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TRI/RII GUIDELINES ON TEA AND RUBBER INTERCROPPING

Intercropping of rubber and tea is considered feasible for agro-climatic regions where conditions are conducive for the cultivation of both these crops. The main objective is to enhance land use efficiency.

1. INTERCROPPING PROCEDURE

Rubber is planted at a spacing of 12 m x 2.4 m (40 ft x 8 ft). Tea is interplanted in 7 rows at a spacing of 1.2 m x 0.6 m (4 ft x 2 ft), the first row of tea being 2.4 m (8 ft) away from the rubber (Fig. 1). Accordingly, it is possible to accommodate approximately 75% stand of rubber and 75% stand of tea. In order to avoid excessive shade on tea, it is suggested that rubber be planted in the East-West direction on flat and undulating lands with gradients not exceeding 1 in 15.

A triangular arrangement could also be tried out by planting rubber in 2 rows, where the spacing between the rubber plants is 2.4 m (8 ft). The spacing between 2 bands of rubber is 18 m (60ft). It is possible to accommodate 12 rows of tea in between two bands of rubber as shown in Fig. 2. For the present, this method of planting is suggested for the estate sector.

To minimize the effect of shade on tea at later stages, 25% of the rubber foliage may be reduced uniformly. This should be done during August/September. The branches should be cut flush with the main stem.

Lands selected should be suitable for both tea and rubber and soil rehabilitation to be undertaken in all lands except in lands where soil conditions are exceptionally good with a soil depth of 100 cm (3ft) or more and soil organic carbon content of over 2-3 %. It is preferable to plant both tea and rubber together.

2. PLANTING OF RUBBER

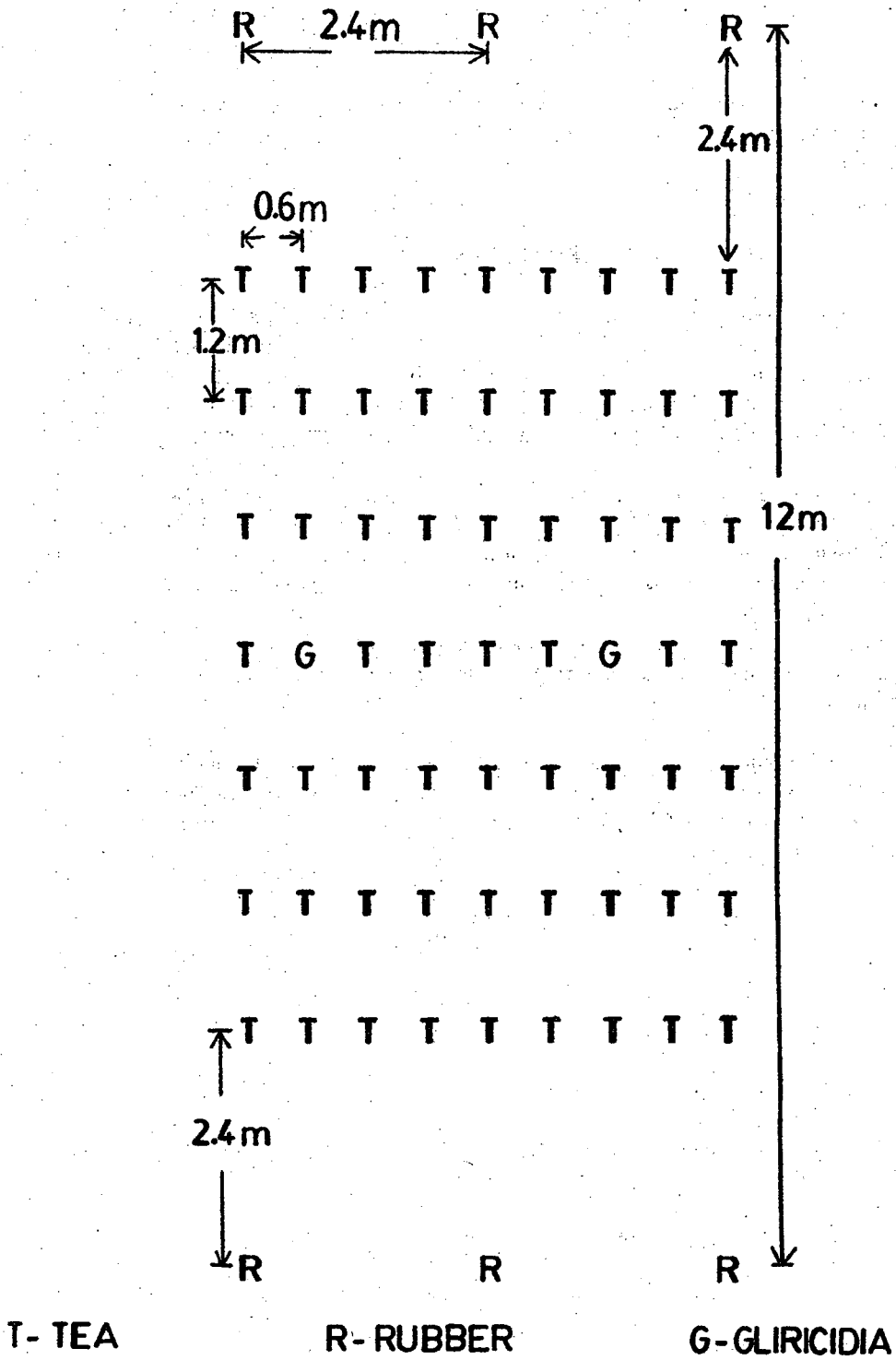
2.1. Clones :

