

CONSOLIDATION OF OLD TEA

S. Sundaralingam

*(Officer-in-Charge, TRI Advisory and Extension Centre,
Pelaghatenne, Passara)*

Infilling of tea fields becomes necessary when old seed tea plants die due to unfavourable weather conditions, diseases, drastic cultural practices, poor soil conditions, etc, resulting in vacancies either in large patches or of single bushes. In this process the original stand of tea gets reduced resulting in uneconomic levels of productivity which is a cause of concern for every one connected with the trade. In a situation like this in high yielding and promising fields the strategy should be to infill the vacancies with suitable clones and maintain the original stand per hectare of tea. These would be the fields that are not earmarked for replanting or diversifying due to poor soil conditions, steepness or rocky nature.

A field selected for infilling should be surveyed and the number of vacancies that already exist as well as those that would arise due to uprooting of weak and sterile bushes should be taken into account. The number of plants and hence of cuttings that are to be put out in the nursery should take this aspect into consideration. Accordingly the number of cuttings required should be assessed and mother bushes of clones like TRI 2025, DN, CY 9, DG 7, DG 39, should be pruned by January/February to obtain cuttings by June/July to produce plants that are 15-16 months of age in the nursery. The nursery work should be completed by June/July to allow the plants sufficient growth and be ready for field planting by October of the following year. Infilling should be completed by November. Precautions should be taken not to infill China jat tea areas, where there are slab rocks and those areas which are steep and waterlogged.

Field Preparation

In general, pruning is done in August/September in the Uva. An attempt must be made to complete infilling by November. If for some reason or another infilling cannot be done before November, this should be done in the following main planting season, i.e. within one year from the month of prune.

In fields recovering after pruning, a close inspection should be made and all dead bushes, old stumps and bushes that are weak and about to die during the course of the ensuing cycle (passengers) should be identified and uprooted. The vacant patches should be forked well and roots of pencil thickness removed and levelled as in the case of fields uprooted for replanting. As far as possible the vacant patches should be blocked out in blocks according to field conditions. If there had been diseases, such patches should be fumigated as recommended. All vacant patches cleaned and levelled should be planted with a grass. The grass should be regularly lopped and thatched in the same area to improve soil conditions and avoid any soil erosion. The grass could be uprooted in the last year of the pruning cycle before the monsoon rains in October. Large planting holes 12" in diameter and 2 ft deep should be cut at a spacing of 4' x 2' and the planting holes partially filled with the soil about 3 weeks prior to planting and allowed to settle. Infilling should commence with the onset of the monsoon rains and should be completed by November. Some compost, well rotted tea fluff or cattle manure could be added to the planting hole. It is preferable to have protective baskets for the plants and the branches of the surrounding tea should be trimmed to admit more light. The area should be thatched heavily as the rains tail off to conserve soil moisture, suppress weed growth and prevent soil erosion.

After care of the infills is very essential and they should be protected against pests and diseases. If there is a severe drought an attempt should be made to water these plants to tide over the drought period. These

plants should be manured with T 200 fertilizer mixture at recommended doses in wet weather.

Bringing into bearing operations should be carried out at the correct times. The well trained nursery plants which are 15 to 16 months of age at time of infilling should be allowed to grow freely for about one year and then a cut across should be given at a convenient height to encourage growth of side branches. The height will depend on the original size of the plant. A second cut across could be given raising the height of the plant by about 4". The plants could be finally tipped and brought into plucking depending on the growth rate. The successful bringing up to this stage will depend on the amount of after care taken. It is best to detail a labourer well versed in the above procedures to look after the infills while weekly assessments of the progress of the infills could be made by the field staff for the Superintendent who could in this manner monitor the entire project. This will help to organize and maintain such projects efficiently and to achieve desired results.

Nursery Procedures

1. Depending on the requirement of cuttings for the infilling procedure, mother bushes of suitable clones should be pruned in January/February so that cuttings could be obtained by June/July. As 15 to 16 month old plants are required to be put out as infills, pruning of mother bushes for purposes of infilling has to be advanced to January/February. The shoots must be cut at the correct time and not allowed to over mature. Shoots will be ready for propagation in approximately 4 1/2 to 5 months time.

2. The required amount of soil should be cut and transported.

3. The soil must be sieved and fumigated with methyl bromide or Basamid. If fumigated with Basamid the soil will be ready in 5 weeks. The nursery beds should also be fumigated and kept ready for propagation in June/July.

4. It is preferable to use large polythene sleeves for planting cuttings for infills. These could be 6" in diameter and 12" long.

5. Select good cuttings for planting in the sleeves.

6. All other after care measures such as shading, watering and fertilizer application must be given at the appropriate times.

7. Rooting would have taken place by about 2 1/2 to 3 months and after examining the cuttings at random for rooting T 65 soluble nursery fertilizer applications should commence at 1 oz in 1 gallon water per square yard (about 100 plants) every fortnight. When the plants are about 5 to 6 months of age apply 2 oz T 65 in 1 gallon water per square yard every fortnight. After each fertilizer application, wash the plants thoroughly with clean water.

8. At about 5 months, restack the plants and plants of equal size should be grouped together. At this time a disbudding or thumbnailing could be done on plants that have put out 4 to 6 leaves.

9. A second restacking could be done when the plants are about 7 - 8 months old. The best plants (A category) should be stacked together and the rest separately (category B). Additional care should be taken to bring the B category up to a reasonable standard.

10. If the plants are growing vigorously a third restacking may be contemplated. Desirable heights should be maintained by tipping the terminal buds to encourage side shoot growth and form a bushy plant.

11. At time of infilling the best plants should be supplied from the nursery. Transport of plants to the field should be done with the least disturbance to the bags. The plants should be stacked in a shady place and watered until they are planted out in the field and protected with baskets and thatched.