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TESTING SEED
FOR
PURITY AND
GERMINATION

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**Purity
tests.**

For a number of years this Station has made purity tests of seed samples for farmers and seed dealers of the State, who are interested in the matter of pure seed. Such seed examination is done free of charge to residents of the State if received not too frequently from one individual, the results being at the disposal of the Station to publish if it deems advisable. The value of such seed analyses depends entirely upon the manner in which the sample is taken and whether it is a fair representative of the bulk of seed from which it is taken. A seed sample to be of value for examination should weigh at least 2 ounces and should be a composite sample taken from all parts of the bulk. There is a large increase in the number of farmers who are interested in pure seed; this is evidenced by the fact that over 1200 samples of seed were received for purity analyses during the past year. Purity examination is the work of a seed expert, but tests for germination, which is of as much importance as purity, may and should, be made at home by the individual farmer or seed grower. The Station is not equipped to make germination tests of seed samples, while on the other hand every farmer should learn to make a germination test of his own seed, both that of vegetables and crop seed.

**Germination
tests.**

Germination tests are very easily made by the use of two ordinary dinner plates and two pieces of clean, white cloth, of medium thickness, preferably canton flannel, or two pieces of ordinary blotting paper.

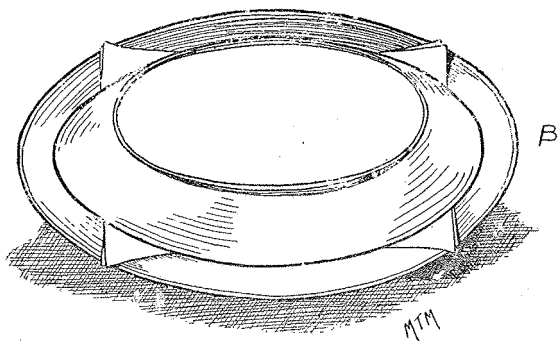
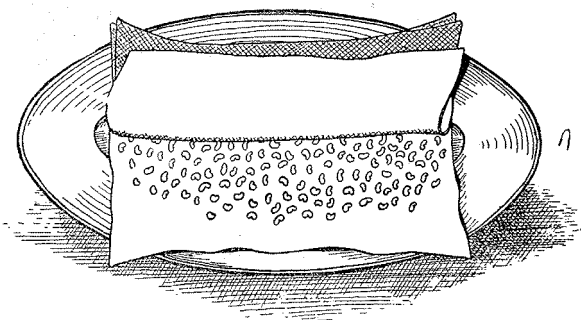


FIG. 1.—HOME-MADE SEED GERMINATOR.

- A. Moistened cloths in place with seeds between them.
- B. Tester complete, with upper plate in position ready to be placed in room of ordinary temperature.

Directions: Dip the cloths in water and then wring them out, place one of them on one of the plates, then count out 100 seeds just as they come and without any selection, drop them on the cloth in such a manner that they do not touch one another. Then place the other moistened cloth or blotter over them and cover the whole with the other inverted plate. Place the tester in the living room or a room at about 70 to 80 degrees temperature. Keep the cloths moist and examine the seed each day and count and remove the seed which has germinated and in this manner the percentage of germination may be ascertained and used as a guide in sowing the seed. Boil the cloths in water a few minutes before using a second time in order to destroy any fungi that may have fallen on them.

The time for germination varies considerably with the kind of seed. The following table gives the time for germination, and the percentage in first class samples, of some of the common seeds.

Kind of Seed	Time for Germination	Percentage of Germination
	Days	Per ct.
Alfalfa	3- 6	95
Clover	3- 6	90-97
Orchard Grass	6-14	90
Red Top	5- 8	90
Timothy	5- 8	96
Corn	About 7	94
Oats	About 7	96
Wheat	About 7	98
Vegetable Seed	7-14	70-95