SOME NEW SYNTHETIC REACTIONS INVOLVING SODIUM HYPOCHLORITE

BY

FESTUS KADERIA

UNIVERSITY OF NAIROBI
LIBRARY

A thesis submitted in partial fulfilment for the degree of Master of Science in the University of Nairobi.

1977
It was found that under acidic conditions, malonic acid reacts with sodium hypochlorite to give various halogeno- compounds in small yield.

In basic medium the reactive methylene groups of malonic acid and pentan-2,4-dione were oxidized to the dihydroxy form.

The methylene protons of some substituted acetic acids were found to be activated by adjacent phenyl, naphthyl, and olefinic groups. In almost all of the substituted acetic acids dealt with, an aldehyde having one carbon atom less than the starting material was one of the products obtained.

When α-Hydroxyacids were treated with alkaline sodium hypochlorite they gave the aldehyde that results from decarboxylation and oxidation of the corresponding alcohol.