Effect of some new post emergence herbicides on weed parameters and seed yield of rice fallow black gram (*Vigna mungo* L.)

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A field experiment was conducted during the rabi season at Agricultural College & Research Institute, Madurai on sandy clay loam soil to study the effect of post emergence herbicides and their rates on weed parameters and seed yield of rice fallow black gram (*Vigna mungo* L.). The weed flora observed in the experimental field consisted of grasses, sedges and broad leaved weeds. The predominant weeds were grasses followed by broad leaved weeds and sedges. The results revealed that application of fenoxaprop-p-ethyl @ 75 g ha\(^{-1}\) and cyhalofop butyl @ 100 g ha\(^{-1}\) were found to be very efficient in controlling the dominant grassy weeds but failed to show effect on sedges and broad leaved weeds (BLW). Imazethapyr @ 100 g ha\(^{-1}\) caused significant reduction in BLW density and dry matter production followed by imazethapyr @ 75 g ha\(^{-1}\). The extent of control of dominant grass weeds was 95.55 % with fenoxaprop-p-ethyl @ 100 g ha\(^{-1}\), 95.51 % with cyhalofop butyl @ 125 g ha\(^{-1}\) and 59.32 % with imazethapyr @ 100 g ha\(^{-1}\). Maximum seed yield was recorded with fenoxaprop-p-ethyl @ 100 g ha\(^{-1}\) which was comparable with cyhalofop butyl @ 125 g ha\(^{-1}\).

Biography

K Sasikala has completed her PhD at the age of 26 years from Tamil Nadu Agricultural University. She is working as Assistant Professor in the Department of Agronomy, HG&RI, Dr. YSRHU, Venkataramannagudem. She has published more than 20 papers in reputed journals. She has elected as Honorary Board member for Society for Advancement of Human and nature.

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