

**EFFECT OF SUPPLEMENTS FOLIAR APPLICATION OF POTASSIUM ON
GROWTH AND YIELD OF COWPEA (*Vigna sinensis*).**

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ABSTRACT

A Field experiment was conducted at the Horticulture Research Station, College of Agriculture, Tikrit university in the season 2007 to Compare the effect of potassium foliar application with potassium added to soil on growth and yield of cowpea plant. Four levels of potassium Fertilizer were added to the soil (0 , 50, 100 , 150) Kg K. ha⁻¹ Four levels Foliar Supplement application of potassium Fertilizer (0 , 4 ,8, 12) Kg K. ha⁻¹ were used with (37.5 kg K. ha⁻¹) were added to the soil .Results indicated that all the potassium levels added are significantly increased growth and yield compared with control. The third level of (37.5 Kg K.h-1) added to soil with (12 Kg K.h-1) was superior among supplemental application and gave a better results in plants length ,number of pods , yield of grains with no significant effects in the treatment(150 Kg K.h-1), while there was significant effect in protein percentage . The highest level of soil application of K (150 Kg K.h-1 added to soil) gave a better results in dry matter weight, and 100 grains weight over all levels of soil and foliar application.