

**EFFECT OF FERTILIZATION WITH
DIFFERENT FORMS OF NITROGEN
FERTILIZERS ON GROWTH, FLOWERING,
MINERAL CONTENT AND YIELD OF BANANA**

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BY



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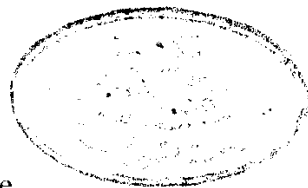
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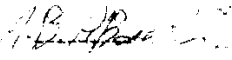
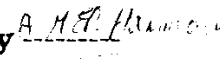
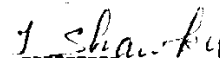
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ABSTRACT

Mohamed Maher Saad Saleh . On the effect of fertilization with different forms of nitrogen fertilizers on growth, flowering, mineral content and yield of banana . Unpublished Doctor of philosophy dissertation, University of Ain Shams, Faculty of Agriculture, Department of Horticulture, (Pomology), 1996 .

Three experiments were carried out on Williams banana during 1991 - 1994 as follows : -

(1) Effect of different forms of nitrogen fertilizers on growth, flowering, mineral content , yield and fruit characteristics of Williams banana) . In this experiment each of calcium nitrate , ammonium sulphate, ammonium nitrate or urea were added at 500 gm N / plant and were split into 14 equal applications, whereas ureaformaldehyde (UF) at 500 or 250 gm N / plant were added one time in April. All fertilizers (treatments) gave more or less similar results . Moreover, UF at 250 gm N / plant gave the lowest amount of total N and NH_4^+ and low amount of NO_3^- in the soil at the end of the experiment . So, using UF as nitrogen fertilizer reduced the amount and number of nitrogen applications and gave similar yield as those of other treatments.

(2) (Effect of level, number and dates of applications of ureaformaldehyde) . This experiment included three levels of UF (500 , 350 and 200 gm N / plant) added one time in April or split into two applications in April and July or in April and October . UF at 200 gm N / plant

added one time in April gave better vegetative growth and the highest yield .

3- (Effect of different levels of ureaformaldehyde)

This experiment included three levels of UF (250 , 200 and 150 gm N / plant) each was added one time in April . UF at 200 or 150 gm N / plant gave similar results and increased the yield significantly than the high level . Low level reduced the content of total N , NH_4^+ and NO_3^- in the soil . So, fertilizing with UF at 150 gm N / plant seems to be the promising treatment for Williams banana.

Key words : - Nitrogen fertilizers , ureaformaldehyde , calcium nitrate , ammonium sulphate , ammonium nitrate , urea , Williams banana , mineral content , yield, fruit characteristics , slow release fertilizers .

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