بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــسـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

RESPONSE OF ALFALFA-BUFFEL GRASS MIXTURE TO FARMYARD MANURE AND SULFUR FERTILIZATION UNDER CALCAREOUS SOIL CONDITIONS

By

Mohamed Abou El-Magd El-Shesheny
B. Sc. (Agron), El-Monofia University, 1984

A thesis submitted in partial fulfilment
of
the requirement for the degree of

Master of Science
(Agronomy)

Department of Agronomy
Faculty of Agriculture
Ain Shams university

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APPROVAL SHEET

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ABSTRACT

Mohamed Abou El Magd El-Shesheny, Response of Alfalfa-Buffel grass mixture to farmyard manure and sulfur fertilization under calcareous soil conditions. Unpublished Master of Science thesis, Ain Shams University, 1999.

A field experiment was set up at Mariut Research Station, Desert Research Center, during 1993 and 1994 growing seasons, to study the effect of cropping patterns, organic manure and sulfur on growth, forage quantity and quality of alfalfa, buffel grass and their mixture. The experiment included 18 treatments which were the combination of three cropping patterns, viz, pure stand of alfalfa, pure stand of buffel grass and buffel grass/alfalfa mixture (50:50), three rates of farymyard manure i.e. 10, 20 and 30 m^3 and two rates of sulfur i.e. 0.4 and 0.8 ton/fed. The experiment was arranged in a completely randomized block design with 4 replications, some growth parameter i.e. plant height, number of branches/plant, leaf area and leaf/stem ratio were recorded, beside fresh and dry forage yields of leaves, stems and total forage yield. Accumulated yield were calculated for alfalfa, buffel grass and their mixture. Moreover, crude protein, total carbohydrates, crude fiber, total ash and ether extract as percentages were determined.

Results of the above studied factors and their interactions showed significant and favourable effects on some measured characters either on growth, yield components, accumulated yield or chemical contents of alfalfa/buffel grass mixture. Buffel grass was shown to be a promising summer grass crop when grown in mixture with alfalfa for both green and dry forage production and also forage quality under the new reclaimed soils as in the north western coast of Egypt especially in Marout province.

Key words: Alfalfa - buffel grass - forage yield - mixture - chemical constituents - farymard manure - sulfur.