

COMMENTS ON MR HUTTON'S NOTES ON DRUM WITHERING

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The foregoing notes were received from Mr G. K. Newton, now with the Uganda Development Corporation Ltd., to whom we are grateful for sending us the latest information on a subject which is of considerable interest to the tea industry in Ceylon.

The withering drum has for a long time been considered as a possible substitute for or supplement to the traditional withering lofts. In the past it has not been recommended by the Institute. It now appears from the results of the experiments carried out in East Africa that the manufacturers of the drum and its users have at last realized that it does not pay to wither leaf for short periods at very high temperatures. There was conclusive evidence at the T.R.I. that such high temperatures are harmful to quality and for this reason the Institute was always firm in stating that the withering drum, under the conditions of operation then recommended by the suppliers, was not suitable for Ceylon.

Judging from the claims now made for the withering drum, the technique appears to be giving much more satisfactory results. The fact that some of the best African teas today are made using the drum does not, however, prove that the drum-withering method is preferable to the tat-withering system. It may be that the latter has not yet reached the same degree of perfection as in Ceylon. It is also possible that the type of rolling adopted in East Africa is perhaps fundamentally different from that in Ceylon. On the other hand the leaf itself may be more suited for drum withering.

When comparing two processes one may draw the wrong conclusions even though there is only one variable factor. In this particular case, for instance, a harder wither for tat withering and possibly harder rolling might give a tea superior to that now obtained. The standard for comparison with drum withering could very well then have not been high enough. One must therefore be rather cautious in accepting the results of any particular treatment until we know all the circumstances. A statement which may be perfectly true for Africa may be inapplicable to Ceylon. Be that as it may, the tea industry in Ceylon will have to examine the possibilities of withering drums for the increasing crops. Extension of withering lofts in some factories appears to have reached the limit, and increasing withering accommodation in others has brought other problems in its train. If the Sirocco drum fulfils the necessary requirements it would certainly meet an important need.

It will be noted from the article that three very important changes have been introduced in the drum-withering system. They are:—

1. considerably reduced speed;
2. extension of withering period by the employment of temperatures more in keeping with what has been found suitable for Ceylon conditions;
3. harder and more conventional withers.

Examination of the table in the article reveals that the withering periods are as follows:—

A (1st batch)	—	13 hours
B (2nd ")	—	14 "
C (3rd ")	—	12 "
D (4th ")	—	12 "
E (5th ")	—	10 "

These periods do not even include the period the leaf is stored in the interval between arrival at the factory and charging into drums. Thus it will be seen that whereas in the past the withering period was as short as four hours or even shorter, it is now prolonged to such an extent that it is not much different from that which has given very satisfactory results in some factories in Ceylon today. The complications in factory organization involved by the adoption of very short periods hitherto have also been partly eliminated, as seen in the programme given in the table.

One of the advantages claimed for withering drums and similar mechanical devices is that the withering period is considerably shortened. It has never been apparent to us how shortening unduly the period of wither helps in any way, and far from being advantageous, periods of the order of 3-4 hours seriously interfere with normal factory routine and necessitate abnormal hours of work. It is pleasing therefore to note from Mr Hutton's article that the idea of accelerating the wither has been abandoned. Coupled with the incorporation of lower temperatures and less damage to the leaf (by the extremely slow speed of the drum and less leaf movement), the present system of drum withering as described by Mr Hutton might well prove successful in Ceylon too. Its possibilities therefore as a contribution to the solving of the problem of inadequate withering accommodation may now be worth examining.

The reader's attention is invited to the Technologist's reports in the T.R.I. Annual Reports for 1952, 1953 and 1955, which refer to a system of mechanical withering which was much like the present drum withering system, except that the leaf was turned over at regular intervals instead of being moved continuously.