BLISTER BLIGHT*

SOME FINANCIAL ASPECTS OF ITS CONTROL

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Blister Blight arrived in Ceylon in late 1946 and appears to be determined to remain. South India took drastic measures in an attempt to eradicate it, but Ceylon from the start, and rightly as time has proved, concentrated on control. Now control of a disease or pest requires knowledge, and all concerned in tea planting have been asked to study and notify their discoveries, so that our knowledge of *Exobasidium vexans* increases daily. The following are therefore only the opinions of an individual at the time of writing.

Blister blight would appear to have two natural controls or requirements. First, a quantity of tender young tea shoots, (leaves and stalks), and next, suitable weather. Obviously therefore the methods of attack are on these lines: (1) Deny it the tender shoots that act as hosts and (2) make the weather unfavourable. The first may be possible, but would mean the end, for the time being at any rate, of tea planting in Ceylon; the second is at present beyond human ability or understanding.

Attack on these lines, the only ones at present evident, cannot be completely successful, but variations would appear to be possible to give partial success. For (1) read "Reduce the number of shoots that are attractive enough to act as hosts to the blight" and for (2) read, "When a large quantity of such hosts must be present, let the weather be at its least favourable for blight."

Brought down to practical planting this means: (1) Get the crop off the bush and into the factory before the blight does much damage, *(i.e.)* short plucking rounds, and (2) let the period between pruning and the end of tipping coincide with the dry weather, *(i.e.)* prune only at certain times of the year.

Now this is where the financial aspect has to be considered. It is all very well to go in for shorter and shorter rounds. Such will in theory tend to give greater crop over the year, but will result in smaller quantities in each basket, and hence increased cost. It is for the practical planter to use his knowledge of the individual estate and what he sees of the incidence of the blight, to obtain the happy mean: as short rounds as are economic.

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Generally speaking, the more the bush is flushing, the shorter the round can economically be. Thus for short rounds we need primarily (a) food and (b) rapid flow of sap from roots to flushing points. (a) means manure in increased doses and (b) requires clean pruning to give straight clean new wood.

Thus to get our first method of attack we require expenditure on manure and good pruning, and frequent plucking rounds.

The second line of attack, pruning only at certain times of the year, brings in several factors for consideration Either the area to be pruned must be reduced, or the labour force increased, or more probably both. Reduction of the area means longer pruning cycles, and for this to be economic the requirements are more manure and clean hard pruning. Now these factors have already been found necessary in our first line of attack. The other factor, a larger gang of pruners, is however new. More pruners mean more dependents and non-pruners; a larger labour force means expenditure on housing; it also means that more work that is not directly productive must be given, particularly in the non-pruning months. While this will eventually lead to increased crop, it will immediately put up the cost of production.

Yet another factor to be considered is the effect of harder pruning in slowing up the rate of return to plucking. It can only be carried out early in the pruning season, and the relatively lighter pruning towards the end. The pruning programme has now become more of a headache than ever and must be varied to suit each field of each estate.

To sum up :—

(1) *Exobasidium vexans* can be controlled, but will still cause loss of crop, and the control will increase the cost of production.

(2) The amount of crop lost will be inversely proportional to the increased expenditure, and the economic mean will be different on every estate.

(3) the individual planter will have to find out this economic mean, for no hard and fast rule can be laid down, but the following will determine it :—

(a) Labour force.

(b) Rate of growth of flush. depending on food for the bush and its rapid supply to the flush.

(c) Weather being normal.

(4) 3 (a) Means expenditure on lines and non-productive work.

3 (b) Expenditure on manure and

3 (c) is entirely uncontrollable and unpredictable.