

tion percentage of about ninety; so with cleaned seed a smaller bulk of seed is handled at the time of sowing and, as a rule, a uniform stand is more easily obtained.

After the seed has been cleaned it should be stored in a dry place, in a container into which the air can penetrate. Stored under such conditions it may be kept satisfactorily for about ten years.

TOPPING AND SUCKERING.

The natural tendency of every plant is to reproduce itself. In the tobacco plant this is demonstrated by its effort to flower out, and, after being topped, to send out suckers from the axil or junction of the leaf with the stalk, which will also flower out and form seed if the growing season is long enough.

Topping.—Usually, in seasons of normal growth, the plant will begin to show signs of flowering out about 8 to 9 weeks after transplanting. It must then be topped or the quality of the leaves will be impaired; leaving the bud until it has fully developed and begins to flower out is an unnecessary waste of plant food and also retards maturity. In topping, the grower must exercise careful judgment, taking into consideration the capabilities of the individual plant, the fertility of the soil, and the character of the season. His aim should be to leave only as many leaves as the plant can bring to their fullest development, and as far as possible to insure all plants maturing at the same time. In order to get the whole field to ripen uniformly it is usually necessary to go over the field twice, at different dates, in performing this operation. This is necessitated by replants and undersized plants which should be topped later and about two leaves lower than the earlier, more vigorous plants. Topping too low results in an unnecessary loss in yield and has a tendency to make the tobacco rough and coarse; while topping too high does not increase the yield, and gives a smaller, lighter-bodied leaf which will most likely be slow to mature. High topping may sometimes be resorted to, with beneficial results, on land which is too fertile and which produces a coarse, heavy-bodied leaf. As a rule, tobacco should be topped low in dry seasons, on poor land, and in districts with a short growing season. On fertile soils and in wet seasons it is best to top higher. Usually, on poor land, from eight to ten leaves, exclusive of three or four undeveloped leaves at the bottom, should be left; and on fertile soil from twelve to fourteen leaves.

Care should be exercised in topping not to damage the top leaves of the plant; when injured at this time they seldom develop satisfactorily.

Suckering.—Soon after topping, the plant will begin to send out suckers. These should be broken off as soon as they attain a length of about four inches. To leave them longer results in a waste of plant food which should go to the development of the plant, and if left too long they get woody, are harder to break out, and may cause more leaves to be broken from the plant during harvesting operations by weakening the attachment of the leaf to the stalk. Sometimes, when the plant has begun to ripen and a rainy season sets in, they may be left for a while longer with beneficial results, as they aid in preventing the plant starting a second growth.

HARVESTING.

Maturity.—Usually, about ninety-five to one hundred days after transplanting or about thirty or forty days after topping, the tobacco is ready for harvesting. When ripe the leaves generally become a greenish-yellow colour or become flecked with yellow spots; they are said to grain up, changing from the smooth, velvety feel of a green plant to a rougher, pebbly character, and on being folded between the thumb and forefinger break along a clear cut line with a distinct crackling sound. The plant ripens from the bottom leaves upward; and, as the top leaves are practically always greener than