

Method of testing seed essay sample



Seed health refers to the health status of a seed. Sowing healthy seeds of high quality is our concern to improve crop yields thus increasing food production. It has a great concern to farmers and seed producing agencies where the disease is high and average yields are low and where more food is needed to feed the ever-increasing population.

- RAG-DOLL OR ROLLED TOWEL METHOD – lay seeds in a moist cloth and roll the cloth with uniform folds. After some time , seeds will sprout.
- DINNER PLATE OR BLOTTER METHOD – seeds are placed in a plate with wet sand and then covered with sheets of moist blotting paper or with another plate .
- SEEDBOX METHOD – contains moist sand 12 cm. deep in which a given number of seeds are planted.

PERCENTAGE OF GERMINATION – To find the percentage of germination of a particular seed , use the rag-doll method of testing seeds.

- To calculate the Percentage of Germination , use the formula :

$$P. G. = \frac{GS}{SS} \times 100$$

- In rolled towel test , 56 seeds germinated out of 125 seeds planted. Find the percentage of germination .

Solution : $P. G. = \frac{56}{125} \times 100 = 44.8$

- The new seeding rate (N. S. R.) is obtained by deviding the Recommended Seedling Rate (R. S. R) by its percentage of germination. So $NSR = \frac{R. S. R.}{P. G.}$
- If the percentage of germination is 45 % , find the new seedling rate of corn if its recommended seedling rate is 8 kg. per hectar.

Solution : $N. S. R. = \frac{8 \text{ kg.}}{45 / 100} = 17.78 \text{ kg. or ha.}$