

# Treatment of Sweet Clover Seed

By J. T. Ewing

We all know that most sweet clover seeds have a very hard coat so that when a piece of land is seeded to sweet clover we seem never to be rid of it. Experiments conducted by R. O. Bibbey, of the University of Saskatchewan, show to what degree seeds of sweet clover are impervious to ordinary field conditions. On a certain university field he gathered seeds of sweet clover which had been lying dormant in the ground since 1928.

You would think the germs in these seeds would have sprouted and grown or else would have died during this time, wouldn't you? Ten summers of sunshine and rain. Ten winters of freezing and thawing. Yet those seeds shown in the illustration were taken from the field after ten years.

See the healthy looking sprouts of those in the left row? Twenty hours before the picture was made they were "scratched" and placed on moist blotting paper. This let moisture through the waterproof shell and the embryo soon began to grow. The second row went onto the moist paper at the same time, but was not previously "scratched," so these kernels are still apparently dead.

What of the third row? These seeds were "scratched" only three short hours previously, showing how quickly they begin to grow when moisture is admitted.

This simple little experiment shows the importance of scarifying all sweet clover seed. At maturity only about one percent of the seeds have seed coats which will admit



Scratching of sweet clover seed helps sprouting process.

water to the embryo. Threshing cracks approximately forty percent of these, and by the time the seed has gone through the scarifier, at least ninety percent should be ready to grow.

Here is a simple test to prove whether or not your seed will grow: Count out a hundred seeds from your stock and place them in a cup of water over night. Unless ninety of them are two or three times their former size the next morning a good job of scarifying has not been done.