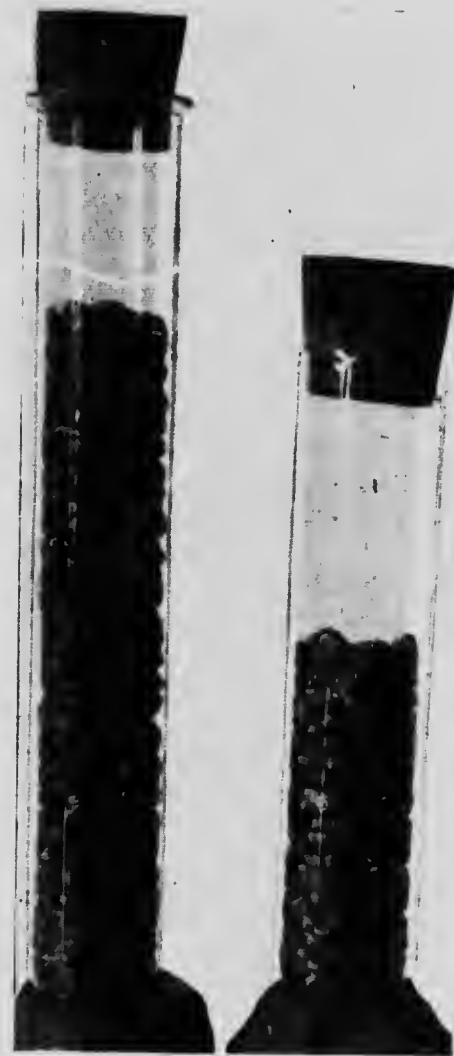


Fig. 3.—There are 500 grains in each of these tubes. The long tube holds seeds of Sample No. 1 in the table on page 7. The shorter tube contains grains of Sample No. 3. The point to note is that although one lot weighs 56 lbs. per bushel as compared with 65 lbs. per bushel in the other sample, its kernels are only about one-half the size. The amount of plant food in a seed is not, therefore, in proportion to the weight per measured bushel.

condition of rusted wheat is an indication that it did not mature properly. If such wheat has been exposed so that it is badly