

## SOIL REHABILITATION: PRE-ROOTING OF GUATEMALA GRASS CUTTINGS

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In order to qualify for the second subsidy under the Tea Replanting Subsidy Scheme, it is obligatory (except in special cases) to recondition the soil by the planting of Guatemala grass or other similar grass for a minimum period of one year and preferably for two years.

The period allowed for rehabilitation varies from estate to estate, but the shorter period of one year is generally considered adequate to build up organic matter, and the benefit accruing from the greater amount of mulch provided over the longer periods is possibly offset by the loss of six months to one years crop from the old tea and the retarding by a similar period of future crops from the new tea, and the cost of additional manure required for the Guatemala grass.

In order to obtain an increase in the amount of loppings from Guatemala during the one year period, small-scale experiments with pre-rooted cuttings were carried out.

Cuttings were taken one month to six weeks before the anticipated time of putting them out in the levelled land, and were stacked closely in damp drains. These cuttings were later put out into the clearings with a well-formed root system. A test weighing of loppings (above a height of about 14 inches) was carried out 3½ months after planting and compared with loppings from unrooted cuttings of the same age. The loppings from the pre-rooted cuttings weighed 3½ times as much as those from the unrooted cuttings. The weight of the root system has not been checked, but at this early stage was seen to be more prolific with the pre-rooted plants.

The additional cost of putting out rooted as opposed to unrooted cuttings is negligible, provided the site selected for the rooting operation is within reasonable distance of the proposed clearing. The area of moist drains required for the supply of one acre of cuttings in the clearing would be the equivalent of about 80 feet of drain 2 feet wide and 1½ feet deep.

The cuttings can be put out in a hole made by an alavangoe or stick (this has to be slightly wider than for unrooted cuttings) or else into a furrow made by a mammoty, if really close planting is preferred.

If an 18-month rehabilitation period is decided upon for an estate in the Uva District having a dry S.W. Monsoon period, pre-rooted cuttings put out in the field in May will be found to carry through the dry weather with very little re-supplying required after the first N.E. Monsoon rains. Casualties among unrooted cuttings have been found to be as high as 25% in the same areas after the drought.

The pre-rooting of cuttings may not be of much additional benefit if the conditioning period is to be as long as two years, but less re-supplying will be found necessary if dry weather develops shortly after the planting period.

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