

POTATO CULTIVATION ON ESTATES

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Replanting of old tea is expensive partly because it has to be preceded by an unproductive period of reconditioning. The cultivation of a single crop of potatoes—after uprooting the tea and before planting the grass—may help to lower costs appreciably, while simultaneously augmenting food supply. Under reasonably favourable circumstances, such as generous manuring, an average-to-good fertility of soil, soil conservation measures, and careful control of pests and diseases, a net profit up to Rs. 1,000 per acre is possible in a 3-month period. The great advantage of using old tea land is that, judging by our pilot trials, such land appears to be free of the destructive *wilt disease*.

Although the prospects of growing a single crop of potatoes on tea land seem to be good, no data are available on estate-scale cultivation. With proper care, it is not very likely that potato cultivation will have an adverse effect on the young tea planted subsequently, particularly when manuring is sufficient and when potato cultivation is followed by grass; nevertheless this aspect needs investigation. Detailed information on the economics of the matter is also needed as regards yields per acre on the one hand and costs of fertilizers, costs of chemicals for control of pests and diseases, labour costs, etc., on the other.

For these reasons it would be of great assistance if estates tried out, in a limited way, potato cultivation in uprooted tea land while keeping a careful account of both costs and returns. It is therefore suggested that interested estates (above 3,000 ft) plant $\frac{1}{4}$ acre of each of the two varieties—*Gineke* and *Tedria*—of which seed potatoes will be made available at reasonable cost.

Both the Department of Agriculture and the Institute desire to obtain more information on the practical possibilities of potato growing on tea land. It is requested that those estates which are willing to participate in this scheme send the appended forms to the respective addresses. This is necessary in order to enable us to reserve the required stocks of seed potatoes and also because it is intended to give participating estates assistance in carrying out their potato cultivation successfully. It is also proposed to investigate, later on, the effect of previous potato cultivation on the subsequent growth of the tea clones, following the reconditioning of these areas. For that purpose it would be desirable for the potatoes to be grown in two blocks alternating with two adjacent blocks which will carry *only* grass.

It may suffice for the moment to give a brief outline of the requirements; more extensive information will be sent to participating estates at a later date.

- (a) Only areas (above 3,000 ft) which are neither too steep nor too low in soil fertility should be chosen.
- (b) Uprooting of tea should be done at such a time as to enable the potatoes to be planted between the end of October and the beginning of December.
- (c) The potatoes should be planted along the contour in shallow trenches in which compost, if available, and fertilizers are placed shortly before planting.
- (d) After digging up the potato crop—which should occupy the land for not more than 3 months—plant Guatemala grass as usual.
- (e) The estimated costs of seed potatoes and fertilisers total Rs. 400–500/acre; the guaranteed price of potatoes is 20 cts./lb. at the estate. Exact costing will be valuable.