

## How To Get Nitro Culture

Nitro-culture is put up by the Bacteriological Department of the Manitoba Agricultural College in bottles, each containing enough to inoculate a bushel of seed. These are sent out by mail, and a charge of 25c. is made for each bottle to cover cost of preparation and mailing. Send cash with order, and address: Bacteriological Department, Manitoba Agricultural College, Winnipeg, Manitoba.

### DIRECTIONS FOR INOCULATION

- (1) Do not open the bottle of culture or expose it for any length of time to the light until you are ready to inoculate the seed, and do not inoculate more seed at one time than can be sown in a day.
- (2) The whole contents of the bottle may be used on a small amount of seed without doing any harm.
- (3) To treat the seed, put into a clean dish one pint of sweet skimmed milk and four tablespoons of sugar. Heat the milk to the boiling point, stirring occasionally, and boil it for a minute or two. Let it stand until the milk is cold. If less than a bushel of seed is to be treated, proportionately less milk and sugar may be used.
- (4) When the milk is cold, pour a little into the bottle of culture, replace the cork and shake the bottle vigorously. Pour this portion of the milk from the bottle back into the dish. Repeat this at least six times. The jelly in the bottle will not dissolve, but should be broken up with a clean stick and mixed with the milk. The bacteria are on the surface of the jelly, hence it is not necessary that the latter be dissolved.
- (5) Heap the seed on a clean floor or table, pour the mixture over it and mix thoroughly with the hands or shovel until each seed is wet. It is important that this mixing be done very thoroughly, so that each seed will be inoculated.
- (6) Spread the seed in a thin layer, out of sunlight, handling over at intervals until it is dry enough to sow. This will not usually take over half an hour.
- (7) The seed should be sown immediately after treatment.

### VARIETIES OF NITRO-CULTURE

Each legume requires a strain of bacteria suitable for that legume. Nitro-Culture for the following will be available for distribution:—Alfalfa, Alsike, Red Clover, White Clover, Sweet Clover, Sweet Peas, Beans, Garden Peas, Field Peas.



Alfalfa, Eight Weeks After Seeding, on Agricultural College Farm