شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائـــــــق الاصليـــــة تالفـــة

بالرسالة صفحات لم ترد بالاصل

BOTANICAL STUDIES ON GROWTH IN FLOWER ABORTION IN COTTON

(*Gossypium barbadense cv. Plants)*

By

Hamed Sayed Ahmed Ahmed

B.Sc. High Agric. Co-OP. Institute, 1992

Thesis

Submitted in Partial Fulfillment of the requirements

For the Degree of

Master of Agric. Science

Department of Agricultural Botany,

Faculty of Agriculture, Moshtohor

ZAGAZIG UNIVERSITY

(BENHA BRANCH)

2002

Zagazig University (Benha Branch)
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Title: BOTANICAL STUDIES ON GROWTH AND FLOWER ABORTION IN COTTON (*Gossypium barbadense*) Plants.

Growth of cotton plants Giza 85 obviously affected with foliar application 5 times with 15 days intervals starting at 60 days of plant age with N at 50 and 250 ppm, P or K at 25 and 50 ppm and paclobutrazol (PP_{333}) at 5 and 10 ppm as well as combinations of PP_{333} at 5 ppm with the low level of each of N, P and K. In this respect, it was of interest that significant increase existed in numbers of both vegetative branches and the formed leaves/plant as well as their dry weights and total leaf area with PP_{333} at 5 or 10 ppm and K at 25 ppm.

Also, anatomically, many features of leaf structures clearly were modified with most of the applied treatments. Here, all applied treatments significantly increased thickness of each of midvein, xylem and phloem tissues, lamina upper and lower epidermis and palisade and spongy tissues as well. In addition, dimensions and the xylem vessel rows number of the main vascular bundle were also significantly increased with all applied treatments.

Moreover, anatomical alterations in leaf anatomy existed with applied treatments ensure the essentiality of increasing the cross sectional area of phloem for improving both growth and productivity of cotton plants.

Furthermore, most applied treatments obviously increased the determined bioconstituents in leaves, i.e. crude protein and carbohydrate contents.

As for yield and its components; different applied treatments significantly increased seed cotton yield as well as lint weight with most of the applied treatments. Also, seeds number per boll was increased with most of the applied treatments. Here, seeds weight was nearly behaved as the same as seeds number. In addition, different applied treatments increased oil percentages in seeds to reach its maximum with PP_{333} at 10 ppm.

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