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## **EFFECT OF STORAGE ENVIRONMENT AND MATERIALS ON MOISTURE**

### **CONTENT AND VIABILITY OF MAIZE (ZEMAYS) SEEDS IN STORAGE**

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### **Abstract**

Seeds of five maize cultivars (ARP.95'ITZEZ, Obatanpa, Oba-super-1 and SUWAN 1-SR) were stored under ambient environments in Ibadan, Abeokuta and Ballah (derived savannah, Rain forest and Southern Guinea savannah respective W of Nigeria in both dry and wet seasons using two storage materials (polyethylene and hessian sack bags). The aims were to relate the effects of weather condition in the storage environment and storage material on of maize seed during storage. Rainfall data were observed from meteorological stations around the storage area, while the relative humidity and temperature data were taken using thermo-hygrometer centrally placed at the storage room. Six months data of seed moisture content and viability in each season were analyzed using SAS package. The result showed that rainfall and temperature has significant effect on relative humidity of storage environment and that assumption of low rainfall expected in Southern Guinea savannah ecology is negated. The result also clearly confirmed that weather situation determines the type of storage materials to be used for maize seed storage. Prediction equations created by means of correlation and regression analysis predicted moisture contents and seed viability close to the observed values at 380 days of storage.