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

PHYSIOLOGICAL RESPONSE OF WHEAT UNDER DIFFERENT LEVELS OF ORGANIC MATTER AND NITROGEN FERTILIZATION AND ITS EFFECTS ON YIELD AND GRAIN QUALITY IN SOUTH OF SINAI

By

Khaled Taha Hassan El Afandy

A thesis submitted in partial fulfillment

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Department of Agronomy
Faculty of Agriculture
Ain Shams University

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APPROVAL SHEET

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BY

Khaled Taha Hassan El Afandy
B.Sc. (Agriculture), Cairo Univ., 1981
M.Sc. (Agriculture), Zagazig Univ., 1990

This thesis for Ph.D. has been approved by:

Prof. Dr. M.S. Radwan ----------
Prof. of Agronomy and Head of Agronomy Department,
Faculty of Agriculture, Cairo University.

Prof. Dr. A.A. Abd El-Gawad ----------
Prof. of Agronomy, Faculty of Agriculture,
Ain Shams University

Prof. Dr. Olfat H. El-Bagoury ----------
Prof. of Agronomy, Faculty of Agriculture,
Ain Shams University.

Date of examination: 15 / 8 / 1995

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Khaled Taha Hassan El Afandy
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Under the supervision of:

Prof. Dr. Olfat H. El-Bagoury
Prof. of Agronomy, Fac. of Agric., Ain Shams Univ.

Prof. Dr. Mokhtar T. Mostafa
Prof. of Agronomy, Fac. of Agric., Ain Shams Univ.

Prof. Dr. Abd El-Moneim M. Hegazi
Prof. of Agronomy and Head of Ecology
& Dry Land Agric. Division, Desert Research Center

ABSTRACT

Two bread wheat cultivars (*Triticum aestivum* L.) i.e. Sakha 8 and Sakha 92 grown under Ras Sudr experimental station were investigated during 1990/1991 and 1991/1992 under three levels of organic matter (sheep dung) i.e., 0, 30, and 60 m^3/fed as well as four treatments of mineral nitrogen at the rates 40, 80, 120, 160 kg N/fed.

The main results obtained were as follows:

1. Sakha 8 was superior than Sakha 92 in plant height, stem diameter, flag leaf area and specific leaf weight. On the other hand Sakha 92 grain and straw yield surpassed significantly Sakha 8 cultivar. Total carbohydrates as well as sodium content were significantly more in Sakha 8 than Sakha 92 while protein, phosphorus, and potassium contents were less in Sakha 8 than Sakha 92.
2. All growth characters as well as grain, straw yield and the different yield components were significantly increased with increasing the organic matter application. In addition total carbohydrates, protein, phosphorus, and potassium contents had a significant increase while sodium content was significantly decreased with increasing the organic matter application.

3. All the growth characters and grain yield/fed, straw yield/fed, were significantly and gradually increased by increasing nitrogen application up to 120 kg/fed. Protein, phosphorus and potassium were gradually increased by increasing nitrogen supply up to 120 kg/fed.
4. According to the grain quality, Sakha 92 had higher values of gluten, hydration value, hectoliter weight, soft and rough barns as well as resistance and energy. In addition, fertilization with 160 kg N/fed or 60 m^3 organic matter gave almost highest value of the above characters.

KEY WORDS

Wheat cultivars, nitrogen fertilization, organic manure, growth characters, yield and yield components, chemical composition, grain quality.

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