

**GROWTH AND YIELD ANALYSIS OF IRRIGATED
POPCORN (*Zea mays evarta*) GROWN IN KADAWA AS
AFFECTED BY SOWING DATE AND INTRA-ROW
SPACING, USING CORRELATION CO-EFFICIENT**

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ABSTRACT

The experiment was designed to assess the effect of irrigation intervals (5, 7 and 9 days), sowing date at two week intervals (Mid and end of February and Mid March) and 3 intra-row spacing (20, 25 and 30 cm) on the performance of popcorn grown at Kadawa, Kano State, Nigeria (11°38'N, 08°02'E and 500m above sea level) using correlation co-efficient. Popcorn (*Zea mays evarta*) yield was found to be very strongly correlated with leaf area index (LAI) and total dry matter (TDM) of the crop. Yield analysis have shown that TDM and ear diameter have made the highest direct contribution, while the greatest combined contribution was made by plant height and TDM and cob and ear diameter. The total contributions (direct and indirect) were found to be 88.2, 50.8, 18.2 and 29.1 per cent in 1997 and 1998 dry seasons, respectively. Lower intra-row spacing of 20 cm, 7—day irrigation interval and sowing at the end of February appeared to enhance popcorn grain yield significantly in both seasons.

Keywords: Popcorn, Growth, Yield, Correlation Coefficient.