



Sudan University of Science and Technology

College of Graduate Studies and Scientific Researches

**Seed health Testing for Three Cultivars of *Sesamum indicum* .Lin
Three Localities in Sudan.**

اختبار صحة البذور لثلاثة عينات من السمسم في ثلاثة مواقع السودان .

**Thesis submitted in partial fulfillment of the requirements for the
M.Sc. Degree in Plant Protection**

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Dedication

To the Spirit of Grate father

-Mother

-Teachers

- Brothers

- Sisters

-For all my colleagues

Acknowledgment

Thank above all to Allah who offered me health to do this work.

The writer wishes to express his gratitude to A/ prof. Eltigani Ahmed Abuelgasim for his guidance, close supervision, and identification of different fungi and the effort he has paid during this study.

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ABSTRACT

This study was conducted to survey the seed –borne fungi of sesame collected from Gadarif, Jazera and local market using the dry seed inspection, standard Blotter and Agar plate method. Recommend by (ISTA 1966).

The dry seed inspection method revealed presence some impurities broken seed, weed seed, discolored and wrinkled. In the Blotter method seed-borne fungi were encountered in sesame seed. These were *Alternaria Spp*, *Drechslera Spp*, *Fusarium Spp*, *Aspergillus Spp* and *Penicillium Spp* Also in the Agar plate method seed-borne fungi were encountered in sesame seed. These were *Alternaria Spp*, *Drechslera Spp*, *Fusarium Spp*, *Aspergillus Spp* and *Penicillium Spp*.

The two incubation methods (Blotter and Agar plate) showed that the seed borne fungi were encountered in higher percentage in the Agar method than in Blotter. Tilt fungicides and Extracts of Neem and Damas were tested Tilt was more effective than Neem and Damas. Damas was effective than Neem.

خلاصة

اجريت هذه الدراسة على ثلاثة اصناف من السمسم بكل من القصارف و الجزيره والسوق المحلي . وقد استخدمت الطرق الموصى بها عالميا من الهيئه الدوليه لفحص البذور. وقد اظهر الفحص الجاف وجود بذور سليمه و اخرى ملونه، مكسوره و اخرى مصابه. استخدمت طرق التحضين على بنية ورق النشاف المبلل وبنية مستخلص البطاطس والاجار وقد اظهرت وجود العديد من الفطريات مثل الدراسة

(*Alternaria Spp, Drechslera Spp, Fusarium Spp, Aspergillus Spp and Penicillium Spp*).

لهذا تم استخدام مستخلص النيم و الدمس لمقاومة فطريات البزور و قد اظهرت فعاليه فى المقاومة وكان الدمس اكثر فعاليه. كما استخدم مبيدة التلت و قد اظهرت ان مبيدة التلت اكثر فعاليه من النيم والدمس.

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