

Productivity of *Rabi* Maize (*Zea mays* L.) as Influenced by Water Management Practices

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ABSTRACT

A field experiment was conducted on sandy loam soils of Agricultural College Farm, Bapatla during *rabi*, 2017-18 to study the effect of deficit irrigation practices on growth and yield of maize. Results of the experiment revealed that growth parameters, yield attributes and yield were significantly influenced by irrigation practices and depth of irrigation. Irrigation through alternate furrows recorded higher plant height (323.9 cm), dry matter accumulation (13308 kg ha⁻¹), kernel weight cob⁻¹ (94.5 g), number of kernels per cob (337.5), kernel (6251 kg ha⁻¹) and stover (6038 kg ha⁻¹) yields. Irrigation at a depth of 60 mm recorded significantly higher plant height (336.0 cm), dry matter accumulation (13243 kg ha⁻¹), kernel weight per cob (100 g), kernel yield (6455 kg ha⁻¹) and stover yield (6015 kg ha⁻¹). Interaction between irrigation practices and depth of irrigation recorded the highest kernel yield under irrigation through alternate furrows at 60 mm depth.

Key words: *Depth of irrigation, Irrigation practices, Maize.*