THE OIL OF MIMUSOPS ELANGI (LINN.)

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Mimusops Elangi (Linn.) belongs to the natural order Sapotaceæ and is indigenous to the Deccan peninsula. The oil from the seed is edible and is also used for purposes of lighting besides finding use in medicinal practice. The oil has got a reddish brown colour and a very disagreeable odour, though it is more or less tasteless. Since it can be easily obtained in large quantities at a relatively low cost, refinement so as to produce an odourless, colourless oil will prevent wastage of seeds and thus lead to national economy. The oil is not much improved by simple process of refinement. Steam distillation followed by treatment with absorbant charcoal leaves a colourless oil free from all odour and taste and more mobile than the crude oil. On remaining exposed to air, however, it acquires an yellow tint.

Elangi oil was first investigated by Kesava Menon¹ (1910) who however determined only the constants. Rau and Simonsen² (1922) obtained a 16% yield of oil containing stearic, palmitic and oleic acids and a small amount of an acid not definitely identified. For the prasent investigation seeds collected locally during the season were extracted with benzene. (See Table I for constants.) The solid and liquid acids and were separately esterified

TABLE I
Constants of Elangi Oil

		Rau and Simonsen	Kesava Menon	Present work	
				1. Crude oil	2. Refined oil
Density Refractive Index Acid Value Iodine Value Saponification Value Acetyl Value Unsaponifiable matter Fatty acids (Insoluble)	per	0·9113 (28° C.) 1·4544 2·2 82·8 188·0 12·0 1·30	D 188 0.9129 45.5 66.5 213.9 1.56 89.4	0.9833 1.4666 12.74 80.43-83.58 192.0 1.6	0.9895 1.4675 0.75 81.10 196.9

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palmitic 10.97%, stearic 10.10%, behenic 0.46%, oleic 63.98%, and linolic 14.49%.

80.8 g. of the dry, purified, neutral oil was oxidised giving 3.4 g. of a residue of completely saturated glycerides corresponding to 4.25% by weight.

Summary

The constants, acid composition and trisaturated glyceride content of Elangi oil are reported.

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