T.R.I. ADVISORY CIRCULAR No.PM 9

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MANAGEMENT OF UP COUNTRY LIVE WOOD TERMITE

(This Advisory Circular supersedes the Advisory Circular PM 9 Serial No. 02/08 issued in June 2008 and related previous Advisory Circulars)

1. Method of Detection of Termite-infested Tea

The Up Country Live-wood Termite (*Postelectrotermes militaris* Desneux) is reported in areas of Maskeliya and high elevations of Pundaluoya and Radella. It gains entry into the tea plant through the roots and constructs galleries within the woody tissues of the roots, collar, and finally the branches. As a result of this concealed habitat, an infested bush remains unnoticed. However, when branches are affected, prune cuts made at the time of pruning would show cavities filled with faecal matter, and occasionally the termites as well.

During periods of moisture stress, one or two branches on a bush may also show signs of wilting. Since such wilting may be caused by reasons other than termite infestation, a few of these branches should be cut back and examined to confirm whether termite infestation is the cause, or whether there are other causes.

2. Method of Uprooting Termite-infested Areas

When termite-infested bushes are noticed at pruning, the frames of neighbouring bushes should also be examined carefully for signs of galleries. Such infested bushes should be uprooted until two concentric rings of plants show no further signs of infestation by termites. The particular patch should be blocked out, the area deep-forked and all tea roots, at least up to pencil thickness, should be removed. The uprooted plants and roots should be collected and burnt *in situ,* and should not be transported out of the infested area. A few old tar- or oil barrels could be used to burn the infested bushes and roots.

3. Treatments

Even though all infested plants and roots are removed and burnt *in situ,* in practice a few roots are likely to be left behind, from which re-infestation could subsequently occur. An extended period of rehabilitation (up to four years) would guarantee the decay of such root fragments, and so prevent re-infestation. It is therefore suggested that after having ensured a thorough root-removal operation following uprooting, commencing around December of the year of prune, the area be leveled and prepared for planting with Guatemala or Mana grass with the onset of the south-west monsoonal rains in May/June of the year following the prune. The grass should then be retained throughout the entire cycle (4-5 years) and the block planted to tea in the year of the following prune. During the extended period of rehabilitation under grass, any small, infested root fragments left behind would have decayed. The grass should be regularly lopped, and the loppings incorporated into the soil to improve the soil organic matter content and the soil structure.

4. Integrated Management of UCLWT

4.1. Suggested Programme for Termite Control

Termite control on the estate scale should not be attempted haphazardly and a well-defined programme should be developed to control the pest (Figure 1). Work should be undertaken on a priority basis, and programmed in the following manner.

Termite-infested patches in fields that are to be retained for a long period (Group 2) and those to be uprooted and replanted at the end of the cycle (Group 1) should be very clearly demarcated.

Priority 1

Termite-infested patches in Group 2 fields should be uprooted in December of the year of prune as recommended above and planted with Guatemala or Mana grass in May/June of the year following the prune. These patches should be block in-filled with tea at the next prune only after a period of three years' rehabilitation (if it is on a four-year cycle) or four years' rehabilitation (if it is on a five-year cycle). As planting of Guatemala or Mana has to be completed by May/June of the year following the prune, the number of termite patches that could be tackled would depend on the availability of labour. However, if all termite patches in such fields cannot be properly treated prior to the planting of Guatemala or Mana by May/June in the year following the prune, they should be left under tea and tackled on the same basis in the following pruning cycle.

Priority II

Termite-infested patches in Group 1 fields should be uprooted as recommended above, in December of the 2nd year from prune, and these patches planted with Guatemala or Mana in May/June of the 3rd year from prune. However, if there are a large number of termite patches in fields due for uprooting and replanting, it may not be possible to have all of them treated and ready for planting with Guatemala or Mana by May/June of the 3rd year. In such instances, some of the patches may be uprooted in December of the 3rd year, and planted with Guatemala or Mana by May/June of the 4th year at the latest. This will effectively eliminate the loss of identity of the termite patches when the entire field is uprooted. Following the treatment of termite patches, the general uprooting should commence in December of the 5th year, and the soil rehabilitated for a period of two years with Guatemala or Mana as shown in the Schedule (Figure 1). When the method of treatment undergrass, suggested above, is adopted, followed by the usual two-year rehabilitation under Guatemala grass following the general uprooting of the field, the termite-infested patches would have been under grass for about 5-6 years.

