

# **Effect of Sequential Application of Herbicides on Weed Dynamics, Growth and Yield of Rainfed Cotton**

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## **ABSTRACT**

Field experiment was conducted during *Kharif*, 2011 at the Agricultural College Farm, Bapatla of Acharya N.G. Ranga Agricultural University to study the effect of sequential application of herbicides on weed dynamics, growth and yield of rainfed cotton. Results indicated that lower weed count and dry weight of weeds, higher weed control efficiency as well as plant height, monopodial, sympodial branches, number of bolls, seed cotton yield, net returns and benefit cost ratio were found with the farmer's practice. Among the herbicidal combinations, pre-emergence application of pendimethalin @ 1.5 kg *a.i* ha<sup>-1</sup> followed by post-emergence application of pyriithiobac @ 63 g *a.i* ha<sup>-1</sup> significantly reduced the density and dry weight of weeds and resulted in higher weed control efficiency, plant height, sympodial branches, number of bolls, seed cotton yield, net returns and benefit cost ratio.

**Key words :** Fenoxaprop ethyl, Pyriithiobac and benefit cost ratio, Quizalofop ethyl, Sequential application of herbicides, Weed control efficiency.