

Experiment 2. Cold bed, cotton covering, fertilized  $\frac{1}{10}$  pound per square foot, Gold Dust fertilizer, also a light application of hen manure worked into the soil. Sowed swollen seed  $\frac{1}{4}$  oz. per 100 square feet. April 15, thick seeding.

Experiment 3. (a) Cold bed, cotton covering, fine stable manure worked into the soil fertilized at  $\frac{1}{10}$  pound per square foot nitrate of soda sown April 24, sprouted seed.

(b) Same as above; glass covering.

Experiment 4. Cold bed, glass covering, fertilized at  $\frac{1}{4}$  pound per square foot; at  $\frac{1}{12}$  pound per square foot; at  $\frac{1}{16}$  pound per square foot, raked in well on surface of ordinary soil. Sown April 24, sprouted seed.

Experiment 5. Hot bed, cotton covering, a light application of hen manure worked into the soil fertilized at  $\frac{1}{10}$  pound per square foot; Gold Dust fertilizer. Sown April 15, dry seed.

Experiment 6. Hot bed, glass covering, fertilized at  $\frac{1}{4}$  pound per square foot; at  $\frac{1}{12}$  pound per square foot; at  $\frac{1}{16}$  pound per square foot on surface of ordinary soil. Sown April 24, sprouted seed.

#### Notes on Beds.

The earliest and strongest plants were obtained from beds under experiment 1. As in the case of Warne variety beds, the dark soil with the glass covering gave excellent results. The hot beds under cotton gave plants about 2 weeks earlier than those grown in the cold bed. The latter beds did not do well, the soil not containing enough humus to bring the plants along quickly at the start. Where the sprouted seed was sown April 24 the plants made good progress, this being one of the best beds. The heavier application of fertilizer at  $\frac{1}{4}$  pound per square foot gave larger healthier plants than where the lighter application was given where the nitrate of soda was applied under glass the seedlings did well, but under the cotton the growth was uneven, due partially to the shaded position of the beds. The sprouted seed sown under cotton made more rapid progress than where dry seed was sown. It was an advantage to sow swollen seed under cotton as it germinated quicker allowing the plants to get a start before the weeds came along. It was found that nitrate of soda at say  $\frac{1}{4}$  pound to 2 to 3 gallons of water, using the solution every other day, gave the best results as in former years. A stronger solution might be used, if one takes the precaution to water again after applying the solution, in order to wash off the excess of soda and prevent any burning of the leaf. Where the farmer has plenty of hen manure it is just as effective and not so complicated in its use.

#### Conclusions from Work in Bed Establishments.

- (1) Prepare the beds in the fall, plough and manure well.
- (2) To obtain early plants cover a portion of your bed area with glass sash or make a small hot bed.
- (3) Obtain rich light loamy soil and apply about  $\frac{1}{2}$  inch of dark bush soil or rich black loam to the surface of the ordinary soil.