

SQUASH AND SMEAR TECHNIQUES
FOR
CYTOLOGICAL STUDIES OF THE GENUS THEOBROMA.

INTRODUCTION.

Several previous cytological studies of Theobroma, many of them unpublished, were mainly made on root-tip, ovule, flower bud and leaf bud sections which were prepared by laborious and time consuming techniques. Squash and smear techniques have scarcely been used and a technique reported by Knight (1951) was repeated and was found to be far from satisfactory.

Fixing and staining difficulties in addition to minuteness of chromosomes have often been mentioned. Apart from chromosome counts, very little is known of Theobroma cytology, a subject which would merit detailed study, in view of breeding programmes involving inter and intra species crosses.

In consequence this study concentrates on investigating the nature of problems and also on developing simple, rapid and satisfactory squash and smear techniques that may be employed in future cytogenetical studies in the genus Theobroma and other related species.