INTRODUCTION

Within recent years herbicides have come to be used increasingly for the control of weeds in temperate crops. Much work has been done on the effect of many chemicals on a wide range of plants. Very little however has been discovered about the effect of herbicides under tropical conditions.

This paper describes some preliminary work on this aspect which attempted to discover the response of the most important tropical crop - rice - to a number of chemicals. Today good water control affords excellent control of weeds in rice but an alternative if this fails would be valuable. Herbicides may supply this. They may also result in a reduction of costs of production, in a saving of irrigation water and labour costs. Work in Venezuela (23) has also suggested that the use of herbicides may increase yields and also permit the use of land unsuitable for irrigation for rice cultivation.

Pre-emergence herbicides might prove particularly useful in the control of weeds in broadcast rice, during the initial stages of growth. Later control could be gained with water and post-emergence herbicides. If it were found that yields from broadcast rice thus treated could equal those from transplanted rice, one of the main costs of rice production, transplanting, would be overcome.

This paper also includes an account of the preparation of an area suitable for future experimental work on rice and of the construction of a spray boom capable of giving an even and controlled spray.