RRIC 100 for low elevations (less than 300 m or 1000 ft).

RRIC 121 for areas with annual rainfall of less than 3750 mm (150 inches) and elevation less than 300 m (1000 ft).

RRIC 102 for all areas irrespective of elevation and rainfall.

TEA AND RUBBER INTERCROPPING SPATIAL ARRANGEMENT



Tea stand - 75% (100% = 12500 plants/ha)
 Rubber stand - 75% (100% = 500 plants/ha)

Figure - 1

2.2. Spacing :

(a) 12 m x 2.4 m (40 ft x 8 ft)

12 m (40 ft) between rows and 2.4 m (8 ft) in the row.

(b) 18 m x 2.4 m x 2.4 m (60 ft x 8 ft x 8 ft) - to be tried on a limited scale.

18 m (60 ft) between two rows planted in a triangular arrangement of 2.4 m x 2.4 m (8 ft x 8 ft) - Refer Fig. 2.

2.3. Soil conservation and land preparation :

As per recommended practices.

2.4. Planting holes :

0.6 m x 0.6 m x 0.75 m (2 ft x 2 ft x 2 1/2 ft).

2.5. Cover crops :

Establish a mixed stand of *Pueraria phaseoloides* and *Desmodium ovalifolium*. Ensure that the cover crops are kept within the rubber area.

2.6. Fertilizer application :

As recommended in the RRI Advisory Circular No. 1992/01.

2.7. Bringing into bearing :

As per recommended practices.

