Rainfall Analysis for Summer Crop Planning in Musilipedu Pilot Village of Yerpedu Mandal of Chittoor District of Andhra Pradesh

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ABSTRACT

Among the weather elements, rainfall is the most important factor that affects crop production. The annual/ monthly rainfall data for 10 years (1993 - 2002) as recorded in 24 Eastern mandals and 15 years (1988-2002) in Yerpedu mandal (nearest rain gauge for Musilipedu village) were analyzed statistically and coefficient of variation (C.V) was calculated to assess the dependability on rainfall for crop production in early *kharif* / *kharif* under rainfed situation. The mean annual rainfall for 10 years in Eastern mandals of Chittoor district was 1136 mm of which 458.0 mm and 552.5 mm were received during South-West and North-East monsoon. The C.V value for annual rainfall was 29.1 per cent indicating low variability among the years. The ten years mean rainfall of 24 mandals of Eastern mandals of Chittoor district for May, June, July, August and September was 67.4, 90.7, 99, 133.2 and 135.1 mm, respectively and the C.V values for the same were 87.0, 90.4, 37.6, 40.2 and 43.7 per cent, respectively. The rainfall for the months of May and June was uncertain as C.V values were high. The mean annual rainfall of Yerpedu mandal (nearest rain gauge for Musilipedu village) for 15 years was 1235.6 mm and the C.V of 28.1 per cent for annual rainfall indicating low variability among the years. The C. V values for May and June were 109.8 and 85.5 per cent, respectively, which were higher indicating higher variability. Analysis of rainfall regression equation revealed that there was decreasing trend in annual rainfall in Eastern mandals (1993-2002) and Yerpedu mandals (1998-2002) of Chittoor district. Summer crops like sesamum, greengram or pearl millet can be suggested for May sowing, as requirement of water for these crops is less.

Key words : Annual Rainfall,Bajra, Greengram, Sesame, Summer Crops