

6. If these flavouring components are derived immediately from fresh peel, a strong alcohol must be employed, on account of the water present in the peel. The alcohol content of the finished extract will, however, be low.
7. A good flavouring extract can be prepared either from fresh lemon peel, from lemon oil, or from so called terpeneless lemon oil. It is according to commercial usage to prepare it from the lemon oil, rather than from the peel.
8. A weak alcohol (proof strength) suffices to dissolve the flavour giving constituents from the oil; and the employment of a stronger alcohol merely adds to the cost of the extract, without corresponding improvement of quality.
9. The citral of lemon-grass oil is not to be confounded with that from true lemon oil. Both citrals are more or less indefinite bodies, being essentially aldehydic, but associated with aromatic substances which are lemon-like in one case and more or less verbena-like in the other. The distinction between them is not, at present, evident, to chemical methods.
10. Methods for the quantitative determination of citral are being studied; and it is hoped that a practicable method may be discovered, thus enabling Lemon Extract to be judged by determination of the component to which it owes its commercial importance.

Of the 75 samples covered by the present report, only 13 contain above 1 per cent of lemon oil. These are as follows, and are arranged in order of their lemon oil content:—

No.		Lemon oil.	Alcohol.
39621	Baird's.....	7.6	89.72
39608	Dr. Scott, St. John, N.B.	7.0	88.72
39618	Nat. Drug & Chemical Co.	5.0	82.74
39829	Gold Standard Mfg.	4.4	80.94
43635	W. A. Georgeson Co., Calgary.	3.6	90.32
38882	F. F. Dalley Co.	3.6	82.64
41753	F. F. Dalley Co.	3.2	80.40
42857	F. F. Dalley Co.	3.0	83.16
38881	F. F. Dalley Co.	2.8	71.48
40380	Henri Jonas Co.	2.1	71.78
39827	Campbell Bros. & Wilson	1.6	56.82
41755	Secley.	1.5	61.96
39830	White Star Mfg. Co.	1.0	70.70

62 samples contain less than 1 per cent of lemon oil and 60 samples contain less than 0.5 per cent lemon oil. It is quite apparent that the appreciation given to Lemon Extract by consumers is dependent upon something else than its lemon oil content.

When considerable amounts of lemon oil are in solution, the alcoholic strength is necessarily high. The absence of terpenes makes it unnecessary to employ so strong an alcohol. Among the 62 samples containing less than 1 per cent of oil, some are very high in alcohol, and apparently to no purpose.

	Samples
From 80 to 90 per cent alcohol	4
" 70 " 80 "	3
" 60 " 70 "	1
" 50 " 60 "	5
" 40 " 50 "	14
" 30 " 40 "	8
" 20 " 30 "	24
" 10 " 20 "	3
	62