### RESEARCH PAPER



DOI:

10.15740/HAS/ARJCI/8.1/17-23 Visit us: www.researchjournal.co.in

# Inter-relationships between rainfall distribution and groundnut yield in Bhavnagar and Junagadh districts of Gujarat state

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College of Agricultural Information Technology, Anand Agricultural University, ANAND (GUJARAT) INDIA Email: rsparmar@aau.in ABSTRACT: Groundnut crop in Saurashtra region of Gujarat is predominantly grown as rainfed crop in *Kharif* season. The year to year fluctuation in the crop yields are mainly attributable to the variation in rainfall and its distribution. In order to study inter-relationships between rainfall distribution and groundnut yield in Bhavnagar and Junagadh districts of Gujarat state, correlation and regression analysis techniques were employed. The district-wise average yield data of groundnut and daily rainfall data were used over a period of 44 years *i.e.* from 1970-2014. Five broad approaches were tried to study the inter-relationships between rainfall distribution and groundnut yield. They were (1) aggregate rainfall, (2) monthly rainfall (3) fortnightly rainfall (4) week-wise rainfall and (5) crop phase-wise rainfall. In general it could be inferred that that the quantum of rainfall during different phenophases of the groundnut had appreciable influence on groundnut productivity.

KEY WORDS: Inter-relationships, Rainfall, Distribution, Yield, Groundnut

How to cite this paper: Parmar, R.S., Patel, H.K., Parmar, D.K. and Vegad, N.M. (2017). Inter-relationships between rainfall distribution and groundnut yield in Bhavnagar and Junagadh districts of Gujarat state. *Adv. Res. J. Crop Improv.*, **8** (1): 17-23, **DOI:** 10.15740/HAS/ARJCI/8.1/17-23.

Paper History: Received: 05.02.2017; Revised: 26.04.2017; Accepted: 06.05.2017