

Effect of Different Dates of Sowing and Irrigation Levels on Growth and Yield of Chickpea (*Cicer Arietinum* L.)

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ABSTRACT

A field experiment was conducted to study the Effect of dates of sowing and irrigation levels on growth and yield of chickpea at Maddipadu Village, Prakasam district during the *rabi* seasons of 2015-16 and 2016-17. The field experiment comprised three dates of sowing and nine irrigation levels replicated three times in strip plot design. Highest dry matter accumulation was recorded with crop sown during 1st Fortnight of November followed by 2nd fortnight of November at 90 DAS and at maturity. Significantly highest drymatter accumulation was recorded with I₀ treatment which was superior to other treatments. Pod numbers plant⁻¹ increased significantly in crop sown during 1st Fortnight of November and superior to other two dates. Significantly higher seed yield of 2463 and 2128 kg ha⁻¹ was recorded with crop sown during 1st fortnight of November in first and second years, respectively which were superior to other dates of sowing. Irrigation as aerial water spray at the rate of 10, 000 to 20, 000 L ha⁻¹ at pod filling stage and 15, 000 to 20, 000 L ha⁻¹ in two intervals at maximum vegetative and pod filling stage was recorded higher seed yield consistently during both the years of study and significantly superior to the rest of the treatments.

Key words: *Chickpea, Dates of sowing, Drymatter accumulation, Irrigation levels, Number of pods, Seed yie*