RESPONSE OF SUGARCANE *Saccharum officinarum* L. TO THE PLANT GROWTH REGULATORS.

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ABSTRACT

One experiment was conducted in the farm of the General Company for Sugar in Missan during 2001 to investigate the effects of some plant growth regulators, growth, yield. experiment treatments included application at early tillering stage different concentrations of growth regulators, ethephon ,GA3, daminozide, mepiquat chloride, fluazifop –butyl, 2,4-D, mefluidide and glyphosate. The results of the present studies showed that, Performance of different growth regulators varies with their concentration and time of application 200mg/L mefluidide or 2000 mg/L ethephon applied at early sugar cane tillering stage caused significant decreases in the heights but significant increases the number of tillers, stem diameter, the number of milling stems, total stems yield and sugar yield. Application of 400 mg/L GA3 or 100mg/L glyphosate or 100 mg /L 2,4-D increased the plant heights but reducing the number of tillers, stem diameter, total stems yield and yield of sugar.