

## MULTICROPPING OF RUBBER WITH TEA

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In agroclimatic regions where conditions are conducive for the cultivation of tea and rubber, the establishment of these two crops as tea and rubber multicropping programme can be practised.

The main objectives of this multicropping concept is to:

- a. Utilize the inter row space in rubber plantations to grow crops that would give an income during the unproductive period for 5 to 6 years and also during the productive period, on wet days when harvesting of rubber (tapping) is not possible. This would increase productivity per unit area of land thereby increasing the productivity of individual estates units with a view to making such units profitable and economically viable.
- b. To generate more employment which would enable estates to utilize the available labour resources more efficiently and profitably.

### Suitable areas

Rubber and tea multicropping system is now recommended for adoption in areas up to an elevation of 300 metre (1000 ft.) from sea level.

Kalutara	-	Horana, Agalawatta, Bulathsinhala.
Ratnapura	-	Kalawana, Pelmadulla, Kuruwita, Ayagama.
Kegalle	-	Avissawella, Dehiowita, Yatiyantota, Kegalle, Bulath -kohupitiya, Ruwanwella, Karandupona.
Colombo	-	Waga, Labugama, Kalatuwawa.
Galle/Matara	-	Pitigala, Elpitiya, Pelwatta, Udugama, Nakiyadeniya, Akuressa.

The selected land should be suitable for the cultivation of tea. TRI should be consulted for this purpose.

## Recommended Clones

- Rubber : RRIC 100 and RRIC 102 for all areas irrespective of rainfall.  
RRIC 121 for areas with an annual rainfall of less than 3750mm (150 inches).
- Tea : TRI 2025, TRI 2026, TRI 2027 and S 106.

## Multicropping Procedure

### 1. Stand and spacing of crops

Rubber should be planted at wider spacing of 40' x 8' which would accommodate 340 plants/ha (140 plants/ac) (Figure 1). It is expected that at least a stand of 300 plants/ha would be available at the age of 5 years. Seven rows of tea with a spacing of 4' x 2' is recommended in between two rows of rubber and the first tea row should be 8' away from the rubber row (Figure 1). This system would provide 9635 tea plants/ha (3900 plants/ac).

### 2. Soil conservation and land preparation

Construction of leader drains, contour drains and terraces should be carried out according to the topography of the land.

In addition, establishment of recommended leguminous cover crops (*i.e.* *Pueraria/Desmodium*) in between tea and rubber row should also be practiced.

#### Soil Rehabilitation

At the time of planting rubber, the interrows where tea is to be established may be planted with a soil reconditioning grass if soil rehabilitation is to be done. Tea may be planted after a period of one or two years of soil rehabilitation. TRI should be consulted on this.

#### Planting grasses

Mana or Guatamala grass could be used. Mana should be planted 4 – 6 inches within the row and 2 – 3 ft. between rows while Guatamala grass should be planted 9 – 12 inches within the row and 2 – 4 ft. between rows.

### **Fertilizer application**

Dolomite should be applied before planting of grasses and the fertilizer mixture U 625 should be applied after planting according the recommendation of the TRI.

### **Lopping of grasses**

Grass should be lopped periodically and the lopping should be added to the soil to improve soil fertility.

### **Establishment of shade**

Shade trees should be established at the time of planting grass. For this purpose, *Gliricidia* should be planted along the intended tea rows at a spacing of 8ft.x 8ft (Figure 1).

## **3. Planting Rubber**

Spacing 40ft x 8ft : 40ft between rows and 8ft within the rows.

Size of planting hole – 2ft x 2ft x 2 1/2ft.

### **Tea:**

Spacing 4ft x 2ft : 4ft between rows and 2ft in the rows.

Size of planting hole : 18 inches deep, 12 inches diameter at the brim and 9 inches diameter at the bottom.

Planting should be done with the onset of the south west monsoon rains (May/June).

## **4. Fertilizer application**

**Rubber:** As recommended for rubber (Agricultural Policy 5) RRISL.

**Tea:** As recommended by TRI. (Refer the advisory circular of Advisory and Extension Services Department of TRI).

## **5. Weed Control**

**Rubber:** Normal estate practice

**Tea :** Only hand weeding should be adopted. Weed growth can also be suppressed by heavy thatching

## **6. Bringing in to bearing : Normal estate practice**

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R - Rubber x - Tea \* - Gliricidia

Fig. 1