

AN ABSTRACT OF A THESIS

THE EFFECTS OF ACID TYPE ON THE PRODUCTION OF
XYLOSE BY ACID HYDROLYSIS

Jan-Ku Chen

Master of Science in Chemical Engineering

This study was concerned with the effect of acid type on xylose production by acid hydrolysis. Red clover hay was treated with dilute sulfuric acid, hydrochloric acid and acetic acid, and xylose production was measured at different acid concentrations, solids concentrations and reaction times.

A spectrophotometric method was used to simultaneously determine the concentration of xylose and glucose. The results of this investigation show that hydrochloric acid yielded higher xylose concentrations than sulfuric acid or acetic acid under the same conditions of concentration and time.

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by

Jan-Ku Chen

Graduate Advisory Committee:

Edgar C. Clausen May 11, 1979
Chairman Date

David W. Garbrough May 11, 1979
Member Date

Thurston S. Bond May 14, 79
Member Date

Approved for the Faculty:

Richard Peters

Dean, Graduate School

May 15, 1979
Date