

STUDY OF ECONOMICS ON MAIZE (*ZEA MAYS L.*) INFLUENCED BY WEED MANAGEMENT

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Abstract: A field investigation was conducted at BAU experimental Farm, Ranchi during *kharif* season 2015 on sandy clay loam soil. The experiment was laid out in a RBD with 13 treatments: pretilachlor 1.0 kg ha⁻¹ PE (T₁), atrazine 1.0 kg ha⁻¹ PE (T₂), pendimethalin 1.0 kg ha⁻¹ PE (T₃), metribuzin 0.35 kg ha⁻¹ PE (T₄), pretilachlor 0.5 + metribuzin 0.175 kg ha⁻¹ PE (T₅), atrazine 0.5 + pendimethalin 0.5 kg ha⁻¹ PE (T₆), pretilachlor 1.0 kg ha⁻¹ at 15 DAS (T₇), metribuzin 0.35 kg ha⁻¹ at 15 DAS (T₈), atrazine 1.0 kg ha⁻¹ at 15 DAS (T₉), green manuring by *Sesbania* @ 80 kg ha⁻¹ fb 2,4-D 0.625 kg ha⁻¹ at 30 DAS (T₁₀), two mechanical weeding at 20 and 40 DAS (T₁₁), two hand weeding at 20 and 40 DAS (T₁₂), and weedy Check (T₁₃), replicated thrice. Results revealed that gross return (70591 Rs. ha⁻¹), net return (44623 Rs. ha⁻¹) and B: C ratio (1.72) were observed maximum due to application of same treatment (atrazine 0.5 + pendimethalin 0.5 kg ha⁻¹ PE). The cost of treatment (atrazine 0.5 + pendimethalin 0.5 kg ha⁻¹ PE) is much lower (1768 Rs. ha⁻¹) against mechanical weeding (3749 Rs. ha⁻¹) and hand weeding (9372 Kg. ha⁻¹).

Keywords: Maize, Weed management, Economics, Investigation

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