

1. Hot bed with cotton covering.
2. Cold bed with cotton covering.
3. Hot bed with glass covering.
4. Cold bed with glass covering.
5. Hot bed with different proportions of special plant bed fertilizer, applied to the ordinary soil.
6. Cold bed with the same treatment given.
7. Cold bed with nitrate of soda applied to the ordinary soil.
8. Cold bed with glass covering with a thin layer of black soil applied to the ordinary soil.

Bright Tobacco Beds—Warne Variety.

The Warne beds under glass were sown April 10 with seed which had been swollen for three days. A plant bed fertilizer—Gold Dust—applied at $\frac{1}{10}$ pound per square foot was raked in well and a thin layer of black virgin soil (about $\frac{1}{2}$ "-1") was spread over the ordinary soil. On one or two beds the seed was sown on the ordinary soil, but the plants came up very uneven and never were as good as where the virgin soil was applied. The dark coloured, friable soil, seemed to suit the requirements of this variety, the seed came up very evenly and the seedlings made rapid growth from the start, being ready for setting May 18.

The seed was sown at the rate of a heaping teaspoonful per 70 square feet. The beds were about the right density, the plants were strong and had a rich green cast. In the light of three years experience with different methods of establishing plant beds for this variety, it would appear that the one above outlined is preferable.

Owing to the intense heat developed under the glass sash particularly where the dark soil was used, it was found advantageous to give a very thin coat of lime on the under side of the glass. By so doing the temperature was sufficiently high and the soil was kept moist more easily.

The Management of Cold Beds under Glass.

On account of the volume of air in the cold bed with glass covering being limited great care is necessary not to allow the temperature to run too high. The other precaution not to have too much cold air on the tender plants to chill them is necessary. Give as much ventilation as possible in order to develop thrifty, stocky plants. A close muggy atmosphere produces leggy plants and invites disease.

Watering should be done in the forepart of the afternoon in order to let the surface of the soil and the plants have a chance to dry off before closing the frames. If very warm sunshiny weather prevails, it will be necessary to water the beds twice each day to keep the soil moist. During last spring's management of the beds, this practice was found almost compulsory if the beds were to be kept moist. The soil should be kept damp throughout but never wet.

Methods of Establishing Burley Beds.

Experiment 1. Cold bed, glass covering, fertilized at $\frac{1}{10}$ pound per square foot. Gold Dust fertilizer, $\frac{1}{2}$ " black soil on ordinary soil sown dry seed April 15.