

WHEAT YIELD PREDICTION USING WEATHER BASED STATISTICAL MODEL IN NORTHERN ZONE OF HARYANA

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ABSTRACT

The study was undertaken to investigate the impact of weather variables on crop productivity of wheat. Principal components of the weather parameters spread over the crop growth period were employed to forecast wheat yield(s) in northern zone (Ambala, Yamuna Nagar and Kurukshetra districts) of Haryana. Zonal weather models gave the desired predictive accuracy and provided a considerable improvement in the district-level wheat yield prediction. The results indicate the possibility of district-level wheat yield prediction, 4-5 weeks ahead of the harvest time, in Haryana.

KEYWORDS: *Eigen Values, Principal Component Scores, Percent Relative Deviation, Weather Parameters and Zonal Model*

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