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
على هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من 15-25 مئوية ورطوبة نسبية من 20-40%

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

STUDIES ON THE EFFECT OF ORGANIC FERTILIZATION SOURCES ON YIELD AND ACTIVE INGREDIENTS OF *NIGELLA SATIVA*

BY

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A Thesis Submitted in Partial Fulfillment
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APROVAL SHEET

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ABSTRACT

Two field experiments were conducted at Ismailia and El-Fayoum sandy soils to evaluate the impact of organic and inorganic fertilization on *Nigella sativa* yield and its oil quality. The used organic manures are sewage sludge, chicken, compost and biogas with and without ammonium nitrate and superphosphate applications. Soil water constants, bulk density and available macro and micronutrients content were significantly improved by applying these organic manures, depending on their organic and elemental content. Moreover, *Nigella sativa* growth parameters, straw, and seed yield were significantly increased by applying NP combined with the organic manures. This trend was affected by using the relatively saline irrigation water in El-Fayoum location compared with the fresh one in Ismailia. The fixed and volatile oil content and their constituents were also affected by the applied organic and inorganic manures, however, using saline irrigation water decreased the volatile oil content of seeds and increased the fatty acid content in plants grown in El-Fayoum area.

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