

ACKNOWLEDGEMENTS

ABSTRACT

**Environmental Factors Modifying the Growth
and Flowering Behaviour of four Cassava
Cultivars in Nigeria****Moses S.C. Simwambana**

Field experiments were conducted at two locations in Nigeria to assess the effects of time of planting, soil type and climatic factors on growth and flowering behaviour of four cassava cultivars. The four cassava cultivars were TME1, TME2, TMS 30555 and TMS 91934. The locations were at IITA in Ibadan, Oyo State and Ubiaja in Edo State. It was found that in all experiments the period of peak flowering occurred between August and October of each year for the four cassava cultivars. Peak flowering was observed to occur during conditions of high rainfall, high relative humidity, high available moisture, moderate temperature, high solar radiation and early planting. Early planted cassava (March) produced more flowers during the first season while the late planting (July) had more flowers in the following season than the early planting. Moisture stress at IITA seemed to inhibit flowering of cultivars TME1 and TME2 compared to Ubiaja. Shading of cassava (40 to 60% light) delayed the first flowering and reduced the number of flowers produced per plant. High relative humidity (59 to 90%) promoted lower branching height and induced cultivar TMS 91934 to flower. The study showed that no single environmental factor was responsible for promotion of flowering in these four cassava cultivars. It is recommended that effects of temperature, relative humidity, soil moisture and day length on flowering in cassava should be evaluated under simulated environmental conditions. IITA and Ubiaja soils should also be studied for their moisture content, moisture retention characteristics, hydraulic conductivity and their effects on flowering of cassava.