THE "DRY RUBBER" CONTENT OF LATEX

FROM

DEEP AND SHALLOW TAPPING.

By

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The investigations published in this paper were carried out on latex from two adjoining estates belonging to one company, in order to endeavour to account for the low "dry rubber" content of the latex from one of these estates (B).

The rubber from these estates was being sold in the form of latex. The General Manager of the two estates found it frequently difficult on estate B to obtain latex containing the "dry rubber" content laid down in the regulations in connection with the export of latex under the Restriction Enactment and the Customs Regulations. The standard adopted for export of latex from Malaya is 3½ lbs. of "dry rubber" per gallon of latex, i.e., latex plus the ammonia (or any other preservative) added to maintain the latex in a liquid state.

Any lower concentration involves a loss to the estate on the exportable allowance under the Restriction Enactment and also a loss on the export duty payable under the Customs Regulations, both of which are based on the above standard.

The Manager was only able to attribute the lower "dry rubber" content of latex from estate B to the fact that the tapping cut was deeper on estate B than on estate A.

Both estates are situated in the coastal area and the soil consists of a heavy alluvial clay typical of such areas. On both estates the drainage was similar and good. Tapping systems and other factors were identical as far as could be observed. The trees on estate B are younger than those on estate A, but this would not account for the difference in "dry rubber" content of the latex, which could not be attributed to any factor other than the depth of the tapping cut. This factor also does not affect the result of this investigation which was carried out on both estates.

The estates were visited by one of us (B.J.E.), and the factory books, which were examined over a considerable period, invariably indicated a lower "dry rubber" content of latex on estate B.

In order to ascertain whether the depth of the tapping cut affected the "dry rubber" content of the latex, the Manager carried

out tests on both estates and sent samples of the latex twice a month for a period of one year to the laboratories for determination of "dry rubber" content.

In each case a definite and equal amount of ammonia was added to the same volume of latex, so that the latex should arrive in a liquid state.

The method of tapping, (i.e., whether deep or shallow), was communicated to us after the results of the determination of the "dry rubber" content of the latex had been reported to the Manager.

Results of Investigations.

The following table gives the "dry rubber" content of the ammoniated samples of latex for the period of one year. The figures are expressed in percentages by weight.

Estate.	Field	Date of Tapping.	"Dry Rubber" Content of Latex.	
			Deep Tapping.	Shallow Tapping.
A	B.139	11- 1-27	30.63	35.69
B	B.210	,,	30.14	33.74
A	C.405	18- 1-27	33.12	39.22
B	A.403	,,	30.13	32.12
A	C.410	28- 1-27	33.41	36.13
B	A.403	29- 1-27	34.41	34.84
A	C	10- 4-27	35.20	36.80
B	A	18- 4-27	30.10	30.50
A	B	29- 4-27	33.30	34.90
B	B	,,	29.40	32.45
A	F	8- 5-27	32 90	34.40
B	A	,,	31.70	32.90
A	F	18- 5-27	34.10	34.20
x B	B	19- 5-27	34.40	33.20
x A		27- 6-27	35.19	34.53
x B		26- 6-27	32.55	31.96
A		11- 7-27	35.14	36.41
B		10- 7-27	34.45	35.41
A	C	16- 8-27	39.14	42.22
B	B	15- 8-27	35 08	36.19
A		30- 8-27	38.70	41.06
(a) B		28- 8-27	—	35.39
A	B	15- 9-27	38.59	45.69
x B	B	11- 9-27	37.54	36.77
A	F	30- 9-27	34.68	36.47
B	B	29- 9-27	34.56	35.80
x A	C	10-10-27	38.26	37.87
B	B	11-10-27	35.19	36.59
A	G	31-10-27	37.24	39.51
B	A	,,	36.84	37.11
A	C	10-11-27	37.68	37.63
B	A	,,	33.56	35.19
A	B	20-11-27	37.71	40.23
B	A	,,	32.52	33.78
A		21-12-27	43.28	45.75
B		,,	33.00	34 26
A	A	31-12-27	40.92	43.27
B	A	,,	33.03	34.53

Note (a).—Sample was lost owing to breakage of container.

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Remarks and Conclusions.

It will be seen from the above table that, with the exception of five days marked x, the "dry rubber" content of the latex from both estates is greater from shallow than from deep tapping.

Apart from the fact that on both estates, shallow tapping produces a latex of higher "dry rubber" content than deep tapping, it is of interest to note that the "dry rubber" content of the latex on estate B is almost invariably lower than that on estate A. Although the trees on estate B are younger than those on estate A, in both cases they may be considered "mature."

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