

On a New Unsaturated Fatty Acid, $C_{10}H_{18}O_2$, Present in the Oil of *Rindera obtusiloda*.

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The oil (5 kg.), extracted with ether from the nuts of *Rindera obtusiloda* grown in Korea, was saponified, decomposed, and the mixed fatty acids thus obtained were subjected to fractional distillation under a reduced pressure of 13 mm. A fraction up to 160° was taken, and, after the removal of the unsaponifiable matter, was again fractionally distilled. The low boiling portion was separated into unsaturated and saturated acids by the Ba-salt-ether method. The unsaturated acid portion was fractionally distilled once more, and finally 2.94 g. of the unsaturated acid possessing the following values were obtained: neutralisation value 327.5, iodine value 128.5.

The unsaturated acid thus obtained was hydrogenated, and the product recrystallized from 70% alcohol had m.p. $30.5-30.9^\circ$ and no depression was observed in admixture with pure capric acid. Hence it was recognized that the original acid was a straight chain compound with 10 carbon atoms. Further this unsaturated acid was converted into methyl ester and the methyl ester, subjected to oxidation and splitting with powdered potassium permanganate in acetone solution, yielded succinic and caproic acids, thus establishing that the original unsaturated fatty acid has the constitution $CH_3(CH_2)_4CH:CH(CH_2)_2COOH$. No compound with this structure is found in literature and the authors propose the name "obtusilic acid" for it.

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