3. PLANTING TEA

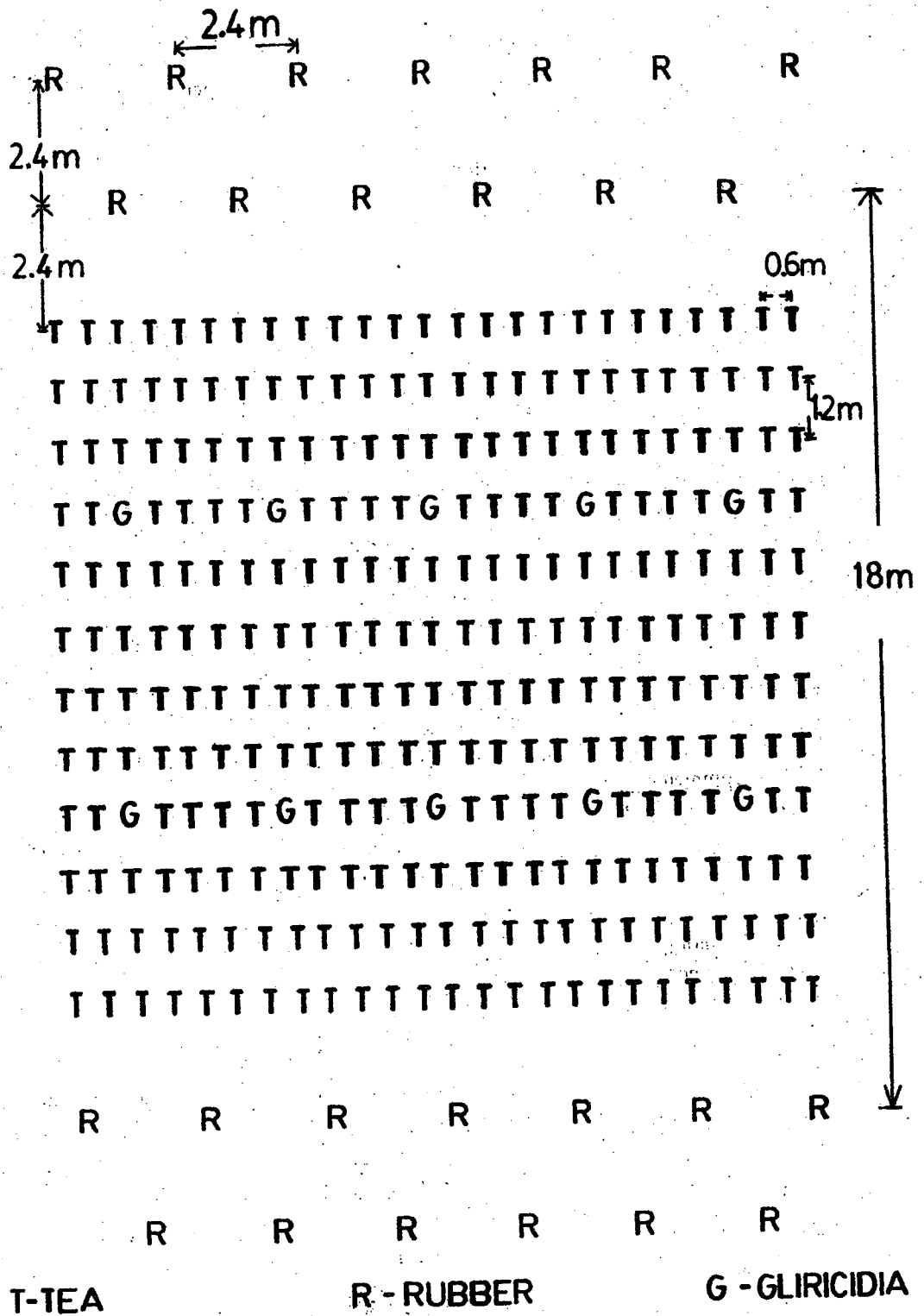
3.1. Soil conservation and land preparation :

As per recommended practices.

3.2. Soil rehabilitation :

Except in areas with very good soil conditions, in all other lands soil should be rehabilitated with Mana/Gautemala grass for a period of 18-24 months.

TEA AND RUBBER INTERCROPPING SPATIAL ARRANGEMENT



Tea stand - 75% (100% = 12500 plants/ha)
 Rubber stand - 80% (100% = 500 plants/ha)

Figure - 2

3.3. Establishment of shade :

Medium shade, *Gliricidia* should be established, at the time of planting tea at a spacing of 6 m x 3.6 m (20 ft x 12 ft). Shade may be thinned out or completely removed at or before tapping rubber.

3.4. Planting tea :

3.4.1. Clones: TRI 2025, TRI 2026, TRI 2027 and S 106

3.4.2. Spacing: for 2000 series clones, 1.2 m x 0.6 m (4 ft x 2 ft) - 12,500 plants/ha.

or

for clones with erect growth habit such as S. 106, 1.1 m x 0.6 m (3 1/2 ft x 2 ft) 15,000 plants/ha.

3.4.3. Holing: Planting holes should be 45 cm (18 inches) deep with a top diameter of 30 cm (12 inches) and a bottom diameter of 2.5 cm (9 inches).

3.4.4. Planting: Planting should be done with the onset of South - West monsoon rains (May/June)

3.5. After-care operations :

3.5.1. Thatching: Thatching to be done soon after planting tea and subsequent thatching done before the tail end of the monsoon. Care should be taken to keep the thatch material away from the collar of plant.

3.5.2. Weed management: Manual weeding and chemical weeding with oxyfluorfen is recommended.

3.5.3. Fertilizer application: Fertilizer application should be done according to the recommendation given in the TRI Advisory Circulars F 9 and F 10.

3.5.4. Bringing into bearing: As per recommended practices.

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