

THE USE OF SEPARATE STICKERS IN BLISTER-BLIGHT FUNGICIDES

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The spraying of tea in plucking poses some special problems:

1. The constant rapid growth causes the continuous development of susceptible unprotected leaf surface.
2. The removal of flush causes the fungicide adhering to the flush also to be removed.
3. The fact that almost all new growth takes place above the level of old sprayed leaves causes redistribution of fungicide by rain to be of only minor importance for the protection of the flush.

The "active" protection period of a fungicide particle on a leaf can for these reasons hardly be longer than one plucking round. Its activity is either finished by the plucking or by the fact that it is situated below the danger zone.

In view of these considerations the use of stickers in tea may be arbitrary. Their effectiveness is limited to the cases in which, immediately after spraying, a heavy shower tends to wash most of the fungicide away to levels where protection is no longer needed. A few days after spraying, so much unprotected new leaf surface has developed that the protective action of the fungicide is finished in any case.

Visser, Shanmuganathan and Sabanayagam (1958) reported that 4 oz. copper oxychloride plus 2 oz. of a sticker did not give better results than other fungicides without addition of the same sticker. Later this sticker was tried and Mulder (1959) reported that no influence on the effectiveness of 3 oz. copper oxychloride could be detected under mild North-East Monsoon conditions. In 1959 the experiment was repeated under South-West Monsoon conditions and again no influence of the addition of stickers could be found.

At this moment, some estates are using sticker with blister-blight spray. It is therefore planned to change two conditions in the experiment to bring out any possible influence of a sticker:—

1. Lower the concentration of the fungicide further to 2 oz. per acre, and test with and without sticker.
2. Lengthen the plucking round.
3. Test the effect of sticker on valuation.

It is hoped that these experiments will finalize the matter.

References

- MULDER, D. (1959). Report of the plant pathologist. *Annu. Rept. Tea Res. Inst. Ceylon for 1958*: 62-66.
- VISSER, T., SHANMUGANATHAN, N. & SABANAYAGAM, J. V. (1958). Blister blight control in 1957 with respect to fungicidal formulation, application rates and yield. *Tea Quart.* 29: 9-20.