

Efficacy of Pre and Post Emergence Herbicides on Sequential Basis for Weed Control in Maize (*Zea mays* L.)

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ABSTRACT

A field experiment was conducted at Agricultural College Farm, Bapatla on sandy clay loam soils during the *kharif* 2014 to study the effect of pre-emergence (Atrazine @ 1.0 kg a.i ha⁻¹ and pendimethalin @ 1.0 kg a.i ha⁻¹) and post-emergence (Topramezone @ 25 g a.i ha⁻¹) herbicides on growth and yield of maize. Hand weeding at 20 and 40 DAS recorded the lowest density and dry weight of weeds and the highest weed control efficiency which resulted in enhanced level of plant growth, yield attributes and grain yield. Atrazine @ 1.0 kg a.i ha⁻¹ fb topramezone @ 25 g a.i ha⁻¹ at 20 DAS and pendimethalin @ 1.0 kg a.i ha⁻¹ fb topramezone @ 25 g a.i ha⁻¹ at 20 DAS were on a par with each other with hand weeding treatment at 20 and at 40 DAS for weed control efficiency as well as in plant growth and yield.

Key words : Economics, Maize, Pre and post-emergence herbicides, Yield.