

**MITOTIC REGULARITY AND CHROMOSOME NUMERICAL STATUS IN SOME  
VARIETIES OF *CAPSICUM* CROPS CULTIVATED IN THE  
NORTH-EAST SUB-REGION OF NIGERIA**

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**ABSTRACT**

Chromosome studies were conducted on 14 varieties of *Capsicum* crops in cultivation within the six states of north-eastern Nigeria. These varieties belonging to three species namely: *Capsicum chinense*, *Capsicum frutescens*, and *Capsicum annuum* were investigated in order to compare their morphology and numerical status and to ascertain if observed variations in fruit morphology had any numerical support. Seeds were collected from locations across the sub-region and processed for planting and subsequent field morphological characterization. Ripe fruits were harvested, seeds extracted and germinated in the Laboratory. A cytological investigation was carried out using germinating root tips. Results showed all 14 Karyotypes had remarkable homogeneity in chromosome morphology. The array of fruit morphological formations existing at the phenotypical level did not reflect in karyotype constitutions, thus suggesting a common origin for the species which had resulted in the formation of a uniform congregation.

**KEYWORDS:** Capsicum, Crops, Morphological & Karyotype