

SUMMARY.

Good seedlings are of first importance in tobacco culture.

In the report the literature on soil sterilisation, seeding and fertilising of tobacco seed beds and the transplanting of seedlings was reviewed. Details and discussion of seed bed and transplanting techniques used were followed by report on four experiments.

Vapam (sodium N-methyl dithiocarbamate) at the rate of 1 quart/100 gals. water/100 sq. ft. of seed bed has given very promising results as a soil sterilant. After applying Vapam to seed boxes lightly filled with soil tobacco seeds can be sown eight days after; the safe period for field seed beds is larger than this but is not definitely known for local conditions. (Experiments A and B).

0.7 gm. seed of 90% germination is sufficient for 10 sq. yds of bed. 30 sq. yds. provide sufficient seedlings to plant 1 acre at 3' x 2' spacing. 5 lbs/10 sq. yds. of a 5 - 15 - 18 fertiliser produces good quality seedlings (For 1 sq. yd. 2 oz. sulphate of ammonia, 3 oz. triple superphosphate, 3 oz. sulphate of potash) (Experiment C).

The best seedlings for transplanting have a rosette growth habit with leaves 4 - 5" long including petiole and should be well hardened off (Experiment D).

Starter solution containing 5 lbs. of a 2:1 mixture of ammonium phosphate and potassium nitrate in 50 gals. of water applied at transplanting show some promise of increasing plant establishment. $\frac{1}{4}$ pt./plant is sufficient. This effect is only slight and only works with seedlings of the above type (Experiment D).

If planting out is done before 9 a.m. or after 3 p.m. a satisfactory stand is obtained. Plants can safely be pulled in the morning for evening planting. (Experiment D)