I- INTRODUCTION

The genus citrus belongs to subfamily Aurantiodeae which constitutes the most important subdivision of family Rutaceae. Citrus species are know to hybridize among themselves easily without much difficults and numerous instances of naturally occurring hybrids have been reported (Swingle, 1943).

Studies of chemical variation have been suggested to be one of the growing points in the field of taxonomy. Chemotaxonomy has gained an important status in recent years. Chemical characters may have a particularly high taxonomic value when they can be shown to be stable, unambiguous and not easily changeable (Naik, 1984). Gas liquid chromatography of leaf oil of citrus has been used recently in studies aimed to determine the range of oil components present, their relation to taxonomic, genetic and environmental factors and possible biochemical interrelationship (Scora et al., 1968).

The analysis of citrus leaf oils offers a possible solution to the problem of citrus identification (Pieringer et al., 1964).

Chemotaxonomic study of citrus volatile leaf oils by Gas Liquid chromatography was made to determine

the chemical composition of leaf oils and to show how the differences and variations in composition may be used as means for identification of citrus species and varieties.

Such studies are of scientific and applied importance to be used for subsequent studies on root-stock compatibility, taxonomic relationships and biological control patterns (Scora et al., 1965).

The present investigation was undertaken to study the variations in leaf volatile oils content among some citrus species and varieties.