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## Impact of urea and potassium foliar application on yield and yield components of two Maize hybrids

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**Abstract :** Two field experiments were carried out during the two successive summer seasons of 2013 and 2014 at Kom Oshim, Fayoum Governorate, Egypt to study the impact of urea and potassium foliar spray fertilizer on two maize hybrids.

The results showed that there were significant differences between the studied maize hybrids (S.C. National 6 and T.W.329) regarding to growth characters at 70 and 90 days from sowing i.e. ( plant height (cm), total dry weight/ plant (g), LA (dm<sup>2</sup>) and LAI). However, L.A.R. at 90 days from sowing Maize was not significant. S.C national 6 cultivar surpassed the other cultivar T.W. 329 in all growth characters. In addition, there were significant differences between maize hybrids in yield and its components except harvest index % and carbohydrate percentage ( i.e. plant height (cm) , ear length (cm). ear diameter (cm), number of rows/ ear, grain index (g), grain yield (g) / plant, straw yield (g) /plant, grain yield (ton)/ fed., straw yield (ton) / fed., biological yield (ton) / fed., and protein percentage). Maize cultivar S.C National 6 surpassed T.W.329 in yield and yield components in both seasons. Foliar spraying with 2% urea and 2% potassium produced the best value of all the previous growth characters, yield and yield components except carbohydrate percentage. The best treatment for growth, yield and yield components was foliar spraying of maize cultivar (S.C. National 6) with urea 2%+ potassium 2%.

**Keywords:** urea, potassium foliar, Maize hybrids, yield.

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