

The results of a comparative experiment at Ottawa in 1914 on semi-hot beds and greenhouses were rather in favour of the semi-hot beds. There was a large amount of cooling off in the greenhouse during the night, the evaporation was more active during the day, it was necessary to water more frequently; in short, the semi-hot beds were at least ten days earlier than the greenhouse. It should be said, however, that the greenhouse in which we were operating was of an obsolete type. However, the conclusion from this experiment, under such conditions, is that the semi-hot beds, well protected by good glazed sashes, is the best and most economical method of raising tobacco seedlings, in good time for transplanting, and these seedlings are rooty, healthy and strong.

It may be said, however, that a greenhouse which is to be used exclusively for the production of tobacco seedlings does not require so elaborate a construction as the ordinary greenhouse. A type of greenhouse used by the Walkerville Company is shown in one of the illustrations of this bulletin (see plate IX). This is a wooden structure, rather rough, covered with movable sashes which may be taken off when they are no longer necessary. Often, such houses are heated by means of ordinary stoves. There is a permanent system of water pipes for watering. The mould is treated by steam and the seed is sown on a cold frame bed. These, however, are expenses which are beyond the means of the average grower.

It should also be stated that the greenhouse may be utilized for storing seed plants when some difficulty is experienced in ripening these plants (late season, cold fall, with danger of early frosts). The best method is to dig out the seed plants with a spade, leaving as much earth adhering to the roots as possible and store them in the greenhouse until the pods are ripe.

However, the same advantage may be secured by building, on some part of the farm, a greenhouse frame, and in the fall, when the time has come to put the seed plants under shelter, this frame is covered with the glazed sashes, which were used over the seed beds in the spring.

The real superiority of the greenhouse over the semi-hot bed is the saving of time effected by not having to remove the sashes for airing or watering. Again, there is not so much danger from sunstroke in a greenhouse if sufficient care is given to aeration, while sunstrokes are always likely to occur with the use of glazed sashes, especially when the sun comes out suddenly after a period of cloudy weather.