EXPERIMENTAL

The oils were obtained by steam distillation of freshly gathered leaves and flowers collected at the onset of flowering. Analysis was by GLC and GLC–MS (Column conditions: 15% carbowax 20 M on chromosorb W, 15% *Apiezon* L. on Universal B and 5% SE 30 gum rubber on Universal B. *Instrumental.* Pye 104 gas chromatograph coupled to MS 12 Mass-spectrometer). Individual compounds were characterized by direct comparison with the retention indices and fragmentation patterns of authentic specimens.

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LAURACEAE

n-PARAFFINS FROM THE LEAVES OF THREE GENERA OF LAURACEAE

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Abstract—*n*-Paraffins ranging from C_{16} to C_{33} were detected by gas chromatography from the leaves of *Cinnamomum camphora* Sieb., *Lindera obtusiloba* Blume, *Litsea japonica* Juss.).

Plants. Cinnamomum camphora Sieb., *Lindera obtusiloba* Blume, *Litsea japonica* Juss.

Occurrence. Hiroshima Prefecture, Japan.

Previous work. No work (concerning paraffin constituents).

Date. Cinnamomum camphora Sieb. (January 1971), *Lindera obtusiloba* Blume and *Litsea japonica* Juss. (September 1970).

Leaves. Crushed to pieces and extracted with *n*-hexane. Purification (column chromatography and molecular sieve 5A treatment).[1] Identification (GLC using two columns, SE-30-5%, Apiezon grease L-5%, column temperature 150–300°). The odd paraffins are in large amount (*Cinnamomum, Lindera, Litsea* are 84·2, 88·6, 57·9%, even ones are 13·8, 11·4, 42·1% respectively).

n-*Paraffins. Cinnamomum camphora* Sieb.: C_{16-19} (trace), C_{20}(0·2%), C_{21}(0·5), C_{22}(0·8), C_{23}(2·6), C_{24}(2·4), C_{25}(7·1), C_{27}(23·9), C_{28}(4·3), C_{29}(43·3), C_{30}(1·2),C_{31}(8·8), C_{32-33}(trace), *Lindera obtusiloba* Blume: C_{16}(1·1), C_{17}(0·3), C_{18}(1·3), C_{19}(0·4), C_{20}(1·3), C_{21}(0·4), C_{22}(1·3). C_{23}(1·4), C_{24}(1·3), C_{25}(3·9), C_{26}(1·9), C_{27}(25·6), C_{28}(1·6), C_{29}(45·1), C_{30}(1·6), C_{31}(11·5), C_{32-33}(trace). *Litsea japonica* Juss.: C_{19-22}(trace). C_{23}(0·6), C_{24}(2·1), C_{25}(3·4), C_{26}(7·0), C_{27}(14·4), C_{28}(18·8), C_{29}(23·8), C_{30}(14·2), C_{31}(14·8), C_{32}(trace), C_{33}(0·9).

[1] N. Y. CHEN and S. J. LUCKI, *Analyt. Chem.* **42**, 508 (1970).