sufficient size to admit of the testing of a very large number of samples at one time.

METHODS.

The returns of the germinating power of seeds will not be based upon a single test, but every sample will be tested in duplicate, once in the soil and again out of the soil in the most approved form of apparatus devised for this purpose. Small seeds will also be examined for impurities, such as sand, dust, foreign seeds, chaff, &o., and the proportion of these given.

DIRECTIONS FOR SENDING SAMPLES.

The samples sent should be a fair average of the bulk of the seed from which it is taken. The quantities which should be forwarded will vary in proportion of the size of the seed. Of large secds such as corn, peas, wheat, barley, oats, &o, about four ounces will be required, while of the smaller seeds such as grass, clover, turnip, carrot, &c., from half an ounce to an ounce will be sufficient. The larger seeds may be put into small cotton bags each marked with the name of the seed, and these smaller bags enclosed in a larger canvas bag provided with a tag on which the address may be written. The smaller seeds may be folded in stout paper, each parcel marked and the whole enclosed in a strong envelope. Packages and communications should be addressed : "Experimental Farm, Ottawa, Canada." All mail matter will be carried free to and from the Experimental Farm within the limits of the general postal regulations as to the size and weight of packages. All seeds received will be entered in the order in which they arrive and the returns made as promptly as possible.

TREATMENT OF FOREST-TREE SEEDS.

The great importance of encouraging and stimulating tree planting among the farmers, especially in the Northwest Provinces, is beyond dispute. It is felt also that this can only be accomplished on the scale of magnitude required by the planting of suitable forest tree seeds, which can be gathered from the native trees growing in the Provinces or purchased at a small cost. This leads us to add a few words of advice on the general treatment of forest tree seeds.

Many of the tree seeds which mature early are better sown soon after they are gathered. This applies especially to the several v. ricties of elm and to the soft maple. The hard maple, box elder and ash seeds keep well over winter, provided they are stored in a cool place and not allowed to get too dry. Acorns, nuts and stone fruits are most successfully planted in the autumn, but if kept over winter should be mixed with moist sand and exposed to frost and planted as early as possible in the spring, taking care that they are at no time left in masses under conditions so as to heat. Many failures with seed arise from not sowing it in partial shade. If seeds are exposed alternately to hot sunshine and cold, while they are swelling, they will frequently rot before they appear above the surface. The requisite shade may be obtained by the use of brush wood, or a light layer of corn stalks or straw, removing this as soon as the seedlings are up and fairly established. Many nurserymen enclose their seedbeds with wooden frames, on which are laid light frames made of one-inch strips and covered with cotton or muslin. These are convenient and can be provided at small cost. Seedlings of evergreen trees grow slowly and require to be shaded and kept moist during hot weather all through the first year of their growth and some-times longer. Seeds take some time to swell their coats after being placed in the ground, hence, if planted dry, they should be sown as soon as soil can be had to cover them. Germination may be hastened, especially with seeds of a hard texture, by pouring hot water on them and allowing them to soak for twenty-four hours before sowing.

Seeds sometimes fail to grow from being planted too deep. The larger nuts and acorns should be covered with soil about as deep as the seed is thick; other smaller seeds should not be covered with more than half an inch of mellow soil, pressed gently with the back of a spade so as to make the earth firm around them, and when the young seedlings appear they should be carefully weeded. Occasionally seeds will remain in the ground until the following season without germinating. Should any fail to grow by the time spring is over, and on examination the kernels are found sound, the seedbeds should be kept weeded and shaded until the next season.

Feeding Milch Cows and Calves.

In the report of the Munster Agricultural and Dairy School, Cork, details are given of experiments that have been conducted as to feeding milch cows and calves.

The first experiment was commenced on February 28th, the object being to find how the quantity of milk would be altered by varying the proportion of roots and meal given to the cows. The money value of the food was taken as the standard, and 1 lb. meal—bran, Indian meal, and orushed oats mixed—was calculated to cost as much as one stone roots. Besides the roots or meal, hay was given ad *tib*. The ordinary food at the time was 9 lb. meal, 20 lb. hay, and 28 lb. mangolds. Six cows were selected as nearly equal as possible in yield of milk and time from calving.

Two were kept on each ration for two weeks at a time, with the following results :--

			-			
	Cows.	Ordinary foo 1.	12 lb. meul.	6lb_meal, 6st. roots.	12 stone roots,	Urdinary food.
1 2.	Average milk per day, lb. Do. Do.	30.6 34.5	26.7 33.7	30.1 34.8	28.3 33.3	26.6 31.3
	Average lb.	32.5	30.1	33.45	30.8	28.9
		Ordinary food.	12 stone roots.	12 lb. meal.	61b. meal, 6st. roots	Ordinary food
3 4	Average milk per day, lb. Do. Do.	33.7 35.3	30.6 34.8	35.3 36.8	34.7 33.3	34.0 31.9
	Average lb.	34.5	32.7	36.0	34.1	32.5
		Ordinary food.	6lb meal, 6st roots	12 stone roots	12 lb. meal.	Ordinar y food.
5 C.	Average milk per day 16 Do. Do.	34.6 35 1	35.0 34.0	20 5 30.3	29.3 29.5	32.0 33.6
	Average lb.	34.8	34.5	30.4	29.4	32.8

The average dai's milk from the six cows.

Ordinary	12 ib	6 ib meal.	12 st.	Ordinary
food.	Meal	6 st. Roots	Roota	food.
1b	1b	1b 1	1b	1b.
33.9	31.8	33.7	31.3	31.4
		i		

In every case the quantity of milk was reduced with the stone roots, which is remarkable when considered in connection with the analysis of the food.