

CYTOGENETIC VARIATIONS OF Musa sapientum Linn.

CULTIVARS OF THE PHILIPPINES

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ABSTRACT PAGE

Cytogenetics of the different varieties of banana from Batangas, namely *Musa sapinetum* var. *cineres* (latundan), *Musa sapientum* var. *lacatan* (lacatan), and *Musa sapientum* var. *compressa* (saba) were examined through microscopy of the squashed, lacto-aceto-orcein stained meristematic cells of the root. The chromosome behaviour of the meristematic cells during mitosis was characterized through the appearance of the chromosomes, relative chromosomes lengths during metaphase and presence of chromosomal abnormality. All cultivars manifested normal mitotic division. Mitotic index of the cultivars was determined and was suggested to be in association with growth and survival rate of the plant. *Musa sapientum* var. *cineres* (70.77%) has the highest mitotic index followed by *Musa sapientum* var. *lacatan* (61.36%), and lastly, *Musa sapientum* var. *compressa* (48.57). Thus, *Musa sapientum* var. *cineres* has the highest survival rate with shortest gestation period while *Musa sapientum* var. *compressa* has the lowest survival rate with the longest gestation period.





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