Introduction

The demand of fats and oils in the forthcoming decades by the Third World Countries will be largely governed by two factors: (a) Food needs (fat and protein) and (b) Non-food industrial needs (fatty acid intermediates—Oleochemicals). The competition between oleochemicals and petrochemicals has brought the prices of mineral oils and fatty oils closer together. This signifies the importance of the application of the renewable fatty oils as specific and characteristic base materials for the ever-growing organic chemical industry.

Fats and oils are found increasingly to be physiologically significant and chemically interesting. Renewed activity has arisen from the recognition of fatty acids as essential dietary requirements, from their link with the prostaglandines and from their involvement in cell structural membranes.

India, primarily an agricultural country abounds in forest flora. There is a wide potential of agrichemicals derived from the minor oilseeds rich in specific kind of fatty acids. In recent years the utilization of fatty acids as agrichemicals find their way into a variety of industrial uses and most of them mainly through derivatization. During 1980-81 our country had to import edible oil seeds and oils worth Rs. 600 crores. No break through is possible unless oilseed production is given a national priority.
During the last decade the production and utilization of oils and fats and their fatty acids have grown both in size and diversity. In the context of chronic shortage of vegetable oils and fats and the dependance of agrichemical industries on their availability, a phytochemical screening of oil-yielding plant species is the only alternative to explore the minor oilseed potential of the forest flora. Lately, a number of oleochemical raw materials are currently in use in the production of detergents, protective coatings, plastics and food additives, lubricants and intermediates for textile processing, adhesives and polymers.

Keeping in view this objective an attempt has been made in the present study to carry out compositional studies on minor seed oils and to synthesize new fatty derivatives from naturally occurring fatty acids.