

AN ANALYSIS OF COFFEE LEAVES.

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A SAMPLE of roasted coffee leaves, analysed by W. Stenhouse (Phil. Mag., 4, vii., 21), contained 1·2 per cent. of theine, 2·1 per cent. of total nitrogen, and yielded 88·8 per cent. of extractive matter, the infusion possessing a taste as of tea and coffee combined.

Having recently had a sample of the slightly roasted leaves, as used in Brisbane, Australia, handed to me, I have examined them with the following results:—

Moisture	..	..	..	..	..	..	..	..	10·29	} Soluble.
Theine	..	..	..	..	..	..	..	..	0·29	
Soluble nitrogenous matter	..	..	..	..	..	..	..	..	5·10	
Soluble mineral salts	..	..	..	..	..	..	..	..	4·95	
Other extractive matter	..	..	..	..	..	..	..	..	19·81	} Insoluble.
Insoluble nitrogenous matter	..	..	..	..	..	..	..	..	13·35	
Cellulose	..	..	..	..	..	..	..	..	34·51	
Chlorophyl, and other insoluble non-nitrogenous substances	..	..	..	..	..	..	..	..	7·83	
Insoluble mineral salts	..	..	..	..	..	..	..	..	3·87	
									100·00	
Total extractive matters	..	..	..	..	..	..	..	..	30·15	
Total ash	..	..	..	..	..	..	..	..	8·82	of which is
Soluble	..	..	..	..	..	..	..	..	3·83	
Insoluble	..	..	..	..	..	..	..	..	4·99	including
Sand	..	..	..	..	..	..	..	..	0·42	
Total nitrogen, by soda lime process	..	..	..	..	..	..	..	..	3·02	per cent.

The infusion contained much caffe-tannic acid, as well as some tannin and glucose, the latter probably derived from the decomposition of the tannin.

The amount of theine found is remarkably small.

The taste of the infusion, if it can be compared with anything, resembles that of a mixture of tea and tobacco, a taste invariably observed, as I was told by my informant, by habitual consumers of the infusion.

The leaves when burnt or roasted exhale a powerful odour of tobacco, and the vapours, when condensed on a glass plate, smell overpoweringly of tobacco juice. It is needless to add that the leaves were carefully examined with the microscope, and that they contained no particle of tobacco. The microscopic structure of the leaves presents nothing very remarkable, but the sheaths of the veins are most regularly undulated. The stomata are small and numerous.

Mr. J. Hughes said that, having lately visited Ceylon, where he saw Mr. Cotton who had sent a sample to one of the societies here, he was much interested in the analysis. Coffee leaves had already been prepared and exhibited with a view, if possible, for future use as a drink; the infusion was something like tea, and under some circumstances might be used as a substitute by persons living in the country. It is rather strong but very refreshing, especially after a long walk or ride.
