

the length is concerned, but it is not advisable that the width be more than five feet, corresponding to the length of the sashes. The frame should be placed in a sloping position, in a north to south direction, at an inclination of one inch to the foot.

Sashes.—The glazed sashes should be solid and easy to handle, so that one man can, without help, adjust them without pulling them out of shape. The best size is five feet by three feet. A larger size than this is always liable to get warped when being handled, and then there is always the danger of breaking the panes and loosening the joints.

Canvas Covers.—It is advisable to have good, thick canvas sheets available, which should be thick enough to protect the seed beds against frost at night. During the day lighter sheets can be used for sheltering the young plants from the sun.

Semi-hot Beds.—A semi-hot bed can be made in the following manner: A trench about $5\frac{1}{2}$ feet wide, 8 inches deep and as long as required, is dug in a sheltered, high, and easily drained spot, having a southern exposure.

This trench is filled with tobacco or corn stalks laid perpendicular to the length and as evenly as possible, well packed down. On this bed of packed stalks a hot bed frame is placed. A thin layer of straw is put down, on which is spread the soil for the seed bed, which has been prepared in advance, to a depth of from four to six inches. The remainder of the trench around the frame is filled in with barnyard manure, heaped up and covered by a platform made of planks.

As soon as the frame is placed on the site of the seed bed, the glazed sashes are put on, so that the stalks forming the foundation may commence to heat before the bed of compost is laid. The mould for the seed bed is left to heat in its turn, this taking place during the time allowed for the spreading of the chemical fertilizer, after which the bed is ready to be sown.

Sowing.—On a seed bed similar to the above, dry seed can be sown in the province of Quebec from the 10th to the 20th of April, according to the locality.

The surface of the seed bed must be carefully levelled and the soil made as fine as possible. Immediately after sowing the surface of the seed bed should be pucked lightly with a smooth board, and watered very lightly with a watering can with very fine holes, in order not to displace the seeds.

During the first few days after sowing, it is useless to allow light to enter the bed. Care should be taken to maintain a temperature of about 80 degrees Fahrenheit in the bed, as this is the temperature most favourable to germination.

Tobacco seed is very fine and consequently difficult to spread. In order to facilitate this even spreading, it should be mixed with some coarse material, such as fine sand, in the proportion of one part of seed to 200 or 300 parts of sand.

Ventilation-Watering.—When two leaves of the plant appear above ground, a little more light may be allowed, in order to avoid the danger of the plants growing spindly. Moderate watering should be continued, and advantage should be taken of all sunny days to raise the sashes at the upper end, so as to renew the air in the beds. Care should always be taken that the temperature is not raised too much, for the young plants can easily be scorched by too much sun. Light canvas sheets may be placed over the sashes during the warmer part of the day in order to avoid this.

As the plants develop, the watering can be increased as well as the temperature of the beds. After the plant has grown six leaves there is little danger of scorching, even if the temperature rises to 90 degrees Fahrenheit, provided the bed is well ventilated. In a close atmosphere a temperature of 80 degrees may be sufficient to kill the plants.

Density of the Beds.—By the term density is meant the number of plants per square foot of seed bed. This should not be too great if the plants are not to be crowded. Good results will be obtained by sowing one-seventh of an ounce of seed to each 100 square feet of seed bed.