TRI - ADVISORY CIRCULARS

HP

HARVESTING & PRUNING

T.R.I. ADVISORY CIRCULAR No.HP 1

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PRUNING OF TEA

(This replaces the existing Circular No. P 1 Serial No. 5/92.)

1. Objectives

The objectives of pruning tea are to:

- maintain a convenient height of the plucking table for easy harvesting,
- stimulate vegetative shoot growth for sustaining productivity,
- remove old, decayed, pest-infested and diseased branches for maintaining a healthy frame, and
- effectively utilize the land area.

2. Categorization of fields

In order to embark on a balanced and successful pruning programme, it is necessary to categorize tea fields according to their potential yield. This will reduce the risk of crop losses and annual crop fluctuations.

3. Methods of pruning

Pruning should be done with a sharp knife and the cut preferably, be made slanted towards the centre of the bush. There are four major styles of pruning, as outlined below. Although rim lung pruning is the most suitable method, other styles also can be adopted under special circumstances as given below.

3.1 Clean Pruning

This is a hard pruning system by which all the branches are cut low at a height of 25-40 cm (10-16"). Clean pruning usually results in late or poor recovery due to the absence of foliage and adequate starch reserves to support bud break and subsequent growth of shoots.

However, clean pruning may be adopted at high elevations, provided the soil and weather conditions are conducive for growth and adequate starch reserves are available in the tea bush for better recovery after pruning.

3.2 Rim lung pruning

In rim lung pruning, about 3 to 4 healthy branches are left at the periphery of the bush at the time of pruning. These lung branches should have in all about 200 to 300 leaves per bush to enable early recovery. The recommended height of pruning is 40-55 cm (16-22").

3.3 Cut-across

In cut-across prune, the top of the bush is cut level at a height of about 55-70 cm (22-28"). In this type of pruning, no cleaning up of old debilitated branches is possible and hence it can lead to poor frame development.

With cut-across pruning, it is possible to obtain an early crop. Thereafter, the bushes will remain dormant for prolonged periods. Old, debilitated or marginal tea fields that are ear-marked for uprooting or diversification can be given a cut-across pruning.

3.4 Skiffing

Skiffing is a slashing or leveling operation which smoothens the plucking surface and reduces its height by a few centimetres. It can be used to delay a rush crop or to extend the pruning cycle, if the need arises.

3.5 Rejuvenation Pruning

Rejuvenation pruning is a type of hard pruning carried out when the foundation frame of bushes reaches an unproductive stage. The height of pruning can vary depending on the status of the frame. Please refer to the 'Advisory Circular' No. P2 issued in September 1992 for details.

4. Length of pruning cycle

The lengths of pruning cycle recommended for different tea growing regions are:

	Seedling	Clonal
Low country	2 years	3 years
Mid-country and Uva	3 - 4 years	4 - 5 years
Up-country	4 years	5 years

5. Time of pruning

In most tea growing regions, pruning could be done from April to June, after a few showers from the south-west monsoon and when there is adequate soil moisture. For some reason, if pruning cannot be done or completed during this season, those fields could be pruned during the north-east monsoon, i.e. from September to October. However, high yielding fields should be pruned during the south-west monsoon. In the Uva, and some areas in the low country (Balangoda, Rakwana, etc.), and in the mid-country (Matale, Upper Hewaheta and Udapussellawa regions), high-yielding tea fields should be pruned during September or October, with the onset of the north-east monsoon, which is an assured season of rain in this area. The remaining fields ear-marked for pruning in the same region could be pruned during the south-west monsoon. Pruning of a field should be completed within the shortest period of time (within about 7 days). This is to facilitate uniform recovery and to complete post pruning practices in time.

Tea fields should not be pruned immediately after harvesting the rush crop. These fields should be rested at least for about 6 weeks. The period could be extended in the case of pruning of debilitated bushes. This is extremely necessary for building up of carbohydrate reserves for early and better recovery after pruning. In order to identify fields to be rested before pruning, a simple iodine test on roots can be done about 2-3 months before pruning.

6. Dry weather pruning

Pruning into dry weather is not recommended, because it may cause sun scorch of branches leading to wood rot and frame debilitation. Scorching also reduces the number of new shoots. Dry weather pruning as a measure of controlling blister blight is also not recommended.

7. Bush sanitation

This involves the removal of weak, diseased, dead or pest-infested branches to renovate the bush frame. Bush renovation should be phased out over 2 or 3 pruning cycles. The individual branches with extensive die-back, wood rot, canker and termite damage could be pruned low while maintaining a uniform height of prune. It is preferable to apply a wound dressing such as "Baycor 3PA", "Candarsan", etc., on the prune cuts. Pruned branches can be protected from sun scorch by placing some of the prunings over the bush for about 3 days immediately after pruning.

8. Mossing and Ferning

Moss and fern on the frames should be cleaned manually or chemically using lime, soon after pruning and well before bud-break. Hydrated lime can be sprayed on the frames at the rate of 125 kg dissolved in 1250 l of water per ha.

9. Burying of prunings

In order to enhance soil fertility, pruned branches should be retained in the field as mulch or buried in shallow trenches in the alternate inter-rows of flat or undulating tea lands.

10. Removal of lung branches

The lungs should be removed selectively depending on the stage of recovery of individual bushes. This should to be started when the majority of new shoots have produced 3-4 fully opened leaves. Too early or too late removal of lungs should be avoided.

11. Tipping height

Shoots should be tipped leaving 4 to 6 leaves above the prune cut, depending on the pruning height. Early tipping or plucking-in should be avoided, because it will retard thickening of branches which leads to poor frame development.

12. Fertiliser and dolomitic limestone application

Suspend application of fertilisers 2-3 months prior to pruning. Resume application of fertilisers 2-3 months after pruning. This could be done at the time of tipping. Early application of fertiliser before tipping can cause leaf-scorch. Dolomitic limestone should be applied based on soil pH, preferably a few weeks before pruning.

13. Envelope forking

Envelope forking is beneficial for soil aeration and root growth. It could be done at the time of tipping, once in a cycle at high and mid-elevations, and once in two cycles at low elevations.

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