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 الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

EFFECT OF INDUSTRIAL WASTES OF EL-NASR COMPANY FOR FERTILIZERS AND CHEMICAL INDUSTERIES (TALKHA FACTORY) ON WATER, SOIL AND PLANT IN TALKHA REGION

BY

IMAN EL-SAYED FOUAD EL-SAYED
B.Sc. (Agricultural cooperation), 1980

THESIS

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ABSTRACT

A field investigation was carried out during 1993 and 1994 to elucidate the effect of pollution from Talkha Factory and the traffic at the main road between El-Mansoura and Demietta on water of El-Tawila drain and El-Sahel canal water as well as adjacent soils and the growth of wheat and maize plants. The obtained results of nine water samples indicated that EC values as well as ammonium and nitrate ions concentration of outles Nos I and II from the factory were higher than the permissible limit for the industrial wastes that allowed to be drained into surface stream. However, phosphorus and heavy metals from the third outlets under invesigation were found to be within the permissible limits. pH, EC and soluble ions of El-Sahel canal water were very slightly affected by Talkha Factory.

Soil salinity was slightly, increased throughout the plant growth periods where it recorded the highest salinity values at the harvest time of both wheat and maize. Soil nitrogen concentration was decreased as the distance between the sample site and Talkha Factory increased, and it was high at the beginning of the growing seasons of both wheat and maize.

Throughout the whole experimental period, lead concentration was high in sites lies near the road, while cobalt and nickel concentration lies below the toxic levels, but cadmium concentration is considered toxic for plant.

Concerning the plant growth, dry matter and grain yield of both wheat and maize were decreased with decreasing the distance from the source of pollution. Meanwhile, increasing the distance from Talkha Factory resulted in a decrease of the nitrogen concentration in the plant while it was found that there were no significant effect for the distance from pollution sources on phosphorus and potassium concentration in plant, while their uptake were greatly affected.

Lead, nickel, cobalt and cadmium concetration in wheat and maize plant were increased by decreasing the distances from pollution sources, i.e. Talkha Factory and the main road.

key words: Wheat - maize - lead - nickel - cobalt - cadmium - ammonium - nitrate - Talkha factory - soil pollution - water pollution - plant pollution.

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