

OA Lawal-Adebowale, AM Omotayo, PA Okuneye,
University of Agriculture, Abeokuta (UNAAB)
P.O. Box 2316, Sapon, Abeokuta, Ogun State, Nigeria.

Estimation of rainfall indices for the determination of length of growing season and timing of arable crop cultivation in Ogun State

Abstract

The study assessed the rainfall distribution pattern over the last 25 years (1989-2004) to determine the length of growing season and timing of arable crop cultivation in Ogun State. Secondary rainfall data was obtained from the four meteorological stations in the State and subjected to arithmetic calculations for estimation of raindays, drydays and rainfall variability in the study areas. The results show that the month of March marks the onset of rainy season in the State while October marks its cessation. Out of the growing period of 208 days, 88 days were observed as having sufficient rainfall (0.25mm and above) per day. Based on Seasonality Index (S.I) of 0.32 and monthly and annual coefficient of variability of less than 50 percent and 20 percent, respectively, estimated for the study area, it was ascertained that the raindays were well spread out through the months of the rainy season. Observed high frequencies of 2 and 4 dryday spells suggest that rainfall will take place mostly after 2 or 4 successive days of no rain. In the light of this, it was concluded that rainfall situation in Ogun State will favourably support arable crop cultivation and as such land preparation should be completed by mid-April and followed by seed sowing between then and early May.

Keywords

Rainday; dryday spell; rainfall variability length of growing season, and timing of arable crop cultivation