

RETARDING THE PREMATURE DEATH OF SEEDLING TEA

P.V. Arulpragasam

Plant Pathologist

(Tea Research Institute of Sri Lanka, Talawakele, Sri Lanka)

In this age of accelerated development projects, we, in the tea industry, are accelerating the death of our valuable seedling tea bushes. The famous saying, 'people die, it cannot be helped', cannot be strictly accepted in the case of the premature death of our seedling tea bushes. It is true that there are some senile tea bushes, riddled with wood rot, that are bound to die anyhow, but this has been brought about by our negligence rather than by natural physiological processes.

Let us examine some of the practices that are shortening the life span of our valuable asset. The trouble mainly starts during the last year of the pruning cycle. The fields due for pruning are given a stepmotherly treatment in all aspects of normal cultural practices like fertilizer application, pest and disease control, weeding, etc. But at the same time the fields are harvested to the maximum, right up to the time of pruning.

It has become the practice to give the minimum or no fertilizer at all during the second half of the pruning year. Neglect of mite and tortrix control during the dry season defoliates and weakens the bushes. When the monsoon sets in after the drought the bushes have no chances of replacing the foliage lost due to mite or tortrix attack because most estates have given up the practice of protecting the fourth year seedling tea fields from blister blight. When blister blight has taken its toll the 'rush' crop is harvested before pruning and then the fields are 'ready' for pruning! When we look at the treatment that the plants have received during the year of pruning, it is a wonder that they recover at all!

As we are aware most of our seedling tea are affected by wood rot of the frames and collar region to varying degrees of severity. We hardly give them a chance

to build up their reserves during the year of pruning. Yet, we are pruning our tea expecting to stimulate maximum vegetative growth and build up a healthy frame, thereby hoping to get maximum crop during the next few years. How well can these debilitated tea bushes respond to our expectations without being given the basic care when it is needed most? The net result is that the recovery from pruning is delayed appreciably and the development of frame is very poor. Most bushes recover after pruning with the little reserves that they have and the weak bushes make a valiant attempt to put out new shoots. These attempts may be thwarted by our failure to protect these young tender shoots from an attack of blister blight. As a result of this these young shoots will die back and the plant does not have enough reserves to put out more new shoots or whatever shoots that are put out will be weak and the numbers small. Quite a number of weak bushes, which otherwise would have recovered and become productive, pack up at each pruning cycle and the average healthy bush becomes weaker due to the treatment meted out to it during the year of pruning.

What then are the measures that should be adopted to extend the economic life span of our old seedling tea? It is a false sense of economy to cut back on the recommended amount of fertilizer that should be applied during the year of pruning. The control of blister blight has been taken for granted in the pruning year not only in seedling tea but also in vegetatively propagated tea. The control of mites and tortrix is as equally important as the control of blister blight. These pests and diseases affect the foliage and it is not unusual to see the thin appearance of some fields where these control measures have not been undertaken. If the maintenance foliage is reduced appreciably during the year of pruning how could we expect the plant to produce enough food for survival and storage.

Special attention should be paid to the pruning of old seedling tea. Rejuvenation pruning as a means of renovating the plant and overcoming bush senility is not advisable for our predominantly low jat seedling tea on our shallow eroded soils. Low pruning, as practiced in the past, has resulted in poor frame development and has even resulted in the death of the bushes. It has been shown that

bushes pruned at about 40 cm recovered earlier and showed vigorous growth than those pruned lower or higher (Kulasegaram and Kathiravetpillai, 1981). Weak bushes, which can be easily identified by their thin appearance, should be rested at least for two months before pruning. At the time of pruning the frame should be cleaned as far as possible and all rotten wood removed and cuts painted over with wound dressing. When the bushes are very badly affected by wood rot of the frame and branches it is better to phase out the cleaning operation over two or three cycles. In pruning weak old seedling tea it is advisable to leave lungs as an insurance against poor recovery.

The cost of replanting being so high, it is high time we paid more attention to preserving and improving the seedling tea that we already have. Let us therefore make every effort, along the measures suggested, to prolong the economic life span of our very valuable asset - the old seedling tea bushes. In future let there be no more vacancies for vegetatively propagated tea in our seedling tea fields!

REFERENCES

- KULASEGARAM, S. & KATHIRAVETPILLAI, A. (1981). The effect of severity of pruning on growth and yield of high-country seed tea (*Camellia sinensis* L.)