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### **PRUNING OF TEA**

*(This replaces the Circular No. HP 1 Serial No. 3/01)*

#### **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,
- effectively utilize the land area, and ensure economic viability of plantations.

#### **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. Categorization of fields should be updated periodically, taking into consideration the new clearings under capital, coming into bearing under revenue. Please refer Advisory Circular No. LU2 on Field categorization in tea lands for details.

#### **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 viz. clean, rim lung cut-across and rejuvenation pruning. 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 inadequate 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 pruning

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 period. Old, debilitated or marginal tea fields that are ear-marked for uprooting or diversification can be given a cut-across pruning.

### 3.4 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. HP4 on rejuvenation pruning for details.

### 3.5 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.

## 4. Length of pruning cycle

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

Region	Seedling	VP
Low country	2 years	3 years
Mid-country (wet zone)	3 - 4 years	4 - 5 years
Mid-country (Intermediate zone) or Uva	3 - 4 years	4 - 5 years
Up country	3- 4 years	4- 5 years

## 5. Time of pruning

Pruning in the Up country, Mid-country (wet zone) and Low country regions could be done during 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 September to October. However, high yielding fields should be pruned during the south-west monsoon. Some areas in the low country (*Balangoda, Rakwana,*



etc.), and in the mid-country (*Matale, Upper Hewaheta, Udapussellawa regions etc.*), high-yielding tea fields should be pruned during September to October with the onset of rains.

In the *Uva* regions, high-yielding tea fields should be pruned during October to January which is an assured season of rain in this area. The remaining fields earmarked for pruning in the same region could be pruned during March to April. 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 and following a prolonged drought. 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 on 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 and shaving off weak, diseased, dead or pest-infested stems and branches to renovate the bush frame. Bush renovation should be undertaken from the 1<sup>st</sup> pruning onwards. 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 recommended wound dressing on the prune cuts and shaved off wounds. 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 the commencement of 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. Lopped branches of shade trees cut into pieces may also be incorporated.

### **10. Removal of lung branches**

The lungs should be removed selectively depending on the stage of recovery of individual bushes. This should be started when the majority of new shoots have produced 3-4 fully opened leaves. Removal of lungs too early or too late 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. Fertilizer and dolomitic limestone application**

Suspend application of fertilizers 2-3 months prior to pruning. Resume application of fertilizers 2-3 months after pruning. This could be done at the time of tipping. Early application of fertilizer before tipping can cause leaf-scorch. Dolomitic limestone should be applied based on soil pH, preferably a few weeks before pruning. Please refer Advisory Circular No. SP3 on Fertilizer recommendations for mature tea for details.

### **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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