

I.R. NMR and magnetic measurements studies are being conducted to establish the bonding and structure in detail.

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FATTY ACID COMPOSITION OF KUSUM (*SCHLCICHERA TRIJUGA*) SEED OIL BY GAS-LIQUID CHROMATOGRAPHY

THE fatty acid composition of Kusum seed oil was done long before the introduction of GLC. The present communication reports on the fatty acid composition of Kusum seed oil by GLC.

The dried seeds were ground and extracted with chloroform methanol (1:2). The bulk of the solvent was removed. The oil was in yield of about 34.0%. The iodine value (Wijs' method) of the oil was found to be 62.15. Saponification of oil, extraction of fatty acids and formation of methyl esters were done according to T. P. Hilditch². The analyses were carried out by F and M Model 700 R Dual-column gas chromatograph with a flame ionisation detector using a 10% DEGS column on Gas-chrom Z (Applied Science Laboratories, Inc., U.S.A) at 180°C and 3% SE 30 column on the same support at 210°C.

Chromatographic peaks of methyl esters were identified by plotting the log of retention times against the number of carbon atoms in the chain³. The peak areas were calculated by the method of triangulation⁴. The data calculated as wt. per cent of fatty acids is given in Table I.

From the composition it is observed that palmitic, oleic and linoleic acids are the major components of the mixed fatty acid. These data do not tally with the previous report¹. The presence of a small amount of number of odd carbon chain fatty acids in the oil is also worth mentioning.

TABLE I
Component acids of Kusum seed oil

Component acids	Percentage by weight
C ₁₄	0.4
C _{14:1}	Trace
C ₁₅	0.1
C _{15:1}	Trace
C ₁₆	16.5
C _{16:1}	0.4
C ₁₇	0.2
C _{17:1}	0.2
C ₁₈	6.4
C _{18:1}	22.0
C _{18:2}	49.6
C _{11:3}	2.2
C ₂₀	1.2
C ₂₂	0.6
C ₂₃	0.2

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A NOTE ON THE BARYTE OCCURRENCES IN RALAM-GARBYANG SEQUENCE OF KUMAUN HIMALAYA

To the north of the Central Crystalline Zone of the Kumaun Himalaya a thick sequence of Pre-Precambrian-Palaeozoic-Mesozoic sediments is exposed. The lower part of the sequence comprises the Martoli, the Ralam and the Garbyang metasediments and sediments¹⁻². Within the lower Garbyang of the Girthi-Ganga valley of Chamoli District a zone bearing baryte mineralization has been discovered during the 3rd Himalayan Expedition sponsored by the Wadia Institute of Himalayan Geology.

Baryte occurs in thick veins associated with the dolomitic limestone of Lower Garbyang Series. The veins range in thickness from a few centi-