



## A REVIEW

# Effect of planting methods on growth, yield, quality and economics of maize (*Zea mays* L.)

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**Abstract :** The optimum time for sowing of *Kharif* maize in northern India is from last week of May to end of June. This period is characterized by a high evaporative demand due to high temperature and low relative humidity. The planting of maize during *Kharif* season experiences high rainfall in monsoon season which often causes temporary flooding in flat method of sowing. Planting methods in maize play a prominent role for reducing its water requirement when sown during *Kharif* season and also to save it from temporary flooding damage due to excessive rainfall during monsoon period. Excess water during the heavy rains especially on poorly drained soils also creates a great problem for maize cultivation as the crop is quite sensitive towards water stagnation. Best method of sowing is necessary to obtain maximum yield and higher net returns from maize cultivation. The findings of the various research scientists and eminent investigators will help in understanding effect of planting methods on growth, yield parameters, yield, quality and economics of maize. Among different planting methods, bed planting is found significant better in improving the growth, yield attributes, yield (grain and stover yield), quality and net returns in *Kharif* maize as compared to flat sowing method and it is followed by ridge sowing method. Bed and ridge planting methods give higher grain yield than the flat sowing method due to better crop growth and nutrient absorption. Water use efficiency and nutrient uptake was higher in bed planting as compared to flat and ridge planting methods.

**Key Words :** Economics, Growth, *Kharif* maize, Planting methods, Quality, Yield

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