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Comparison of the Effectiveness of Zero Tillage and Intercropping on Weed Management in Maize (*Zea mays* L.)

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Abstract
Maize is an important cereal worldwide and weeds are a major constraint to production. A trial was conducted in Kigumo, Murang'a County, Central Province of Kenya in 2010 to compare the effects of glyphosate and intercropping maize with *Dolicos lablab* on weed and maize yield. Treatments comprised of DUMA SC41 and DK8031 maize varieties, glyphosate, intercropping and weedy arranged in a randomized complete block design in 5x3 m plots replicated three times and data collected in 3x1.5m area in each plot. Weed scores, biomass and maize yield were recorded. Data was analysed using Gen Stat software package, treatments effects compared using ANOVA and the means separated by Student New man Keuls**.** No significant differences in weed scores, biomass weight and maize yield in both seasons between glyphosate and intercropping at $P < 0.05$. Intercropping and glyphosate had similar effects on weeds and maize yield, the former can substitute herbicide use.

Key words: Maize, grain yield, small scale farmers, tillage