



A REVIEW

Weed control in maize with herbicides and its effect on grain yield

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Abstract : Competition posed by weeds is a major challenge in crop production as weeds cause severe reduction in yield by competing with crop plants for limited resources like light, space applied nutrients and water also. Several researchers and eminent investigators observed that diverse weed flora causes huge losses in maize yield and if the weeds are not managed at right time then it results in huge yield penalty. Among weed management treatments, hand weeding at 15-21 days after sowing and 30-42 days after sowing and integration of pre-emergence application of atrazine 1.5 kg ha⁻¹, pendimethalin at 1.50 kg ha⁻¹, pendimethalin + atrazine both at 0.5 kg ha⁻¹ as pre-emergence spray, atrazine + alachlor at 0.75 + 1.25 kg ha⁻¹, or alachlor at 1.5 kg ha⁻¹fb hand weeding at 30 days after sowing and tembotrione 125 g ha⁻¹+surfactant applied on 20 DAS were proved more effective. In case of sequential treatments, pre-emergence application of atrazine at 1.25 kg ha⁻¹ or pendimethalin at 1.5 kg ha⁻¹ fbparaquat at 0.6 kg ha⁻¹ at 3 weeks after sowing or pre-emergence application of atrazine at 1.0 kg ha⁻¹ followed by topamazone at 0.030 kg ha⁻¹ at 30 days after sowing gave higher gross returns, net returns and benefit cost ratio, thus proved more economical.

Key Words : Herbicide, Losses, Maize, Weeds, Yield

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