STATEMENT I

Sugarcane (Saccharum officinarum.L.) is one of the important cash crops of Maharashtra. In the present investigation an attempt has been made to study responses of sugarcane to presowing soaking treatment with plant growth regulators chlorocholine chloride and ethephon. These studies encompass analysis of growth and productivity, study of bud metabolism, mineral nutrition and fate of some important organic metabolites. Review of literature indicates that this aspect of sugarcane physiology with respect to pretreatment of CCC and ethephon has not been studied so far. Hence this work represents an original contribution. At the same time, this work can be regarded as an extension of research work on various crop species carried out in our laboratory for last several years. This work has not been previously submitted for the award of any degree in any institute.

STATEMENT II

The present investigation is devoted to the study of presowing soaking treatment of growth regulators on physiology of sugarcane, an important cash crop. The sources from which the information is gathered, have been listed in the bibliography. The current journals, reviews, books and monographs have been extensively referred during the course of investigation. Every attempt has been made to keep the reference work as upto-date as possible.

Dr. P.D. Chavan

Guide

Mr. M.N. Patil Candidate