
Relationships between Phenological and Yield traits of the Plant Crop and first Ratoon Crop of *Musa* Genotypes as Affected by Ploidy level and Genomic group**Baiyeri, K.P., B.N. Mbah and A. Tenkouano¹***Department of Crop Science, Faculty of Agriculture
University of Nigeria, Nsukka, Nigeria**¹International Institute of Tropical Agriculture
P.M.B. 5320, Ibadan, Nigeria***ABSTRACT**

*Multiple correlation of phenological and yield traits of the plant crop (PC) with those of the first ratoon crop (RC) of 36 *Musa* genotypes was carried out. The genotypes were landraces (triploid) belonging to AAA, AAB and ABB *Musa* genomic groups and hybrids (mostly tetraploid) thereof. The plants were grown under four environments for two crop cycles (PC and RC). Genomic group and ploidy level significantly affected the number of traits correlated and their coefficient of correlation. Plantains (AAB) had fewer and weaker correlated traits than cooking bananas (ABB) and dessert bananas (AAA). In all the genomic groups plant height of RC at harvest of the PC was significantly correlated with days to flowering and yield of the RC. In the hybrid genotypes, the black sigatoka disease score of the PC correlated with days to flowering, bunch weight and harvest interval in RC. Yield of RC was predictable from the yield of PC (except for the plantains). It was conclusive from the study that early selection of sucker for the ratoon crop and other crop management options that will enhance healthy growth of the PC will sustain high yield in *Musa* genotypes.*