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EDITORIAL COMMENT

This number of the *Tea Quarterly* is once more dominated by articles related to replanting of tea by vegetative propagation. This is proper, for the future of the industry will be greatly influenced by the replanting, which is now under way assisted by the subsidy scheme, but is still technically unfamiliar to some planters. Although vegetative propagation has been studied and used by the Institute for two decades, new discoveries about its implications are still being made.

Quality of Made Tea

The first effect of uprooting old tea, rehabilitating the land, and replanting, is a loss of crop. With a regular annual programme of replanting, the tendency to lose production continues until after the first replanting comes into full bearing. It is therefore proper to begin replanting with a very quick-growing and high-yielding clone, to shorten the period of reduced crop and to make the reduction as small as possible. TRI 2024 satisfies these criteria and is also of A1 quality. It is, however, recognized to be unwise for a single clone to predominate in the Island. Once the total crop of an estate begins to rise, therefore, the emphasis is likely to change from weight of yield to a variety of properties in the made tea. Yield can be assessed in rupees instead of in weight. The selection of clones with special manufacturing properties, attracting special prices, will then become of first importance. Mr Keegel's article gives preliminary information on manufacturing properties of made tea of a large number of clones.

It is not easy to get fair data of weight of yield about all these clones. To be comparable, the data must be got in one place over the same period and with great attention to detail. Clonal tests for this purpose have been going on and are being expanded in the various regions. At the moment, the outstanding clones on both yield and quality together seem to be TRI 2024 and the Sirikandura clone S 106.

Approved Clones

The provisional list of clones approved for subsidy has been revised and is printed here. Even though these clones are provisionally approved, they are not all of equal worth, and though some additional ones are likely to be brought in, on the whole the tendency may be towards reduction in the next few years. The 142 clones in the list of March, 1959, are now reduced to 122 clones.

Eelworms

Much work has been done in the last few decades on eelworms parasitising crops in many parts of the world. Inferior crops and crop failures can often be certainly put down to them. Because many parasitic species affect only one or a few species of plants, rotation of crops has tended to check them; but tea is perennial. The replanting of tea in Ceylon offers a rare opportunity of checking a widespread

and sometimes serious pest, by reconditioning the soil. Dr Visser here offers his very last contribution on eelworms and the work has now been taken over by Dr Hutchinson, who is here as a member of the United States Operations Mission. The main point to emphasize is that it is practically impossible to eliminate eelworms from growing tea, so rehabilitation should be used to ensure their elimination from the land, and only clean (as nearly as possible eelworm-free) plants from clean nurseries should be put in. The regulations made under the Plant Protection Ordinance in 1932, prohibiting the movement of tea plants outside an estate, except by permit, were rescinded in 1946 (*see Tea Quarterly*, Vol. 18, page 74); nevertheless, the danger of spreading eelworm is so serious that it is hoped that all planters will voluntarily refuse either to transmit or to receive plants (as distinct from cuttings) across the boundaries of their estates.

Drum Withering

There has been a large rise in tea production in Ceylon since the War and the rise may steepen because of the clonal replanting scheme. The principal problem arising from this is likely to be in accommodation for withering the increased amount of leaf. In many factories, three-quarters of the space is taken up by withering tats and the remaining quarter is not overcrowded with machinery. The crop could be doubled in a couple of decades but increase may be restricted by the expenditure required for doubling the withering accommodation. A method of withering that is more economical of space and money is therefore worthy of study. Mr Hutton's article on drum withering in East Africa, which has been edited and annotated by Mr Keegel for Ceylon conditions, is thus timely. Improvements in the use of the drum make it a possible machine for use in Ceylon, without loss of quality. Indeed, the use of a drier forced draught of cold air might conceivably improve quality.

Magnesium Deficiency

Clonal trials have given crops at least five times as great as the average for the Island and nearly twice the highest commercial yields. Although the detailed applicability of these yields to commercial planting is dubious, there is no doubt that the soil will be called upon to support considerable increases. The more a crop takes out of the soil, the more likely it is to reveal deficiencies in the soil. The more productive a clone is, therefore, the more likely it is to make demands on the soil that are too heavy to be satisfied without special manuring. A deficiency disease of the crop can thus be regarded as a useful direct indicator of what should be done. Dr Mulder and Mr R. L. de Silva have discussed deficiency diseases in general and magnesium deficiency in particular, a disease which is increasing in high-yielding clones and is readily dealt with, once recognized.

Shot-hole-borer Beetle

Although there is no article in this number on shot-hole borer, investigations are proceeding. There is some hope of discovering a strain of tea bush that has some resistance to the borer; even if the original bush were unsatisfactory as a clonal mother, the resistance might be incorporated with other satisfactory qualities by the plant breeder, who is now being sought. At the same time, it is known that it is the best bushes and the best-manured bushes that contain the most borers. The object of this note is to encourage planters to seek resistant bushes. On some estates, a reward of Rs 50/- is offered to a pruner who discovers, in a heavily infested field, a bush that is prolific but not much infested. The Institute is willing to follow up information sent in to the Director about bushes believed to be resistant.

Miscellaneous

The new post of Chief Advisory Officer has been filled by the arrival of Mr C. B. Foster-Barham from Kericho, East Africa, and he is taking over a large part of the advisory work, which has been a heavy load on the specialist research workers. Letters regarding advice should always be addressed impersonally to "The Director" and not to individuals by name. Letters addressed to an individual are often delayed when he is away on tour or on leave, whereas those addressed impersonally to the Director are always opened on the day they arrive and often dealt with more promptly.

Dr Joachim has now taken up his post as Low-Country Adviser again. As Editor, he referred on p. 75 of the current volume of the *Tea Quarterly* to contributions by planters, recording in the *Tea Quarterly* some of their practical observations on new aspects of scientific cultivation of tea. I would go a little further and suggest that a column of "Letters to the Editor," putting questions and points of view as well as factual observations, might be appreciated.