



A STUDY ON DEGRADATION KINETICS OF TRYPSIN  
INHIBITORS IN HORSE GRAM (*Dolichos biflours*)

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**ABSTRACT**

The study aims at determination of a kinetic model for degradation of a trypsin inhibitor changes in horse gram (*Dolichos biflours*) subjected to defined set of processing conditions. This study was carried out in a steady state temperature conditions over the range of 50-120°C. The degradation of trypsin inhibitor followed a first order kinetics, and was adequately modeled by Arrhenius equation. Using the time temperature data of the unsteady state heating process encountered in three different cooking methods viz. open pan, pressure cooking and cooking in a recently developed and patented fuel-efficient Eco-cooker and the kinetic data obtained under steady state temperature conditions, a mathematical model has been developed to predict the degradation of trypsin inhibitor in three modes of cooking