It is assumed that in all the A-category fields, and the better B-category fields, one would come across only a few termite-infested patches. If for some reason or the other, one encounters large numbers of termite-infested patches distributed throughout a given field, such a field should obviously be considered as one that needs to be replanted, and not as one needing an attempt at in-filling.

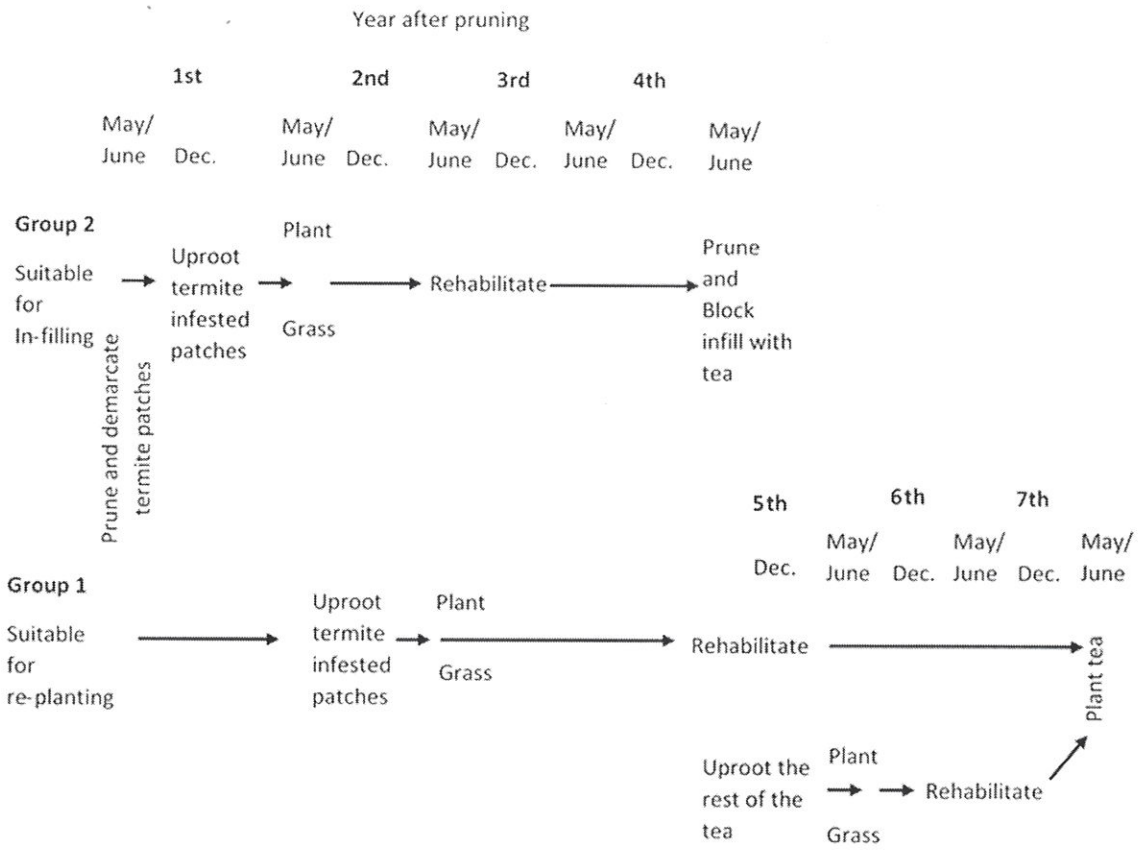

Figure 1: Schedule of proposed field operations to control Upcountry Live-wood Termite

If any of the C category fields, find suitable blocks for replanting, follow the programme for Group 1 fields.

Note: In five-year cycle estates, the period of rehabilitation of termite affected patches will be extended by one year.

4. 2. Soil Amendments

Soil amendments such as reclaimable tea, neem oil cake and *Alocasia* (Habarala) could be incorporated in termite infested tea lands at the rate of (i) reclaimable tea 400 g + neem oil cake 200 g or (ii) *Alocasia* (Habarala) 2.6 kg per plant depending on the availability.

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