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RESEARCH ARTICLE:

Effect of different weed management methods on growth and yield of irrigated sorghum

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SUMMARY : A field experiment was conducted at Department of Millets, Tamil Nadu Agricultural University, Coimbatore during *Kharif*, 2011to study integrated weed management practices on growth and yield of irrigated sorghum. The experiment was laid out in a Randomized Block Design with three replications. Plant growth parameters like plant height, dry matter production, leaf area index and yield parameters *viz.*, earhead length, ear head weight, 1000 grain weight and grain and stover yields of sorghum were recorded to assess the crop productivity. The economic parameters like cost of cultivation, gross and net returns, benefit cost ratio were also estimated to assess the influence of different weed control methods. Higher grain yield of 1847 kg ha⁻¹ was recorded in PE Atrazine 0.25 kg ha⁻¹ + HW at 30 and 45 DAS. Higher net return of Rs.32,014 ha⁻¹ and B:C ratio of 3.02 was registered in PE Atrazine 0.25 kg ha⁻¹ + Pendimethalin 0.50 kg ha⁻¹ at 30 DAS (Layby application).

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